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# CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)

## SUBCHAPTER R—TOXIC SUBSTANCES CONTROL ACT


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# SUBCHAPTER R—TOXIC SUBSTANCES CONTROL ACT

## PART 700—GENERAL

### Subparts A and B—[Reserved]

### Subpart C—Fees

Sec.
700.40 Purpose and applicability.
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700.49 Failure to remit fees.

AUTHORITY: 15 U.S.C. 2625 and 2665.

SOURCE: 53 FR 31252, Aug. 17, 1988, unless otherwise noted.

**§ 700.40 Purpose and applicability.**

(a) *Purpose.* The purpose of this subpart is to collect fees from manufacturers, importers, and processors who submit notices and applications to EPA under section 5 of the Toxic Substances Control Act (15 U.S.C. 2604) to defray part of EPA's cost of administering the Act.

(b) *Applicability.* This subpart applies to all manufacturers, importers, and processors who submit certain notices and applications to EPA under section 5 of the Act.

**§ 700.41 Radon user fees.**

User fees relating to radon proficiency programs authorized under the Toxic Substances Control Act appear at 40 CFR part 195.

[59 FR 13177, Mar. 18, 1994]

**§ 700.43 Definitions.**

Definitions in section 3 of the Act (15 U.S.C. 2602), as well as definitions contained in §§ 704.3 and 720.3 of this chapter, apply to this subpart unless otherwise specified in this section. In addition, the following definitions apply:

*Consolidated premanufacture notice* or *consolidated PMN* means any PMN submitted to EPA that covers more than one chemical substance (each being assigned a separate PMN number by EPA) as a result of a prenotice agreement with EPA (*See* 48 FR 21734).

*Exemption application* means any application submitted to EPA under section 5(h)(2) of the Act.

*Exemption notice* means any notice submitted to EPA under § 723.175 of this chapter.

*Final product* means a new chemical substance (as ''new chemical substance'' is defined in § 720.3 of this chapter) that is manufactured by a person for distribution in commerce, or for use by the person other than as an intermediate.

*Intermediate premanufacture notice* or *intermediate PMN* means any PMN submitted to EPA for a chemical substance which is an intermediate (as ''intermediate'' is defined in § 720.3 of this chapter) in the production of a final product, provided that the PMN for the intermediate is submitted to EPA at the same time as, and together with, the PMN for the final product and that the PMN for the intermediate identifies the final product and describes the chemical reactions leading from the intermediate to the final product. If PMNs are submitted to EPA at the same time for several intermediates used in the production of a final product, each of those is an intermediate PMN if they all identify the final product and every other associated intermediate PMN and are submitted to EPA at the same time as, and together with, the PMN for the final product.

*Joint submitters* means two or more persons who submit a section 5 notice together.

*Person* means a manufacturer, importer, or processor.

*Premanufacture notice* or *PMN* means any notice submitted to EPA pursuant to section 5(a)(1)(A) of the Act in accordance with part 720 of this chapter or § 723.250 of this chapter.

*Section 5 notice* means any PMN, consolidated PMN, intermediate PMN, significant new use notice, exemption notice, or exemption application.

*Significant new use notice* means any notice submitted to EPA pursuant to section 5(a)(1)(B) of the Act in accordance with part 721 of this chapter.

*Small business concern* means any person whose total annual sales in the person's fiscal year preceding the date of the submission of the applicable section 5 notice, when combined with

those of the parent company (if any), are less than $40 million.

**§ 700.45 Fee payments.**

(a) *Persons who must pay fees.* Persons submitting a section 5 notice to EPA shall remit for each such notice the appropriate fee identified in paragraph (b) of this section in accordance with the procedures in paragraph (e) of this section.

(b) *Fees.* Persons shall remit fee payments to EPA as follows:

(1) *Small business concerns.* Small business concerns shall remit a fee of $100 for each section 5 notice submitted.

(2) *Others.* Persons other than small business concerns shall remit fees according to the type of section 5 notice as follows:

(i) *Premanufacture notices and consolidated premanufacture notices.* Persons shall remit a fee of $2,500 for each PMN or consolidated PMN submitted.

(ii) *Intermediate premanufacture notices.* Persons shall remit a fee of $1,000 for each intermediate PMN. However, for the PMN for the final product the person shall submit the fee in paragraph (b)(2)(i) of this section.

(iii) *Significant new use notices.* Persons shall remit a fee of $2,500 for each significant new use notice submitted.

(iv) *Exemption applications.* Persons shall remit a fee of $2,500 for each exemption application submitted under section 5(h)(2) of the Act.

(v) *Exemption notices.* Persons shall remit a fee of $2,500 for each exemption notice submitted under § 723.175 of this chapter.

(c) *No fee required.* Persons are exempt from remitting any fee for submissions under §§ 720.38 and 723.50 of this chapter.

(d) *Joint submitters.* Joint submitters of a section 5 notice are required to remit the appropriate fee identified in paragraph (b) of this section for each section 5 notice regardless of the number of joint submitters for that notice. To qualify for the fee identified in paragraph (b)(1) of this section, each joint submitter of a section 5 notice must qualify as a small business concern under § 700.43.

(e) *Remittance procedure.* (1) Each remittance under this section shall be in United States currency and shall be paid by money order, bank draft, or certified check drawn to the order of the Environmental Protection Agency.

(2) Each remittance shall be sent to the Environmental Protection Agency, HQ Accounting Operations Branch (PM–226), P.O. 360399M, Pittsburgh, PA 15251–6399, ATTN: TSCA User Fee.

(3) Persons who submit a section 5 notice shall place a unique identifying number, which must include the letters ''TS'' followed by a combination of 6 numbers (letters may be substituted for some numbers), on the front page of each section 5 notice submitted. The same identifying number and the submitter's name must appear on the corresponding fee remittance under this section. If a remittance applies to more than one section 5 notice, the person shall include the name of the submitter, the identifying number for each section 5 notice to which the remittance applies, and the amount of the remittance which applies to each notice. Any remittance not having the identifying name and number described above will be returned to the remitter.

(4)(i) Each person who remits the fee identified in paragraph (b)(1) of this section for a PMN, consolidated PMN, intermediate PMN, or significant new use notice shall write or type the words, ''The company named in part 1, section A is a small business concern under 40 CFR 700.43 and has remitted a fee of $100 in accordance with 40 CFR 700.45(b).'' under ''CERTIFICATION'' on Page 2 of the Premanufacture Notice for New Chemical Substances (EPA Form 7710–25 (4–26–83)).

(ii) Each person who remits the fee identified in paragraph (b)(1) of this section for an exemption application under section 5(h)(2) of the Act shall include the words, ''Each company identified in this application is a small business concern under 40 CFR 700.43 and has remitted a fee of $100 in accordance with 40 CFR 700.45(b).'' in the exemption application.

(iii) Each person who remits the fee identified in paragraph (b)(1) of this section for an exemption notice under § 723.175 of this chapter shall include the words, ''Each company identified in this notice is a small business concern under 40 CFR 700.43 and has remitted a

fee of $100 in accordance with 40 CFR 700.45(b).'' in the certification required in § 723.175(i)(1)(x) of this chapter.

(5)(i) Each person who remits a fee identified in paragraph (b)(2) of this section for a PMN, consolidated PMN, intermediate PMN, or significant new use notice shall write or type the words, ''The company named in part 1, section A has remitted the fee specified in 40 CFR 700.45 (b).'' under ''CERTIFICATION'' on page 2 of the Premanufacture Notice for New Chemical Substances (EPA Form 7710–25 (4–26–83)).

(ii) Each person who remits the fee identified in paragraph (b)(2) of this section for an exemption application under section (5)(h)(2) of the Act shall include the words, ''Each company identified in this application has remitted a fee of $2,500 in accordance with 40 CFR 700.45(b).'' in the exemption application.

(iii) Each person who remits the fee identified in paragraph (b)(2) of this section for an exemption notice under § 723.175 of this chapter shall include the words, ''Each company identified in this notice has remitted a fee of $2,500 in accordance with 40 CFR 700.45(b).'' in the certification required in § 723.175(i)(1)(x) of this chapter.

(f) *Fee refunds.* EPA will refund any fee paid for a section 5 notice whenever the Agency determines:

(1) That the chemical substance that is the subject of a PMN, intermediate PMN, exemption application, or exemption notice is not a new chemical substance as of the date of submission of the notice.

(2) In the case of a significant new use notice, that the notice was not required.

(3) The notice is incomplete under § 720.65(c) of this chapter.

[53 FR 31252, Aug. 17, 1988, as amended at 54 FR 21429, May 18, 1989; 58 FR 34204, June 23, 1993]

### § 700.49 Failure to remit fees.

EPA will not consider a section 5 notice to be complete unless the appropriate certification under § 700.45(e) is included and until the appropriate remittance under § 700.45(b) has been sent to EPA as provided in § 700.45(e) and received by EPA. EPA will notify the submitter that the section 5 notice is incomplete in accordance with § 720.65(c) of this chapter.

# PART 702—GENERAL PRACTICES AND PROCEDURES

## Subparts A–B—[Reserved]

## Subpart C—Citizen Suit

Sec.
702.60 Purpose.
702.61 Service of notice.
702.62 Contents of notice.

AUTHORITY: 15 U.S.C. 2619.

SOURCE: 47 FR 2773, Jan. 19, 1982, unless otherwise noted.

## Subparts A–B—[Reserved]

## Subpart C—Citizen Suit

### § 702.60 Purpose.

Section 20 of the Toxic Substances Control Act (TSCA) authorizes any person to begin a civil action to compel performance by the Environmental Protection Agency (EPA) of TSCA nondiscretionary acts or duties (section 20(a)(2)) or to restrain any violation of TSCA, or of any rule promulgated under sections 4, 5, or 6, or of any order issued under section 5 of TSCA (section 20(a)(1)). The purpose of this regulation is to prescribe procedures governing the giving of a notice of intent to file suit required by section 20(b) of TSCA as a prerequisite to beginning such civil actions.

### § 702.61 Service of notice.

(a) *Notice as a prerequisite to suit.* Under section 20 of TSCA, no civil action may be commenced by a citizen to restrain a violation of TSCA, or a rule or order thereunder, unless at least 60 days in advance the citizen has given notice of the intent to file suit to the Administrator and to the person who is alleged to have committed the violation. No civil action may be commenced by a citizen to compel the Administrator to perform any non-discretionary act or duty under TSCA, unless at least 60 days in advance the citizen has given notice of the intent to file suit to the Administrator. However, in

the case of an alleged failure by the Administrator to file an action under section 7 of TSCA, the citizen must give notice to the Administrator only 10 days in advance of filing the civil action.

(b) *Method of service.* Notice of intent to file suit can be either personally served or served by certified mail—return receipt requested—to persons identified in paragraph (d) of this section.

(c) *Date of service.* The effective date of service of a notice given in accordance with this rule shall be the date of the return receipt, if served by mail, or the date of receipt if personally served.

(d) *Persons to be served*—(1) *Violations of TSCA rules or TSCA order.* (i) If the alleged violator is a private individual or a corporation, notice of intent to file suit shall be served on the individual or the owner or managing agent of the plant, facility, or activity alleged to be in violation. If the alleged violator is a corporation, a copy of the notice shall also be sent to the registered agent, if any, of such corporation in the State in which such violation is alleged to have occurred. Notice shall also be served on the Administrator of the EPA.

(ii) If the alleged violator is a State or local government entity, notice of intent to file suit shall be served on the head of the agency. Notice shall also be served on the Administrator of the EPA, and a copy shall be sent to the Attorney General of the United States.

(iii) If the alleged violator is a Federal agency, notice of intent to file suit shall be served on the head of the agency. Notice shall also be served on the Administrator of the EPA, and a copy shall be sent to the Attorney General of the United States.

(2) *Performance of non-discretionary TSCA acts or duties.* Notice of intent to file suit shall be served on the Administrator of the EPA and a copy shall be sent to the Attorney General of the United States.

(3) *Address of persons to be served.* (i) EPA Administrator: 401 M St., SW., Washington, DC 20460. (ii) Attorney General of the United States: 10th and Constitution Avenue, NW., Washington, DC 20530.

**§ 702.62 Contents of notice.**

(a) *Violation of TSCA rule or TSCA order.* Notice of intent to file suit regarding an alleged violation of TSCA or any rule promulgated under sections 4, 5, or 6, or an order issued under section 5, shall include sufficient information to permit the recipient to identify:

(1) The specific provision of TSCA or of the rule or order under TSCA alleged to have been violated.

(2) The activity alleged to constitute a violation.

(3) The person or persons responsible for the alleged violation.

(4) The location of the alleged violation.

(5) The date or dates of the alleged violation as closely as the citizen is able to specify them.

(6) The full name, address, and telephone number of the citizen giving notice.

(b) *Failure to act.* Notice regarding an alleged failure of the Administrator to perform any act or duty which is not discretionary shall:

(1) Identify the specific provision of TSCA which requires an act or creates a duty.

(2) Describe with reasonable specificity the action taken or not taken by the Administrator which is alleged to constitute a failure to perform the act or duty.

(3) State the full name, address, and telephone number of the citizen giving the notice.

(c) *Identification of Counsel.* The notice shall state the name, address, and telephone number of the Legal Counsel, if any, representing the citizen giving the notice.

# PART 704—REPORTING AND RECORDKEEPING REQUIREMENTS

## Subpart A—General Reporting and Recordkeeping Provisions for Section 8(a) Information-Gathering Rules

Sec.
704.1 Scope.
704.3 Definitions.
704.5 Exemptions.
704.7 Confidential business information claims.
704.9 Where to send reports.
704.11 Recordkeeping.
704.13 Compliance and enforcement.

### Subpart B—Chemical-Specific Reporting and Recordkeeping Rules

704.25 11-Aminoundecanoic acid.
704.33 P-tert-butylbenzoic acid (P-TBBA), p-tert-butyltoluene (P-TBT) and p-tert-butylbenzaldehyde (P-TBB).
704.43 Chlorinated naphthalenes.
704.45 Chlorinated terphenyl.
704.95 Phosphonic acid,[1,2-ethanediylbis[nitrilobis-(methylene)]]tetrakis-(EDTMPA) and its salts.
704.102 Hexachloronorbornadiene.
704.104 Hexafluoropropylene oxide.
704.175 4,4′-methylenebis(2-chloroaniline) (MBOCA).

AUTHORITY: 15 U.S.C. 2607(a).

## Subpart A—General Reporting and Recordkeeping Provisions for Section 8(a) Information-Gathering Rules

### §704.1 Scope.

(a) This part specifies reporting and recordkeeping procedures under section 8(a) of the Toxic Substances Control Act (TSCA) for manufacturers, importers, and processors of chemical substances and mixtures (hereafter collectively referred to as substances) that are identified in subpart B of this part. The reporting and recordkeeping provisions in subpart A of this part apply throughout this part unless revised in any other subpart.

(b) Subpart B of this part sets out chemical-specific reporting and recordkeeping requirements under section 8(a) of TSCA.

[53 FR 51715, Dec. 22, 1988, as amended at 60 FR 31920, June 19, 1995]

### §704.3 Definitions.

All definitions as set forth in section 3 of TSCA apply in this part. In addition, the following definitions are provided for the purposes of this part.

*Annual* means the corporate fiscal year.

*Article* means a manufactured item (1) which is formed to a specific shape or design during manufacture, (2) which has end use function(s) dependent in whole or in part upon its shape or design during end use, and (3) which has either no change of chemical composition during its end use or only those changes of composition which have no commercial purpose separate from that of the article, and that result from a chemical reaction that occurs upon end use of other chemical substances, mixtures, or articles; except that fluids and particles are not considered articles regardless of shape or design.

*Byproduct* means a chemical substance produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance(s) or mixture(s).

*CAS Number* means Chemical Abstracts Service Registry Number.

*Coproduct* means a chemical substance produced for a commercial purpose during the manufacture, processing, use, or disposal of another chemical substance or mixture.

*Customer* means any person to whom a manufacturer, importer, or processor directly distributes any quantity of a chemical substance, mixture, mixture containing the substance or mixture, or article containing the substance or mixture, whether or not a sale is involved.

*Domestic* means within the geographical boundaries of the 50 United States, including the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Northern Mariana Islands, and any other territory or possession of the United States.

*Enclosed process* means a manufacturing or processing operation that is designed and operated so that there is no intentional release into the environment of any substance present in the operation. An operation with fugitive, inadvertent, or emergency pressure relief releases remains an enclosed process so long as measures are taken to prevent worker exposure to and environmental contamination from the releases.

*EPA* means the United States Environmental Protection Agency.

*Import* means to import for commercial purposes.

*Import for commercial purposes* means to import with the purpose of obtaining an immediate or eventual commercial advantage for the importer, and includes the importation of any amount of a chemical substance or mixture. If

a chemical substance or mixture containing impurities is imported for commercial purposes, then those impurities also are imported for commercial purposes.

*Import in bulk form* means to import a chemical substance (other than as part of a mixture or article) in any quantity, in cans, bottles, drums, barrels, packages, tanks, bags, or other containers, if the chemical substance is intended to be removed from the container and the substance has an end use or commercial purpose separate from the container.

*Importer* means (1) any person who imports any chemical substance or any chemical substance as part of a mixture or article into the customs territory of the United States, and includes:

(i) The person primarily liable for the payment of any duties on the merchandise, or

(ii) An authorized agent acting on his behalf (as defined in 19 CFR 1.11).

(2) Importer also includes, as appropriate:

(i) The consignee.

(ii) The importer of record.

(iii) The actual owner if an actual owner's declaration and superseding bond have been filed in accordance with 19 CFR 141.20.

(iv) The transferee, if the right to draw merchandise in a bonded warehouse has been transferred in accordance with subpart C of 19 CFR part 144.

(3) For the purposes of this definition, the customs territory of the United States consists of the 50 States, Puerto Rico, and the District of Columbia.

*Impurity* means a chemical substance which is unintentionally present with another chemical substance.

*Intermediate* means any chemical substance that is consumed, in whole or in part, in chemical reactions used for the intentional manufacture of other chemical substances or mixtures, or that is intentionally present for the purpose of altering the rates of such chemical reactions.

*Known to or reasonably ascertainable by* means all information in a person's possession or control, plus all information that a reasonable person similarly situated might be expected to possess, control, or know.

*Manufacture* means to manufacture for commercial purposes.

*Manufacture for commercial purposes* means: (1) To import, produce, or manufacture with the purpose of obtaining an immediate or eventual commercial advantage for the manufacturer, and includes among other things, such ''manufacture'' of any amount of a chemical substance or mixture:

(i) For commercial distribution, including for test marketing.

(ii) For use by the manufacturer, including use for product research and development, or as an intermediate.

(2) Manufacture for commercial purposes also applies to substances that are produced coincidentally during the manufacture, processing, use, or disposal of another substance or mixture, including both byproducts that are separated from that other substance or mixture and impurities that remain in that substance or mixture. Such byproducts and impurities may, or may not, in themselves have commercial value. They are nonetheless produced for the purpose of obtaining a commercial advantage since they are part of the manufacture of a chemical product for a commercial purpose.

*Manufacturer* means a person who imports, produces, or manufactures a chemical substance. A person who extracts a component chemical substance from a previously existing chemical substance or a complex combination of substances is a manufacturer of that component chemical substance.

*Non-isolated intermediate* means any intermediate that is not intentionally removed from the equipment in which it is manufactured, including the reaction vessel in which it is manufactured, equipment which is ancillary to the reaction vessel, and any equipment through which the substance passes during a continuous flow process, but not including tanks or other vessels in which the substance is stored after its manufacture. Mechanical or gravity transfer through a closed system is not considered to be intentional removal, but storage or transfer to shipping containers ''isolates'' the substance by removing it from process equipment in which it is manufactured.

*Own or control* means ownership of 50 percent or more of a company's voting

stock or other equity rights, or the power to control the management and policies of that company. A company may own or control one or more sites. A company may be owned or controlled by a foreign or domestic parent company.

*Parent company* is a company that owns or controls another company.

*Person* includes any individual, firm, company, corporation, joint venture, partnership, sole proprietorship, association, or any other business entity; any State or political subdivision thereof; any municipality; any interstate body; and any department, agency, or instrumentality of the Federal Government.

*Possession or control* means in the possession or control of any person, or of any subsidiary, partnership in which the person is a general partner, parent company, or any company or partnership which the parent company owns or controls, if the subsidiary, parent company, or other company or partnership is associated with the person in the research, development, test marketing, or commercial marketing of the substance in question. Information is in the possession or control of a person if it is:

(1) In the person's own files including files maintained by employees of the person in the course of their employment.

(2) In commercially available data bases to which the person has purchased access.

(3) Maintained in the files in the course of employment by other agents of the person who are associated with research, development, test marketing, or commercial marketing of the chemical substance in question.

*Process* means to process for commercial purposes.

*Process for commercial purposes* means the preparation of a chemical substance or mixture after its manufacture for distribution in commerce with the purpose of obtaining an immediate or eventual commercial advantage for the processor. Processing of any amount of a chemical substance or mixture is included in this definition. If a chemical substance or mixture containing impurities is processed for commercial purposes, then the impurities also are processed for commercial purposes.

*Processor* means any person who processes a chemical substance or mixture.

*Production volume* means the quantity of a substance which is produced by a manufacturer, as measured in kilograms or pounds.

*Propose to manufacture, import, or process* means that a person has made a firm management decision to commit financial resources for the manufacture, import, or processing of a specified chemical substance or mixture.

*Site* means a contiguous property unit. Property divided only by a public right-of-way shall be considered one site. There may be more than one plant on a single site. The site for a person who imports a substance is the site of the operating unit within the person's organization which is directly responsible for importing the substance and which controls the import transaction and may in some cases be the organization's headquarters office in the United States.

*Small manufacturer or importer* means a manufacturer or importer that meets either of the following standards:

(1) *First standard.* A manufacturer or importer of a substance is small if its total annual sales, when combined with those of its parent company (if any), are less than $40 million. However, if the annual production or importation volume of a particular substance at any individual site owned or controlled by the manufacturer or importer is greater than 45,400 kilograms (100,000 pounds), the manufacturer or importer shall not qualify as small for purposes of reporting on the production or importation of that substance at that site, unless the manufacturer or importer qualifies as small under standard (2) of this definition.

(2) *Second standard.* A manufacturer or importer of a substance is small if its total annual sales, when combined with those of its parent company (if any), are less than $4 million, regardless of the quantity of substances produced or imported by that manufacturer or importer.

(3) *Inflation index.* EPA shall make use of the Producer Price Index for

Chemicals and Allied Products, as compiled by the U.S. Bureau of Labor Statistics, for purposes of determining the need to adjust the total annual sales values and for determining new sales values when adjustments are made. EPA may adjust the total annual sales values whenever the Agency deems it necessary to do so, provided that the Producer Price Index for Chemicals and Allied Products has changed more than 20 percent since either the most recent previous change in sales values or the date of promulgation of this rule, whichever is later. EPA shall provide FEDERAL REGISTER notification when changing the total annual sales values.

*Small quantities solely for research and development* (or ''small quantities solely for purposes of scientific experimentation or analysis or chemical research on, or analysis of, such substance or another substance, including such research or analysis for the development of a product'') means quantities of a chemical substance manufactured, imported, or processed or proposed to be manufactured, imported, or processed solely for research and development that are not greater than reasonably necessary for such purposes.

*Substance* means either a chemical substance or mixture unless otherwise indicated.

*Test marketing* means the distribution in commerce of no more than a predetermined amount of a chemical substance, mixture, article containing that chemical substance or mixture, or a mixture containing that substance, by a manufacturer or processor, to no more than a defined number of potential customers to explore market capability in a competitive situation during a predetermined testing period prior to the broader distribution of that chemical substance, mixture, or article in commerce.

*Total annual sales* means the total annual revenue (in dollars) generated by the sale of all products of a company. Total annual sales must include the total annual sales revenue of all sites owned or controlled by that company and the total annual sales revenue of that company's subsidiaries and foreign or domestic parent company, if any.

*TSCA* means the Toxic Substances Control Act, 15 U.S.C. 2601 et seq.

[53 FR 51715, Dec. 22, 1988]

### § 704.5 Exemptions.

A person who is subject to reporting requirements for a substance identified in this part is exempt from those requirements to the extent that the person and that person's use of the substance is described in this section. This section is superseded by any TSCA section 8(a) rule that adds to, removes, or revises the exemptions described in this section.

(a) *Articles.* A person who imports, processes, or proposes to import or process a substance identified in this part solely as part of an article is exempt from the reporting requirements of this part with regard to that substance.

(b) *Byproducts.* A person who manufactures, imports, or proposes to manufacture or import a substance identified in this part solely as a byproduct is exempt from the reporting requirements of this part.

(c) *Impurities.* A person who manufactures, imports, processes, or proposes to manufacture, import, or process a substance identified in this part solely as an impurity is exempt from the reporting requirements of this part.

(d) *Non-isolated intermediate.* A person who manufactures or proposes to manufacture a substance identified in this part solely as a non-isolated intermediate is exempt from the reporting requirements of this part.

(e) *Research and development.* A person who manufactures, imports, processes, or proposes to manufacture, import, or process a substance identified in this part only in small quantities solely for research and development is exempt from the reporting requirements of this part.

(f) *Small manufacturers and importers.* Small manufacturers and importers are exempt from the reporting requirements of this part.

[53 FR 51717, Dec. 22, 1988]

### § 704.7 Confidential business information claims.

(a) Any person submitting a notice under this rule may assert a business

confidentiality claim covering all or any part of the notice. Any information covered by a claim will be disclosed by EPA only to the extent and by means of the procedures set forth in part 2 of this title.

(b) If no claim accompanies the notice at the time it is submitted to EPA, the notice will be placed in an open file available to the public without further notice to the respondent.

(c) To assert a claim of confidentiality for data contained in a notice, the respondent must submit two copies of the notice.

(1) One copy of the notice must be complete. In that copy the respondent must indicate what data, if any, are claimed as confidential by marking the specific information on each page with a label such as ''confidential'', ''proprietary'', or ''trade secret''.

(2) If some data in the notice are claimed as confidential, the respondent must submit a second copy. The second copy must be complete except that all information claimed as confidential in the first copy must be deleted.

(3) The first copy of the notice will be for internal use by EPA. The second copy will be placed in an open file to be available to the public.

(4) Failure to furnish a second copy of the notice when information is claimed as confidential in the first copy will be considered a presumptive waiver of the claim of confidentiality. EPA will notify the respondent by certified mail that a finding of a presumptive waiver of the claim of confidentiality has been made. The respondent has 15 days from the date of receipt of notification to submit the required second copy. Failure to submit the second copy will cause EPA to place the first copy in the public file.

(d) In submitting a claim of confidentiality, a person attests to the truth of the following four statements concerning all information which is claimed confidential:

(1) My company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.

(2) The information is not, and has not been, reasonably obtainable without our consent by other persons (other than government bodies) by use of legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding).

(3) The information is not publicly available elsewhere.

(4) Disclosure of the information would cause substantial harm to our competitive position.

[48 FR 23420, May 25, 1983, as amended at 53 FR 51717, Dec. 22, 1988]

### § 704.9 Where to send reports.

Reports must be submitted by certified mail to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATT: 8(a) Reporting.

[60 FR 34463, July 3, 1995]

### § 704.11 Recordkeeping.

Each person who is subject to the reporting requirements of this part must retain the following records for 3 years following the creation or compilation of the record.

(a) A copy of each report submitted by the person in response to the requirements of this part.

(b) Materials and documentation sufficient to verify or reconstruct the values submitted in the report.

(c) A copy of each notice sent by the person, return receipt requested, to that person's customers for the purpose of notifying their customers of the customer's reporting obligations under this part.

(d) All return receipts signed by the person's customers who received the notice described in paragraph (c) of this section.

[53 FR 51717, Dec. 22, 1988, as amended at 58 FR 34204, June 23, 1993]

### § 704.13 Compliance and enforcement.

Violators of the requirements of this part may be subject to civil administrative penalties up to $25,000 per day of violation or criminal prosecution, as provided in sections 15 and 16 of TSCA. In addition, under section 17, EPA may seek judicial relief to compel submission of required information.

[53 FR 51717, Dec. 22, 1989]

## Subpart B—Chemical-Specific Reporting and Recordkeeping Rules

### § 704.25 11-Aminoundecanoic acid.

(a) *Definitions.* (1) *11–AA* means the chemical substance 11-aminoundecanoic acid, CAS Number 2432–99–7.

(2) *Enclosed process* means a process that is designed and operated so that there is no intentional release of any substance present in the process. A process with fugitive, inadvertent, or emergency pressure relief releases remains an enclosed process so long as measures are taken to prevent worker exposure to an environmental contamination from the releases.

(3) *Internal subunit* means a subunit that is covalently linked to at least two other subunits. *Internal subunits* of polymer molecules are chemically derived from monomer molecules that have formed covalent links between two or more other molecules.

(4) *Monomer* means a chemical substance that has the capacity to form links between two or more other molecules.

(5) *Polymer* means a chemical substance that consists of at least a simple weight majority of polymer molecules but consists of less than a simple weight majority of molecules with the same molecular weight. Collectively, such polymer molecules must be distributed over a range of molecular weights wherein differences in molecular weight are primarily attributable to differences in the number of internal subunits.

(6) *Polymer molecule* means a molecule which includes at least four covalently linked subunits, at least two of which are internal subunits.

(7) *Small processor* means a processor that meets either the standard in paragraph (a)(7)(i) of this section or the standard in paragraph (a)(7)(ii) of this section.

(i) *First standard.* A processor of a chemical substance is small if its total annual sales, when combined with those of its parent company, if any, are less than $40 million. However, if the annual processing volume of a particular chemical substance at any individual site owned or controlled by the processor is greater than 45,400 kilograms (100,000 pounds), the processor shall not qualify as small for purposes of reporting on the processing of that chemical substance at that site, unless the processor qualifies as small under paragraph (a)(7)(ii) of this section.

(ii) *Second standard.* A processor of a chemical substance is small if its total annual sales, when combined with those of its parent company (if any), are less than $4 million, regardless of the quantity of the particular chemical substance processed by that company.

(iii) *Inflation index.* EPA will use the Inflation Index described in the definition of *small manufacturer* set forth in § 704.3, for purposes of adjusting the total annual sales values of this small processor definition. EPA will provide notice in the FEDERAL REGISTER when changing the total annual sales values of this definition.

(8) *Subunit* means an atom or group of associated atoms chemically derived from corresponding reactants.

(b) *Persons who must report.* Except as provided in paragraph (c) of this section, the following persons are subject to this section:

(1) Persons who manufacture or propose to manufacture 11–AA:

(i) For use as an intermediate in the manufacture of polymers in an enclosed process when it is expected that the 11–AA will be fully polymerized during the manufacturing process, or

(ii) For use as a component in photoprocessing solutions.

(2) Persons who import or propose to import 11–AA:

(i) For use as an intermediate in the manufacture of polymers in an enclosed process when it is expected that the 11–AA will be fully polymerized during the manufacturing process, or

(ii) For use as a component in photoprocessing solutions.

(3) Persons who process or propose to process 11–AA:

(i) For use as an intermediate in the manufacture of polymers in an enclosed process when it is expected that the 11–AA will be fully polymerized during the manufacturing process, or

(ii) For use as a component in photoprocessing solutions.

(c) *Persons not subject to this section.* The following persons are not subject to this section:

(1) Small manufacturers (includes importers) as described in § 704.3.

(2) Small processors.

(3) Persons described in § 704.5.

(4) Persons who, at any time during the 3-year period ending July 22, 1986, manufactured, imported, or processed 11–AA:

(i) For use as a intermediate in the manufacture of polymers in an enclosed process when it is expected that the 11–AA will be fully polymerized during the manufacturing process, or

(ii) For use as a component in photoprocessing solutions.

(d) *What information to report.* Persons identified in paragraph (b) of this section must submit a Premanufacture Notice Form (EPA Form 7710–25).

(e) *When to report.* (1) Persons who intend to manufacture, import, or process 11–AA for use as an intermediate in the manufacture of polymers in an enclosed process when it is expected that the 11–AA will be fully polymerized during the manufacturing process or for use as a component in photoprocessing solutions must notify EPA within 30 days after making a firm management decision to commit financial resources for the manufacturing, importing, or processing of 11–AA.

(2) Persons who initiated manufacturing, importing, or processing of 11–AA for use as an intermediate in the manufacture of polymers in an enclosed process when it is expected that the 11–AA will be fully polymerized during the manufacturing process, or for use as a component in photoprocessing solutions during the time period between July 22, 1986 and July 13, 1987 must notify EPA by August 10, 1987.

(f) *Recordkeeping.* Persons subject to the reporting requirements of this section must retain documentation of information contained in their reports for a period of 5 years from the date of submission of the report.

(g) *Where to send reports.* Reports must be submitted by certified mail to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATT: 11–AA Notification.

[52 FR 19864, May 28, 1987, as amended at 60 FR 16308, Mar. 29, 1995; 60 FR 34463, July 3, 1995]

### § 704.33 P-tert-butylbenzoic acid (P-TBBA), p-tert-butyltoluene (P-TBT) and p-tert-butylbenzaldehyde (P-TBB).

(a) *Definitions.* (1) *P-TBBA* means the substance p-tert-butylbenzoic acid, also identified as 4-(1,1-dimethylethyl)benzoic acid, CAS No. 98–73–7.

(2) *P-TBT* means the substance p-tert-butyltoluene, also identified as 1-(1,1-dimethylethyl)-4-methylbenzene, CAS No. 98–51–1.

(3) *P-TBB* means the substance p-tert-butylbenzaldehyde, also identified as 4-(1,1-dimethylethyl)benzaldehyde, CAS No. 939–97–9.

(4) *Small processor* means a processor that meets either the standard in paragraph (a)(4)(i) of this section or the standard in paragraph (a)(4)(ii) of this section.

(i) *First standard.* A processor of a chemical substance is small if its total annual sales, when combined with those of its parent company, if any, are less than $40 million. However, if the annual processing volume of a particular chemical substance at any individual site owned or controlled by the processor is greater than 45,400 kilograms (100,000 pounds), the processor shall not qualify as small for purposes of reporting on the processing of that chemical substance at that site, unless the processor qualifies as small under paragraph (a)(1)(ii) of this section.

(ii) *Second standard.* A processor of a chemical substance is small if its total annual sales, when combined with those of its parent company (if any), are less than $4 million, regardless of the quantity of the particular chemical substance processed by that company.

(iii) *Inflation index.* EPA shall use the Inflation Index described in the definition of *small manufacturer* that is set forth in § 704.3, for purposes of adjusting the total annual sales values of this small processor definition. EPA shall provide FEDERAL REGISTER notification when changing the total annual sales values of this definition.

(b) *Persons who must report.* Except as provided in paragraph (c) of this section, the following persons are subject to the reporting requirements of this rule; a person may become subject to this rule more than once, for more than one substance or under more than one of the criteria listed in this paragraph (b).

(1) Persons who manufactured, imported, or processed P-TBBA, P-TBT, and/or P-TBB for commercial purposes during the person's latest complete corporate fiscal year prior to June 25, 1986. For purposes of this provision, processors of P-TBBA, P-TBT, and/or P-TBB shall include only those persons who processed the substances other than as non-isolated intermediates.

(2) Persons who commence manufacture or importation of P-TBBA, P-TBT, and/or P-TBB for commercial purposes after June 25, 1986. This provision is applicable to persons who cease manufacture or importation of P-TBBA, P-TBT, and/or P-TBB after June 25, 1986 and then subsequently resume manufacture or importation of the substance(s).

(3) Persons who process P-TBBA, P-TBT, and/or P-TBB for commercial purposes in any way other than as a non-isolated intermediate after June 25, 1986.

(c) *Persons not subject to this rule.* In addition to the persons described in § 704.5, small processors, as defined in paragraph (a)(4) of this section, are not subject to this rule.

(d) *Information to report.* Persons subject to this rule as described in paragraph (b) of this section shall report information to EPA as specified in this paragraph (d). Respondents to this rule shall report all information that is known to or reasonably ascertainable by the person reporting. For purposes of importer reporting under this paragraph, a site is the operating unit within the person's organization which is directly responsible for importing the substance and which controls the import transaction. The import site may in some cases be the organization's headquarters office in the United States.

(1) All manufacturers, importers, and processors specified in paragraph (b) of this section shall report their name and headquarters address.

(2) All manufacturers, importers, and processors specified in paragraph (b) of this section shall report the name, address, and office telephone number (including area code) of their principal technical contact.

(3) All manufacturers, importers, and processors specified in paragraph (b) of this section shall report the name and address of each site where P–TBBA, P–TBT, and/or P–TBB is manufactured, imported, or processed.

(4) All manufacturers, importers, and processors specified in paragraph (b)(1) of this section only shall report the information described in this paragraph (d)(4). Respondents to this paragraph (d)(4) shall report separately for each substance that they manufacture, import, or process, and for each site at which they do so. However, if the information to be reported in response to this paragraph (d)(4) is the same for different sites, the respondent need not report separately for each site but need only notify EPA that the information is the same for each site. The information to be reported under this paragraph (d)(4) shall cover the respondent's latest complete corporate fiscal year prior to June 25, 1986. Respondents to this paragraph (d)(4) shall report the following information:

(i) The total quantity (by weight) of P–TBBA, P–TBT, or P–TBB manufactured, imported, or processed for commercial purposes per site.

(ii) A narrative description of the manufacturing, importing, or processing operation(s) involving P–TBBA, P–TBT, or P–TBB at each site.

(iii) A narrative description of worker activities involving P–TBBA, P–TBT, or P–TBB at each site, including the number of workers potentially exposed to each substance and, if applicable, the number of workers potentially exposed to more than one substance.

(iv) The potential routes of worker exposure to P–TBBA, P–TBT, or P–TBB at each site (e.g., inhalation, ingestion, dermal absorption).

(v) Available monitoring data from employee breathing zones with potential exposure to P–TBBA, P–TBT, or P–TBB at each site, including a description of the method of monitoring, the number of samples taken, and the potential number of workers similarly

exposed for each worker job category. Respondents to this paragraph (d)(4)(v) shall submit data showing a range of 8-hour time weighted averages (TWAs), provided that the data are available in that form. Respondents also shall submit a calculated geometric mean of these data, with an explanation of the method by which the mean was derived. However, if the monitoring data are not available in the form of 8-hour TWAs, respondents shall submit raw sample data results and the duration time of sampling for each job category.

(vi) A narrative description of any personal protective equipment and/or engineering controls used to prevent exposure to P–TBBA, P–TBT, or P–TBB at each site.

(vii) A listing of the estimated quantities of P–TBBA, P–TBT, or P–TBB released directly into air, water, or land from each site.

(viii) A narrative description of the times during the manufacturing, importing, or processing operations involving P–TBBA, P–TBT, or P–TBB when environmental release occurs at each site.

(ix) A narrative description of any engineering controls used to prevent environmental release of P–TBBA, P–TBT, or P–TBB at each site.

(x) A narrative description of all known end uses of any P–TBBA, P–TBT, or P–TBB that is manufactured, imported, or processed by the respondent. The narrative need not include customer identity.

(xi) A narrative description of the methods used at each site for disposing of wastes generated during the manufacture, importation, or processing of P–TBBA, P–TBT, or P–TBB, including the quantity and content of such wastes (per site), the method of disposal, and an identification of the disposal site(s).

(5) All manufactureres, importers, and processors specified in paragraph (b) of this section shall report the information described in this paragraph (d)(5). Respondents to this paragraph (d)(5) shall report separately for each substance that they intend to manufacture, import, or process during the first 2 years following the date on which they become subject to this rule. The data reported under this paragraph (d)(5) shall cover that 2-year period. Respondents to this paragraph (d)(5) shall report separately for each site at which they intend to manufacture, import, or process each substance. Respondents need not comply with this paragraph (d)(5) if the information to be reported is identical to that reported by the respondent under paragraph (d)(4) of this section, provided that the respondent makes note of that fact to EPA. Respondents to this paragraph (d)(5) shall report the following information:

(i) An estimate of the total quantity (by weight) of P–TBBA, P–TBT, or P–TBB that the respondent intends to manufacture, import, or process for commercial purposes per site during each of the first 2 years following the date on which the respondent becomes subject to this rule.

(ii) A narrative description of the intended manufacturing, importing, or processing activities involving P–TBBA, P–TBT, or P-TBB at each site during the first 2 years following the date on which the respondent becomes subject to this rule. The description shall include a summary of the intended manufacturing, importing, or processing operation(s); a summary of intended worker activities involving the substances, including an estimate of the number of persons anticipated to be exposed annually to P–TBBA, P–TBT, or P–TBB (per site) during the 2-year period, the anticipated routes of worker exposure to the substances (e.g., inhalation, ingestion, dermal absorption); and a summary of any personal protective equipment and/or engineering controls that the respondent intends to use to prevent exposure to the substances.

(iii) A narrative description of anticipated environmental releases of P–TBBA, P–TBT, or P–TBB at each site from the manufacture, importation, or processing of these substances during the first 2 years following the date on which the respondent becomes subject to this rule. The narrative shall include the anticipated quantities of each substance released directly into air, water, or land, the anticipated routes of environmental release, and any intended engineering controls to

be used to prevent environmental release of the substances.

(iv) A narrative description of all anticipated end uses or P–TBBA, P–TBT, or P–TBB resulting from the respondent's manufacture, importation, or processing of the substances during the first 2 years following the date on which the respondent becomes subject to this rule. The summary need not include customer identity.

(v) A narrative summary of the anticipated disposal of wastes generated from the manufacture, importation, or processing of P–TBBA, P–TBT, or P–TBB during the first 2 years following the date on which the respondent becomes subject to this rule. The summary shall include the anticipated quantity and content of such wastes (per site), the intended method of disposal, and an identification of intended disposal site(s).

(e) *When to report.* Persons subject to this rule must submit the requisite information to EPA within 60 days of becoming subject to the rule under the standards set forth in paragraph (b) of this section.

(f) *Certification.* Persons subject to this rule must attach the following statement to any information submitted to EPA in response to this rule: ''I hereby certify that, to the best of my knowledge and belief, all of the attached information is complete and accurate.'' This statement shall be signed and dated by the company's principal technical contact.

(g) *Recordkeeping.* Persons subject to the reporting requirements of this section must retain documentation of information contained in their reports for a period of 5 years from the date of the submission of the report.

[51 FR 17339, May 12, 1986; 51 FR 18323, May 19, 1986, as amended at 52 FR 20083, May 29, 1987; 58 FR 34204, June 23, 1993]

### § 704.43 Chlorinated naphthalenes.

(a) *Definitions.* (1) *Extent of chlorination* means the percent by weight of chlorine.

(2) *Import* means to import in bulk form or as part of a mixture.

(3) *Isomeric ratio* means the relative amounts of each isomeric chlorinated naphthalene that composes the chemical substance; and for each isomer the relative amounts of each chlorinated naphthalene designated by the position of the chlorine atom(s) on the naphthalene.

(4) *Polychlorinated biphenyl* means any chemical substance that is limited to the biphenyl molecule and that has been chlorinated to varying degrees.

(5) *Small manufacturer* means a manufacturer (including importers) who meets either paragraph (a)(5)(i) or (ii) of this section:

(i) A manufacturer of a chemical substance is small if its total annual sales, when combined with those of its parent company (if any), are less than $40 million. However, if the annual production volume of a particular chemical substance at any individual site owned or controlled by the manufacturer is greater than 45,400 kilograms (100,000 pounds), the manufacturer shall not qualify as small for purposes of reporting on the production of that chemical substance at that site, unless the manufacturer qualifies as small under paragraph (a)(5)(ii) of this section.

(ii) A manufacturer of a chemical substance is small if its total annual sales, when combined with those of its parent company (if any), are less than $4 million, regardless of the quantity of the particular chemical substance produced by that manufacturer.

(iii) For imported mixtures containing a chemical substance identified in paragraph (b) of this section, the 45,400 kilograms (100,000 pounds) standard in paragraph (a)(5)(i) of this section applies only to the amount of the chemical substance in a mixture and not the other components of the mixture.

(6) *Waste* means any solid liquid, semisolid, or contained gaseous material that results from the production of a chemical substance identified in paragraph (b) of this section and which is to be disposed.

(b) *Substances for which reports must be submitted.*

| CAS registry number | Chemical substance |
|---|---|
| 90–13–1 | Naphthalene, 1-chloro- |
| 91–58–7 | Naphthalene, 2-chloro- |
| 1321–64–8 | Naphthalene, pentachloro- |
| 1321–65–9 | Naphthalene, trichloro- |
| 1335–87–1 | Naphthalene, hexachloro- |
| 1335–88–2 | Naphthalene, tetrachloro- |
| 1825–30–5 | Naphthalene, 1,5-dichloro- |
| 1825–31–6 | Naphthalene, 1,4-dichloro- |
| 2050–69–3 | Naphthalene, 1,2-dichloro- |

| CAS registry number | Chemical substance |
|---|---|
| 2050–72–8 | Naphthalene, 1,6-dichloro- |
| 2050–73–9 | Naphthalene, 1,7-dichloro- |
| 2050–74–0 | Naphthalene, 1,8-dichloro- |
| 2050–75–1 | Naphthalene, 2,3-dichloro- |
| 2065–70–5 | Naphthalene, 2,6-dichloro- |
| 2198–75–6 | Naphthalene, 1,3-dichloro- |
| 2198–77–8 | Naphthalene, 2,7-dichloro- |
| 2234–13–1 | Naphthalene, octachloro- |
| 25586–43–0 | Naphthalene, chloro- |
| 32241–08–0 | Naphthalene, heptachloro- |
| 70776–03–3 | Naphthalene, chloro derivatives. |

(c) *Persons who must report.* (1) Persons who are manufacturing or importing a chemical substance identified in paragraph (b) of this section on October 8, 1984.

(2) Persons who propose to import a chemical substance identified in paragraph (b) of this section on or after October 8, 1984.

(3) Persons who manufacture a chemical substance identified in paragraph (b) of this section after October 8, 1984.

(4) A person is required to report only once for each chemical substance identified in paragraph (b) of this section.

(d) *Persons exempt from reporting.* (1) Small manufacturers.

(2) Persons described in § 704.5.

(e) *What information to report.* Persons described in paragraph (c) of this section must notify EPA of current or prospective manufacture or import. The notice must include, to the extent that it is known to or reasonably ascertainable by the person making the report, the following information:

(1) Company name and address.

(2) Name, address, and telephone number of the principal technical contact.

(3) For chemical substances proposed to be imported, the proposed date of import.

(4) A description of the use(s) or intended use(s) for the chemical substance.

(5) A description of the isomeric ratio and extent of chlorination of the chemical substance and the impurity level of polychlorinated biphenyls.

(6) The quantity (by weight) manufactured or imported within 12 months prior to October 8, 1984, if any, and the estimated quantity (by weight) to be manufactured or imported for the first 3 years following the date of the report or the date of the intended start of import whichever occurs later.

(7) The number of persons exposed to the chemical substance during manufacture, import, processing, distribution in commerce, use, and disposal.

(8) If a manufacturer's waste contains one or more of the chemical substances identified in paragraph (b) of this section, the manufacturer must:

(i) Provide the quantity (by weight) of the chemical substances identified in paragraph (b) of this section present in the waste.

(ii) Identify the constituents of the waste and their concentrations,

(iii) State the rate of waste generation as a percentage of production volume,

(iv) Describe where in the manufacturing process the waste is generated, and

(v) Describe the method for disposal of the waste.

(f) *When to report.* (1) Persons who are manufacturing or importing a chemical substance identified in paragraph (b) of this section on October 8, 1984 must notify EPA by November 6, 1984.

(2) Persons who propose to import a chemical substance identified in paragraph (b) of this section on or after October 8, 1984 must notify EPA by November 6, 1984, or 15 days after making the management decision described in § 704.3, whichever is later in time.

(3) Persons who manufacture a chemical substance identified in paragraph (b) of this section after October 8, 1984 must notify EPA within 30 days after the initial date of manufacture.

[49 FR 33653, Aug. 24, 1984; 49 FR 45133, Nov. 15, 1984; 50 FR 1215, Jan. 10, 1985; 51 FR 19839, June 3, 1986; 52 FR 20083, May 29, 1987. Redesignated at 53 FR 51717, Dec. 22, 1988]

### § 704.45 Chlorinated terphenyl.

(a) *Definitions.* (1) *Chlorinated terphenyl* means a chemical substance, CAS No. 61788–33–6, comprised of chlorinated ortho-, meta-, and paraterphenyl.

(2) *Extent of chlorination* means the percent by weight of chlorine for each isomer (ortho, meta, and para).

(3) *Isomeric ratio* means the ratios of ortho-, meta-, and parachlorinated terphenyls.

(4) *Polychlorinated biphenyl* means any chemical substance that is limited

to the biphenyl molecule that has been chlorinated to varying degrees.

(5) *Small manufacturer* means a manufacturer (importers are defined as manufacturers under TSCA) who meets either of the following standards under this rule:

(i) *First standard.* A manufacturer of an existing chemical substance is small if its total annual sales, when combined with those of its parent company (if any), are less than $40 million. However, if the annual production volume of a particular chemical substance at any individual site owned or controlled by the manufacturer is greater than 45,400 kilograms (100,000 pounds), the manufacturer shall not qualify as small for purposes of reporting on the production of that chemical substance at the site, unless the manufacturer qualified as small under paragraph (a)(5)(ii) of this section.

(ii) *Second standard.* A manufacturer of an existing chemical substance is small if its total annual sales, when combined with those of its parent company (if any), are less than $4 million, regardless of the quantity of chemicals produced by that manufacturer.

(b) *Persons who must report.* Except for small manufacturers and as provided in § 704.5, the following persons are subject to the rule:

(1) Persons who manufacture or propose to manufacture chlorinated terphenyl.

(2) Persons who import (importers) or propose to import chlorinated terphenyl as a chemical substance in bulk or as part of a mixture.

(c) *What information to report.* Persons subject to this rule as described in paragraph (b) of this section must notify EPA of current or proposed manufacture or import of chlorinated terphenyl. The notice must include, to the extent that it is known to the person making the report or is reasonably ascertainable, the following information:

(1) Company name and address.

(2) Name, address, and telephone number of principal technical contact.

(3) A description of the use(s) or intended use(s) for chlorinated terphenyl.

(4) A description of the isomeric ratio and extent of chlorination of the chlorinated terphenyl and the impurity level of polychlorinated biphenyls.

(5) The quantity (by weight) manufactured or imported within 12 months prior to the effective date of the rule, if any, and the estimated quantity (by weight) to be manufactured or imported for the first three years following the date of the report or the date of the intended start of production, whichever occurs later.

(6) The proposed date for the initiation of manufacturing or importation of chlorinated terphenyl, if appropriate.

(d) *When to report.* Persons who are manufacturing or importing chlorinated terphenyl on the effective date of the rule must notify EPA within 30 days of the effective date of the rule. Persons who propose to manufacture or import chlorinated terphenyl must notify EPA within 15 days after making the management decision described in § 704.3 ''Proposed to manufacture or import''.

[49 FR 11184, Mar. 26, 1984, as amended at 49 FR 32068, Aug. 10, 1984; 50 FR 2048, Jan. 15, 1985; 52 FR 20083, May 29, 1987. Redesignated at 53 FR 51717, Dec. 22, 1988; 58 FR 34204, June 23, 1993]

### § 704.95 Phosphonic acid, [1,2-ethanediyl-bis[nitrilobis-(methylene)]]tetrakis- (EDTMPA) and its salts.

(a) *Substances for which reporting is required.* The chemical substances for which reporting is required under this section are:

| CAS No. | Chemical name |
|---|---|
| 1429–50–1 | Phosphonic acid, [1,2-ethanediyl-bis[nitrilobis (methylene)]] tetrakis- (EDTMPA) |
| 15142–96–8 | Phosphonic acid, [1,2-ethanediyl-bis[nitrilobis(methylene)]] tetrakis-, hexasodium salt |
| 34274–30–1 | Phosphonic acid, [1,2-ethanediyl-bis[nitrilobis(methylene)]] tetrakis-, potassium salt |
| 57011–27–5 | Phosphonic acid, [1,2-ethanediyl-bis[nitrilobis (methylene)]] tetrakis-, ammonium salt |
| 67924–23–6 | Cobaltate (6-), [[[1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis-[phosphonato]] (8-)]-, pentapotassium hydrogen, (OC–6–21)- |
| 67969–67–9 | Cobaltate (6-), [[[1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis- [phosphonato]] (8-)-N,N',O,O'',O'''',O'''''']-, pentasodium hydrogen, (OC–6–21)- |
| 67989–89–3 | Cuprate (6-), [[[1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis- [phosphonato]] (8-)]-, pentapotassium hydrogen, (OC–6–21)- |

| CAS No. | Chemical name |
|---|---|
| 68025–39–8 | Cobaltate (6-), [[[1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis- [phosphonato]] (6-)-N,N',O,O'',O'''',O'''''']-, pentaammonium hydrogen, (OC–6–21)- |
| 68188–96–5 | Phosphonic acid, [1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis-, tetrapotassium salt |
| 68309–98–8 | Cadmate (6-), [[[1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis- [phosphonato]] (8-)]-, pentapotassium hydrogen, (OC–6–21)- |
| 68901–17–7 | Phosphonic acid, [1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis-, octaammonium salt |
| 68958–86–1 | Nickelate (6-), [[[1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis- [phosphonato]] (8-)]-, pentaammonium hydrogen, (OC–6–21)- |
| 68958–87–2 | Nickelate (6-), [[[1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis- [phosphonato]] (8-)]-, pentapotassium hydrogen, (OC–6–21)- |
| 68958–88–3 | Nickelate (6-), [[[1,2-ethanediylbis [nitrilobis (methylene)]] tetrakis [phosphonato]] (8-)]-, pentasodium hydrogen, (OC–6–21)- |

(b) *Persons who must report.* Unless exempt as provided in § 704.5, reports must be submitted by:

(1) Persons who manufacture or import any of the substances identified in paragraph (a) of this section.

(2) Persons who propose to manufacture or propose to import any of the substances identified in paragraph (a) of this section. For the purposes of importer reporting under this section, an import site is the operating unit within the person's organization which is directly responsible for importing the substance and which controls the import transaction; the import site may in some cases be the organization's headquarters office in the United States.

(c) *What information to report.* Persons identified in paragraph (b) of this section must report to EPA, for each of the substances identified in paragraph (a) of this section, the following information to the extent known to or reasonably ascertainable by them.

(1) Initial Report:

(i) Name and Chemical Abstracts Service Registry Number of the substance for which the report is submitted.

(ii) Company name and headquarters address.

(iii) Name, address, and telephone number of the principal technical contact.

(iv) The total quantity (by weight in pounds) of the substance manufactured or imported for the person's most recently completed corporate fiscal year.

(v) A description of the commercial uses of the substance during the person's most recently completed corporate fiscal year, including the production volume for each use.

(vi) The estimated quantity (by weight in pounds) of the substance proposed to be manufactured or imported in the person's current corporate fiscal year.

(vii) A description of the intended commercial uses of the substance during the person's current corporate fiscal year, including the estimated production volume for each use.

(2) Follow-up Report:

(i) Name and Chemical Abstracts Service Registry Number of the substance for which the report is submitted.

(ii) Company name and headquarters address.

(iii) Name, address, and telephone number of the principal technical contact.

(iv) The estimated quantity (by weight in pounds) of the substance proposed to be manufactured or imported in the person's current corporate fiscal year.

(v) A description of the intended commercial uses of the substance during the person's current corporate fiscal year, including the estimated production volume for each use.

(d) *When to report.* (1) Persons specified in paragraph (b)(1) of this section who are manufacturing or importing the substance as of December 5, 1988 must submit an initial report described in paragraph (c)(1) of this section by January 3, 1989.

(2) Persons specified in paragraph (b)(2) of this section must submit an initial report within 30 days after making the management decision described in § 704.3 or by January 3, 1989, whichever is later.

(3) Persons specified in paragraph (b) of this section, who submitted a report described in paragraph (c)(1) of this section, must submit a follow-up report described in paragraph (c)(2) of this section within 30 days of making the management decision, described at § 704.3, to do either of the following events:

(i) Manufacture or import the substance in a quantity 50 percent greater

than the quantity reported in the most recently submitted report.

(ii) Manufacture or import the substance for a use not reported for that substance in any previous report.

(e) *Certification.* Persons subject to this section must attach the following statement to any information submitted to EPA in response to this section: ''I hereby certify that, to the best of my knowledge and belief, all of the attached information is complete and accurate.'' This statement must be signed and dated by the company's principal technical contact.

(f) *Recordkeeping.* Persons subject to the reporting requirements of this section must retain documentation of information contained in their reports for a period of 5 years from the date of the submission of the report.

[53 FR 41337, Oct. 21, 1988, as amended at 58 FR 34204, June 23, 1993]

### § 704.102 Hexachloronorbornadiene.

(a) *Definitions.* (1) *Endrin* means the pesticide 2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1a*alpha*, 2*beta*, 2a*beta*, 3*alpha*, 6*alpha*, 6*abeta*, 7*beta*, 7a*alpha*)-, CAS Number 72–20–8.

(2) *HEX–BCH* means the chemical substance 1,2,3,4,7,7-hexachloronorbornadiene, CAS Number 3389–71–7.

(3) *Isodrin* means the pesticide 1,4:5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexacholoro-1,4,4a,5,8,8a-hexahydro-, (1*alpha*, 4*alpha*, 4a*beta*, 5*beta*, 8*beta*, 8a*beta*)-, CAS Number 465–73–6.

(4) *Small business* means any manufacturer, importer, or processor who meets either paragraph (a)(4)(i) or (ii) of this section:

(i) A business is small if its total annual sales, when combined with those of its parent (if any), are less than $40 million. However, if the annual manufacture, importation, or processing volume of a particular chemical substance at any individual site owned or controlled by the business is greater than 45,400 kilograms (100,000 pounds), the business shall not qualify as small for purposes of reporting on the manufacture, importation, or processing of that chemical substance at that site, unless the business qualifies as small under paragraph (a)(4)(ii) of this section.

(ii) A business is small if its total annual sales, when combined with those of its parent company (if any), are less than $4 million, regardless of the quantity of the particular chemical substance manufactured, imported, or processed by that business.

(iii) For imported and processed mixtures containing HEX–BCH, the 45,400 kilograms (100,000 pounds) standard in paragraph (a)(4)(i) of this section applies only to the amount of HEX–BCH in a mixture and not the other components of the mixture.

(5) ''8-hour time weighted average'' means the cumulative exposure for an 8-hour work shift computed as follows:

$$E = \frac{C_a T_a + C_b T_b + \ . \ . \ . \ C_n T_n}{8}$$

Where:

E is the equivalent exposure for the working shift.

$C_i$ is the concentration (i.e., parts per million) during any period of time ($T_i$) where the concentration remains constant.

$T_i$ is the duration in hours of the exposure at the concentration $C_i$.

(6) ''Year'' means corporate fiscal year.

(b) *Persons who must report.* (1) Reports must be submitted by:

(i) Persons who are manufacturing, importing, or processing HEX–BCH for use as an intermediate in the production or isodrin or endrin on or after January 2, 1986; and

(ii) Persons who propose to manufacture, import, or process HEX–BCH for use as an intermediate in the production of isodrin or endrin, on or after January 2, 1986.

(2) Persons described in paragraph (b)(1) of this section who engage or propose to engage in more than one activity (i.e., manufacture and processing) must report the information required in paragraph (d) separately for each activity.

(c) *Persons exempt from reporting.* (1) Small businesses.

(2) Persons described in § 704.5(a) and (c).

(d) *Information to report.* (1) Initial reports must include, to the extent that it is known to or reasonably ascertainable by the person reporting, the following information:

(i) Company name and address.

(ii) Name, address, and telephone number of the principal contact.

(iii) Name and address of plant sites where HEX–BCH is or is proposed to be manufactured, imported, or processed, noting for each plant site which activity takes or would take place at each site.

(iv) If applicable, the intended date for initiating the manufacture, import, or processing of HEX–BCH.

(v) If applicable, the actual quantity (by weight) of HEX–BCH manufactured, imported, or processed during the most recently concluded year.

(vi) The estimated quantity (by weight) of HEX–BCH to be manufactured, imported, or processed each year during the first 3 years following the date of the report or the date of the intended start of manufacture, import, or processing, whichever occurs later.

(vii) For each year described in paragraphs (d)(1) (v) and (vi) of this section: the number or expected number of employees exposed to HEX–BCH during the manufacture, import, processing, distribution in commerce, use, and disposal; the routes of exposure; and the 8-hour time weighted average of exposure.

(viii) If employees are exposed or expected to be exposed to HEX–BCH, state for each reported route of exposure, whether personal protective equipment is used or expected to be used, and a description of the personal protective equipment.

(ix) The actual or anticipated quantity, content, method of disposal, and disposal site of any wastes generated or expected to be generated during the manufacture, importation, or processing of HEX–BCH.

(2) Subsequent reports must provide, to the extent known to or reasonably ascertainable by the person reporting, the information in paragraph (d)(1) of this section and a statement explaining why the subsequent report is required.

(e) *When to report.* (1) Persons who are manufacturing, importing, or processing HEX–BCH on January 2, 1986, must submit an initial report to EPA by February 3, 1986.

(2) Persons who propose to manufacture, import, or process HEX–BCH on or after January 2, 1986, must submit an initial report to EPA by February 3, 1986, or 30 days after making the management decision described in § 704.3 ''Propose to manufacture, import, or process,'' whichever is later in time.

(3) Persons described in paragraph (b) of this section, who have submitted a report described in paragraph (d) of this section, must submit a subsequent report within 30 days of any of the following events. Based on the most recently submitted report:

(i) The manufacture, importation, or processing of HEX–BCH begins at a plant site different than that reported pursuant to paragraph (d)(1)(iii) of this section.

(ii) The actual quantity (by weight) of HEX–BCH manufactured, imported, or processed in a given year is greater than or equal to 200 percent of the estimated value for that year reported pursuant to paragraph (d)(1)(vi) of this section.

(iii) The total number of employees exposed to HEX–BCH is greater than 130 percent of the projected value reported pursuant to paragraph (d)(1)(vii) of this section.

(iv) The route of exposures to HEX–BCH differs from that reported pursuant to paragraph (d)(1)(vii) of this section.

(v) The actual 8-hour time weighted average exposure for any activity exceeds the projection reported pursuant to paragraph (d)(1)(vii) of this section by more than 100 percent.

(vi) The method of disposal or disposal site reported pursuant to paragraph (d)(1)(ix) of this section has changed.

(vii) Three years have passed since the most recent submission of a report and the person is still engaged in the manufacture, importation, or processing of HEX–BCH.

(f) *Certification of review.* Each person who submits a report under this section must for 3 years following the submission date of the most recent submission, review their activities at the end of each year to determine whether any reportable event specified in paragraph (e)(3) of this section has occurred. If a review shows that none of these events has occurred, the person is required to certify this fact in writing.

(g) *Recordkeeping.* Any person subject to the reporting requirements of this section must:

(1) Retain documentation of information contained in their reports. This documentation must be maintained for a period of 3 years from the date of the submission of the report; and

(2) Retain the certification required by paragraph (f) of this section for 3 years from the date of its creation.

[50 FR 47536, Nov. 19, 1985, as amended at 52 FR 20083, May 29, 1987. Redesignated at 53 FR 51717, Dec. 22, 1988; 58 FR 34204, June 23, 1993]

### § 704.104 Hexafluoropropylene oxide.

(a) *Definitions.* (1) ''HFPO'' means the chemical substance hexafluoropropylene oxide, CAS Number 428–59–1. [Listed in TSCA Inventory as oxirane, trifluoro(trifluoromethyl)-]

(2) ''Enclosed process'' means a process that is designed and operated so that there is no intentional release of any substance present in the process. A process with fugitive, inadvertent, or emergency pressure relief releases remains an enclosed process so long as measures are taken to prevent worker exposure to and environmental contamination from the releases.

(3) ''Small processor'' means a processor that meets either the standard in paragraph (a)(3)(i) of this section or the standard in paragraph (a)(3)(ii) of this section.

(i) *First standard.* A processor of a chemical substance is small if its total annual sales, when combined with those of its parent company, if any, are less than $40 million. However, if the annual processing volume of a particular chemical substance at any individual site owned or controlled by the processor is greater than 45,400 kilograms (100,000 pounds), the processor shall not qualify as small for purposes of reporting on the processing of that chemical substance at that site, unless the processor qualifies as small under paragraph (a)(3)(ii) of this section.

(ii) *Second standard.* A processor of a chemical substance is small if its total annual sales, when combined with those of its parent company (if any), are less than $4 million, regardless of the quantity of the particular chemical substance processed by that company.

(iii) *Inflation index.* EPA will use the Inflation Index described in the definition of ''small manufacturer'' that is set forth in § 704.3 for purposes of adjusting the total annual sales values of this small processor definition. EPA will provide FEDERAL REGISTER notification when changing the total annual sales values of this definition.

(b) *Persons who must report.* Except as provided in paragraph (c) of this section, the following persons are subject to this section:

(1) Persons who manufacture or propose to manufacture HFPO for use as an intermediate in the manufacture of fluorinated substances in an enclosed process.

(2) Persons who import or propose to import HFPO for use as an intermediate in the manufacture of fluorinated substances in an enclosed process.

(3) Persons who process or propose to process HFPO as an intermediate in the manufacture of fluorinated substances in an enclosed process.

(c) *Persons not subject to this rule.* The following persons are not subject to this rule:

(1) Small processors.

(2) Persons described in § 704.5 (a) through (d).

(3) Persons who have already submitted to EPA a completed copy of the Preliminary Assessment Information Manufacturer's Report (EPA Form 7710–35, as described at § 712.28 of this chapter) for HFPO are not required to report under this section with respect to activities previously reported on.

(d) *What information to report.* Persons identified in paragraph (b) of this section must submit a Premanufacture Notice Form (EPA Form 7710–25).

(e) *When to report.* (1) Persons who are manufacturing, importing, or processing, or who propose to manufacture, import, or process HFPO for use as an intermediate in the manufacture of fluorinated substances in an enclosed process as of December 10, 1987, must report by February 8, 1988.

(2) Persons who propose to manufacture, import, or process HFPO for use as an intermediate in the manufacture of fluorinated substances in an enclosed process after December 10, 1987, must report within 30 days after making a firm management decision to

commit financial resources for the manufacturing, importing, or processing of HFPO.

(f) *Recordkeeping.* Persons subject to the reporting requirements of this section must retain documentation of information contained in their reports for a period of 5 years from the date of submission of the reports.

(g) *Where to send reports.* Reports must be submitted by certified mail to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATTN: HFPO Reporting.

[52 FR 41299, Oct. 27, 1987, as amended at 58 FR 34204, June 23, 1993; 60 FR 16308, Mar. 29, 1995; 60 FR 31920, June 19, 1995; 60 FR 34463, July 3, 1995]

### § 704.175 4,4′-methylenebis(2-chloroaniline) (MBOCA).

(a) *Substance subject to reporting.* The chemical substance 4,4′-methylenebis(2-chloroaniline) (CAS No. 101–14–4) is subject to reporting under this section. The substance also is identified as 4,4′-methylenebis(2-chlorobenzenamine) and MBOCA.

(b) *Persons who must report.* Except as provided in paragraph (c) of this section, the following persons are subject to this rule.

(1) Persons who propose to manufacture MBOCA in the United States on or after June 2, 1986.

(2) Persons who are manufacturing MBOCA in the United States as of June 2, 1986.

(3) Persons manufacturing MBOCA in the United States on or after June 2, 1986 who propose to change their manner or method of manufacturing the substance from a manner or method of manufacturing that previously was reported under this section.

(c) *Persons not subject to this rule.* The following persons are exempt from the reporting requirements of this section:

(1) Persons who import MBOCA into the customs territory of the United States and do not otherwise manufacture the substance in the United States.

(2) Persons who complied with the requirements of this section prior to June 2, 1986 and received written notification of compliance from EPA.

(d) *What information to report.* Persons who are subject to this rule as described in paragraph (b) of this section must report information to EPA by completing the following Parts of the notice form contained in Appendix A to Part 720 of this chapter: Parts I.A., I.B., I.C.1., I.C.3., and II.A.; also, Part III as appropriate. Persons subject to the requirements of this section also must submit a narrative description of any processing and packaging of MBOCA that occurs at the manufacturing plant site, including the number of workers potentially exposed to MBOCA during on-site processing and packaging of MBOCA and a description of any personal protective equipment and/or engineering controls that would be used to prevent release of and exposure to MBOCA during on-site processing and packaging. Persons subject to the requirements of this section are not required to submit information on processing or use of MBOCA away from the manufacturing plant site. Respondents to this rule shall report all information that is known to or reasonably ascertainable by the person reporting.

(e) *When to report.* (1) Persons specified in paragraph (b)(1) of this section must report by July 2, 1986 or within 30 days after making a firm management decision to commit financial resources for the manufacture of MBOCA, whichever is later in time.

(2) Persons specified in paragraph (b)(2) of this section must report by July 2, 1986.

(3) Persons specified in paragraph (b)(3) of this section must report within 30 days of making a firm management decision to commit financial resources to change their manner or method of manufacturing the substance from a manner or method of manufacturing that previously was reported under this section.

[51 FR 13223, Apr. 18, 1986, as amended at 52 FR 20083, May 29, 1987; 58 FR 34204, June 23, 1993]

# PART 707—CHEMICAL IMPORTS AND EXPORTS

## Subpart A—[Reserved]

## Subpart B—General Import Requirements and Restrictions

Sec.
707.20 Chemical substances import policy.

## Subpart C—[Reserved]

## Subpart D—Notices of Export Under Section 12(b)

707.60 Applicability and compliance.
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707.65 Submission to agency.
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707.70 EPA notice to foreign governments.
707.72 Termination of reporting requirements.
707.75 Confidentiality.

AUTHORITY: 15 U.S.C. 2611(b) and 2612.

SOURCE: 45 FR 82850, Dec. 16, 1980, unless otherwise noted.

## Subpart A—[Reserved]

## Subpart B—General Import Requirements and Restrictions

### § 707.20 Chemical substances import policy.

(a) *Scope.* (1) This statement addresses the policy of the Environmental Protection Agency (EPA) on importation of chemical substances, mixtures, and articles under section 13 of the Toxic Substances Control Act (TSCA; 15 U.S.C. 2601 et seq.). In particular, it addresses aspects of the regulation promulgated by the United States Customs Service (Customs), Department of the Treasury (19 CFR 12.118 through 12.127, and 127.28 [amended]) to implement section 13 of TSCA, 15 U.S.C. 2612. Section 13 requires the Secretary of the Treasury to refuse entry into the Customs territory of the United States of a chemical substance, mixture, or article if it does not comply with rules in effect under TSCA, or if it is offered for entry in violation of TSCA or rules or orders under TSCA.

(2) In addition to this statement of policy, EPA will continue, as necessary, to address problems associated with imports in rulemaking and other actions under individual sections of TSCA, i.e., sections 4, 5, 6, 7, 8, and 12. Sections 5, 6, and 7 apply directly to imports subject to the section 13 requirements. Section 12 may apply to export of a shipment that is refused entry under section 13. Importers may have obligations under sections 4 and 8; section 4 and 8 requirements for importers would not apply to individual chemical shipments and thus are not included under section 13 requirements. Interested persons should refer to the records of these individual rulemaking actions for specific information and guidance.

(b) *Objectives.* (1) TSCA is intended to be comprehensive, and assure protection of health and the environment from unreasonable risks associated with chemicals whether the chemicals are imported or produced domestically. This intent is manifested by the inclusion of importation in the Act's definition of the term ''manufacture'': ''[M]anufacture means to import * * *, produce, or manufacture'' (15 U.S.C. 2602(7)). Thus, importers are responsible for insuring that chemical importation complies with TSCA just as domestic manufacturers are responsible for insuring that chemical manufacture complies with TSCA.

(2)(i) The section 13 rule requires importers to sign the following statement for each import of chemical substances subject to TSCA: ''I certify that all chemical substances in this shipment comply with all applicable rules or orders under TSCA and that I am not offering a chemical substance for entry in violation of TSCA or any applicable rule or order under TSCA.'' The certification will document that, in accordance with TSCA, the importer has taken the necessary steps to insure compliance.

(ii) The section 13 rule requires importers of chemicals not subject to TSCA (e.g., pesticides) to certify that compliance with TSCA is not required. Importers must certify this by signing the statement: ''I certify that all chemicals in this shipment are not subject to TSCA.'' This is appropriate when a chemical import is not clearly identified as a pesticide or other chemical not subject to TSCA.

(3) The United States is involved in a major effort toward international harmonization in the control of chemicals. At such time as international agreement is reached on this issue, EPA would be prepared to modify its policy if necessary. EPA believes that its international harmonization efforts in the control of chemicals will protect health and the environment while fulfilling its obligations under the Trade Agreements Act of 1979.

(c) *The section 13 rule*—(1) *General certification.* (i) The rule promulgated under section 13 of TSCA by Customs, in consultation with EPA, implements the requirement of section 13 that chemical substances, mixtures, or articles not in compliance with TSCA, or whose importation is not in compliance with TSCA, shall be denied entry into the customs territory of the United States. The rule requires that importers certify by a statement, on the entry document or invoice, that any shipment of a chemical substance subject to TSCA, imported in bulk or as part of a mixture, complies with TSCA, and that it is not offered for entry in violation of TSCA or any rule or order under TSCA, or that the chemicals imported are not subject to TSCA.

(ii) The certification applies to TSCA sections 5, 6, and 7.

(iii) EPA expects that this certification will be based upon actual knowledge of the importer in most cases. However, EPA realizes that sometimes importers may not have actual knowledge of the chemical composition of imported mixtures. In these cases, the importer should attempt to discover the chemical constituents of the shipment by contacting another party to the transaction (e.g., his principal or the foreign manufacturer). This person may be able to identify the components of the mixture, or at least state that the substances comply with TSCA. The greater the effort an importer makes to learn the identities of the imported substances and their compliance with TSCA, the smaller his chance of committing a violation by importing a noncomplying shipment. If a shipment is ultimately determined to have violated TSCA, the good faith efforts of the importer to verify compliance, as evidenced by documents contained in his files, may obviate or mitigate the assessment of a civil penalty under section 16 of TSCA.

(2) *EPA enforcement.* (i) EPA and Customs will monitor chemical imports to determine if shipments and their import comply with the certification requirements and the substantive mandates of TSCA. Customs will refuse entry to any shipment until such time as the certification is properly submitted. Customs will also detain a shipment if there are reasonable grounds to believe that such shipment or its import violates TSCA or regulations or orders thereunder. A violative shipment must either be brought into compliance, exported, destroyed, or voluntarily abandoned within the time periods prescribed in 19 CFR 12.124 of the section 13 rule.

(ii) When EPA determines that a shipment should be detained, EPA will identify the reasons for the detention and the necessary actions for an importer to bring the shipment into compliance with TSCA. If EPA has given this information to Customs before the district director issues the detention notice, the information will become part of the detention notice. The importer should contact one of the following EPA regional offices for guidance as to the proper procedures to correct any deficiencies in the shipment.

REGION I

John F. Kennedy Federal Building, Boston, MA 02203 (617–223–0586)

REGION II

26 Federal Plaza, New York, NY 10278 (201–321–6669)

REGION III

Curtis Building, 6th and Walnut Streets, Philadelphia, PA 19106 (215–597–7668)

REGION IV

345 Courtland Street, NE., Atlanta, GA 30365 (404–881–3864)

REGION V

230 South Dearborn Street, Chicago, IL 60604 (312–353–2291)

REGION VI

1201 Elm Street, Dallas, TX 75270 (214–767–2734)

REGION VII

324 East 11th Street, Kansas City, MO 64106 (816–374–3036)

REGION VIII

1860 Lincoln Street, Denver, CO 80295 (303–837–3926)

REGION IX

215 Fremont Street, San Francisco, CA 94105 (415–974–8119)

REGION X

1200 Sixth Avenue, Seattle, WA 98101 (206–442–2871)

(iii) If Customs detains or refuses entry of a shipment (other than for failure to make the general certification) and the importer takes measures necessary to bring the shipment into conformity with the requirements of TSCA, EPA officials will reassess the shipment to determine its current compliance status. When a shipment is no longer in violation, EPA will notify the district director and the importer. The district director will then release the shipment. This notice will also serve as a determination to permit entry under 19 CFR 12.123(c) if a shipment is brought into compliance before the 19 CFR 12.123(c) decisionmaking process has been completed. If compliance is achieved after a 19 CFR 12.123(c) determination (adverse to the importer) has been made, the EPA notice to the district director will serve as a reversal of the decision to refuse entry.

(3) *EPA assistance.* Assistance in determining whether a chemical shipment is in compliance with TSCA can be obtained from the Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room E–543B, 401 M St., SW., Washington, DC, 20460, Telephone: (202) 554–1404, TDD: (202) 544–0551.

[48 FR 55464, Dec. 13, 1983, as amended at 60 FR 34463, July 3, 1995]

## Subpart C—[Reserved]

## Subpart D—Notices of Export Under Section 12(b)

### § 707.60 Applicability and compliance.

(a) Section 12(b) of the Toxic Substances Control Act requires any person who exports or intends to export a chemical substance or mixture to notify the Environmental Protection Agency of such exportation to a particular country if any of the following actions have been taken under the Act with respect to that chemical substance or mixture:

(1) Data are required under section 4 or 5(b),

(2) An order has been issued under section 5,

(3) A rule has been proposed or promulgated under section 5 or 6, or

(4) An action is pending, or relief has been granted under section 5 or 7.

(b) No notice of export will be required for articles, except PCB articles, unless the Agency so requires in the context of individual section 5, 6, or 7 actions.

(c) Any person who exports or intends to export polychlorinated biphenyls (PCBs) or PCB articles, for any purpose other than disposal, shall notify EPA of such intent or exportation under section 12(b). PCBs and PCB articles have the definitions published in § 761.3 of this title respectively.

(d) Any person who would be prohibited by a section 5 or 6 regulation from exporting a chemical substance or mixture, but who is granted an exemption by EPA to export that chemical substance or mixture, shall notify EPA under section 12(b) of such intent to export or exportation.

(e) Failure to comply with section 12(b) as set forth in these rules will be considered a violation of section 15(3) of the Toxic Substances Control Act, and will subject the exporter to the

penalty, enforcement, and seizure provisions of sections 16 and 17 of the Toxic Substances Control Act.

### § 707.63 Definitions.

The definitions set forth in the Toxic Substances Control Act, section 3, apply for this part. In addition, the following abbreviations and definitions are provided for purposes of this rule:

(a) *EPA* means the Environmental Protection Agency.

(b) *Exporter* means the person who, as the principal party in interest in the export transaction, has the power and responsibility for determining and controlling the sending of the chemical substance or mixture to a destination out of the customs territory of the United States.

(c) *Regulated chemical* means any chemical substance or mixture for which export notice is required under § 707.60.

(d) *TSCA* means the Toxic Substances Control Act.

### § 707.65 Submission to agency.

(a) Exporters must notify EPA of their export or intended export of each regulated chemical in accordance with the following:

(1) The notice must be in writing;

(2)(i) The notice must be for the first export or intended export to a particular country in a calendar year when data are required under section 5(b), an order has been issued under section 5, a rule has been proposed or promulgated under section 5 or 6, or an action is pending or relief has been granted under section 5 or 7.

(ii) The notice must be for the first export or intended export to a particular country when data are required under section 4.

(3) The notice must be postmarked within seven days of forming the intent to export or on the date of export, whichever is earlier. A notice of intent to export must be based on a definite contractual obligation, or an equivalent intra-company agreement, to export the regulated chemical.

(b) If the EPA action that prompts the notice is a proposed rule, the requirement to submit export notices to EPA shall begin thirty days after publication of the action in the FEDERAL REGISTER.

(c) Notices shall be marked ''Section 12(b) Notice'' and sent to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460.

[45 FR 82850, Dec. 16, 1980, as amended at 53 FR 12522, Apr. 15, 1988; 58 FR 40242, July 27, 1993; 60 FR 34463, July 3, 1995]

### § 707.67 Contents of notice.

The notice to EPA shall include:

(a) The name of the regulated chemical as it appears in the section 4, 5, 6, or 7 action. If a category is regulated, the name of the individual regulated chemical within that category, as well as the category, must be given. The name shall be that which appears in Volume I of the EPA Chemical Substance Inventory, or its supplements, if the chemical appears there.

(b) The name and address of the exporter.

(c) The country (countries) of import.

(d) The date(s) of export or intended export.

(e) The section (4, 5, 6, or 7) of TSCA under which EPA has taken action.

### § 707.70 EPA notice to foreign governments.

(a)(1) Notice by EPA to the importing country shall be sent no later than 5 working days after receipt by the TSCA Document Processing Center of the first annual notification for each regulated chemical when data are required under section 5(b), an order has been issued under section 5, a rule has been proposed or promulgated under section 5 or 6, or an action is pending or relief has been granted under section 5 or 7.

(2) Notice by EPA to the importing country shall be sent no later than 5 working days after receipt by the TSCA Document Processing Center of the first notification for each regulated chemical when data are required under section 4.

(b) Notices shall:

(1) Identify the regulated chemical.

(2) Summarize the regulatory action taken, or indicate the availability of data under section 4 or 5(b) of TSCA.

(3) Identify an EPA official to contact for further information.

(4) Include a copy of the pertinent FEDERAL REGISTER notice.

(c) Notices shall be sent to the country's ambassador in Washington, DC, or other official designated by the foreign government, and to the United States Department of State.

[45 FR 82850, Dec. 16, 1980, as amended at 58 FR 40242, July 27, 1993]

### § 707.72 Termination of reporting requirements.

(a) The reporting requirements of Subpart D of this part are terminated for certain specific chemical substances and mixtures as set forth in this paragraph.

(1) When data required under Part 766 of this chapter have been submitted to EPA for a specific chemical substance produced by a specific process, and the data show no positive test result as defined in § 766.3 of this chapter, reporting is no longer required by persons who export or intend to export that substance produced by that process.

(2) [Reserved]

(b) [Reserved]

[52 FR 21437, June 5, 1987]

### § 707.75 Confidentiality.

(a) A person may assert a claim of confidentiality for any information which is submitted to EPA in a notice.

(b) Any claim of confidentiality must accompany the information at the time it is submitted to EPA. In the notice, the submitter must clearly identify the information that is claimed confidential by marking the specific information on each page with a label such as ''confidential business information'', ''proprietary'', or ''trade secret''.

(c) Notwithstanding any claim of confidentiality, information outlined in § 707.70 will be included in the EPA notice to the foreign government. With this exception, EPA will disclose information that is covered by a claim of confidentiality asserted in accordance with this section only to the extent permitted by, and in accordance with, the procedures set forth in TSCA and Part 2 of this chapter.

(d) If a person does not assert a claim of confidentiality for information at the time a notice is submitted to EPA, the Agency may make the information public, including placement in a public file, without further notice to the person.

## PART 710—INVENTORY REPORTING REGULATIONS

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AUTHORITY: 15 U.S.C. 2607(a).

### § 710.1 Scope and compliance.

(a) This part establishes regulations governing reporting by certain persons who manufacture, import, or process chemical substances for commercial purposes under section 8(a) of the Toxic Substances Control Act (15 U.S.C. 2607(a)). Section 8(a) authorizes the Administrator to require reporting of information necessary for administration of the Act and requires EPA to issue regulations for the purpose of compiling an inventory of chemical substances manufactured or processed for a commercial purpose, as required by section 8(b) of the Act. Following an initial reporting period, EPA published an initial inventory of chemical substances manufactured, processed or imported for commercial purposes. In accordance with section 8(b), EPA periodically amends the inventory to include new chemical substances which are manufactured or imported for a commercial purpose and reported under section 5(a)(1) of the Act. EPA also revises the categories of chemical substances and makes other amendments as appropriate.

(b) Section 15(3) of TSCA makes it unlawful for any person to fail or refuse to submit information required under these reporting regulations. In addition, section 15(3) makes it unlawful for any person to fail to keep, and permit access to, records required by these regulations. Section 16 provides that any person who violates a provision of section 15 is liable to the United States for a civil penalty and may be criminally prosecuted. Pursuant to section 17, the Government may seek judicial relief to compel submission of section 8(a) information and to otherwise restrain any violation of section 15.

NOTE: As a matter of traditional Agency policy, EPA does not intend to concentrate its enforcement efforts on insignificant clerical errors in reporting.

(c) Each person who reports under these regulations shall maintain records that document information reported under these regulations and, in accordance with the Act, permit access to, and the copying of, such records by EPA officials.

[42 FR 64572, Dec. 23, 1977, as amended at 45 FR 18375, Mar. 21, 1980; 60 FR 31921, June 19, 1995]

### §710.2 Definitions.

In addition to the definitions in §704.3 in this chapter, the following definitions also apply to this part:

(a) The following terms shall have the meaning contained in the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 321 et seq., and the regulations issued under such Act: *Cosmetic, device, drug, food,* and *food additive.* In addition, the term *food* includes poultry and poultry products, as defined in the Poultry Products Inspection Act, 21 U.S.C. 453 et seq.; meats and meat food products, as defined in the Federal Meat Inspection Act, 21 U.S.C. 60 et seq.; and eggs and egg products, as defined in the Egg Products Inspection Act, 21 U.S.C. 1033 et seq.

(b) The term *pesticide* shall have the meaning contained in the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136 et seq., and the regulations issued thereunder.

(c) The following terms shall have the meaning contained in the Atomic Energy Act of 1954, 42 U.S.C. 2014 et seq., and the regulations issued thereunder: *byproduct material, source material,* and *special nuclear material.*

(d) *Act* means the Toxic Substances Control Act, 15 U.S.C. 2601 et seq.

(e) *Administrator* means the Administrator of the U.S. Environmental Protection Agency, any employee or authorized representative of the Agency to whom the Administrator may either herein or by order delegate his authority to carry out his functions, or any other person who shall by operation of law be authorized to carry out such functions.

(f) An *article* is a manufactured item: (1) Which is formed to a specific shape or design during manufacture, (2) which has end use function(s) dependent in whole or in part upon its shape or design during end use, and (3) which has either no change of chemical composition during its end use or only those changes of composition which have no commercial purpose separate from that of the article and that may occur as described in §710.4(d)(5); except that fluids and particles are not considered articles regardless of shape or design.

(g) *Byproduct* means a chemical substance produced without separate commercial intent during the manufacture or processing of another chemical substance(s) or mixture(s).

(h) *Chemical substance* means any organic or inorganic substance of a particular molecular identity, including any combination of such substances occurring in whole or in part as a result of a chemical reaction or occurring in nature, and any chemical element or uncombined radical; except that ''chemical substance'' does *not* include:

(1) Any mixture,

(2) Any pesticide when manufactured, processed, or distributed in commerce for use as a pesticide,

(3) Tobacco or any tobacco product, but not including any derivative products,

(4) Any source material, special nuclear material, or byproduct material,

(5) Any pistol, firearm, revolver, shells, and cartridges, and

(6) Any food, food additive, drug, cosmetic, or device, when manufactured, processed, or distributed in commerce

for use as a food, food additive, drug, cosmetic, or device.

(i) *Commerce* means trade, traffic, transportation, or other commerce: (1) Between a place in a State and any place outside of such State, or (2) which affects trade, traffic, transportation, or commerce described in paragraph (i)(1) of this section.

(j) *Distribute in commerce* and *distribution in commerce* when used to describe an action taken with respect to a chemical substance or mixture or article containing a substance or mixture, mean to sell or the sale of, the substance, mixture, or article in commerce; to introduce or deliver for introduction into commerce, or the introduction or delivery for introduction into commerce of, the substance, mixture, or article; or to hold, or the holding of, the substance, mixture, or article after its introduction into commerce.

(k) *EPA* means the U.S. Environmental Protection Agency.

(l) *Importer* means any person who imports any chemical substance or any chemical substance as part of a mixture or article into the customs territory of the U.S. and includes:

(1) The person primarily liable for the payment of any duties on the merchandise, or

(2) An authorized agent acting on his behalf (as defined in 19 CFR 1.11).

(m) *Impurity* means a chemical substance which is unintentionally present with another chemical substance.

(n) *Intermediate* means any chemical substance:

(1) Which is intentionally removed from the equipment in which it is manufactured, and (2) which either is consumed in whole or in part in chemical reaction(s) used for the intentional manufacture of other chemical substance(s) or mixture(s), or is intentionally present for the purpose of altering the rate of such chemical reaction(s).

NOTE: The *equipment in which it was manufactured* includes the reaction vessel in which the chemical substance was manufactured and other equipment which is strictly ancillary to the reaction vessel, and any other equipment through which the chemical substance may flow during a continuous flow process, but does not include tanks or other vessels in which the chemical substance is stored after its manufacture.

(o) *Manufacture* means to produce or manufacture in the United States or import into the customs territory of the United States.

(p) *Manufacture or import ''for commercial purposes''* means to manufacture or import:

(1) For distribution in commerce, including for test marketing purposes, or

(2) For use by the manufacturer, including for use as an intermediate.

(q) *Mixture* means any combination of two or more chemical substances if the combination does not occur in nature and is not, in whole or in part, the result of a chemical reaction; except that ''mixture'' does include:

(1) Any combination which occurs, in whole or in part, as a result of a chemical reaction if the combination could have been manufactured for commercial purposes without a chemical reaction at the time the chemical substances comprising the combination were combined and if, after the effective date or premanufacture notification requirements, none of the chemical substances comprising the combination is a new chemical substance, and

(2) Hydrates of a chemical substance or hydrated ions formed by association of a chemical substance with water.

(r) *New chemical substance* means any chemical substance which is not included in the inventory compiled and published under subsection 8(b) of the Act.

(s) *Person* means any natural or juridicial person including any individual, corporation, partnership, or association, any State or political subdivision thereof, or any municipality, any interstate body and any department, agency, or instrumentality of the Federal Government.

(t) *Process* means the preparation of a chemical substance or mixture, after its manufacture, for distribution in commerce (1) in the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such substance or mixture, or (2) as part of a mixture or article containing the chemical substance or mixture.

(u) *Process for ''commercial purposes''* means to process (1) for distribution in commerce, including for test marketing purposes, or (2) for use as an intermediate.

(v) *Processor* means any person who processes a chemical substance or mixture.

(w) *Site* means a contiguous property unit. Property divided only by a public right-of-way shall be considered one site. There may be more than one manufacturing plant on a single site. For the purposes of imported chemical substances, the site shall be the business address of the importer.

(x) *Small maufacturer or importer* means a manufacturer or importer whose total annual sales are less than $5,000,000, based upon the manufacturer's or importer's latest complete fiscal year as of January 1, 1978, except that no manufacturer or importer is a ''small manufacturer or importer'' with respect to any chemical substance which such person manufactured at one site or imported in quantities greater than 100,000 pounds during calendar year 1977. In the case of a company which is owned or controlled by another company, total annual sales shall be based on the total annual sales of the owned or controlled company, the parent company, and all companies owned or controlled by the parent company taken together.

NOTE: The purpose of the exception to the definition is to ensure that manufacturing and importers report production volumes for all chemical substances which they manufactured at one site or imported in quantities equal to or greater than 100,000 pounds during calendar year 1977.

(y) *Small quantities for purposes of scientific experimentation or analysis or chemical research on, or analysis of, such substance or another substance, including any such research or analysis for the development of a product* (hereinafter sometimes shortened to *small quantities for research and development*) means quantities of a chemical substance manufactured, imported, or processed or proposed to be manufactured, imported, or processed that (1) are no greater than reasonably necessary for such purposes and (2) after the publication of the revised inventory, are used by, or directly under the supervision of, a technically qualified individual(s).

NOTE: Any chemical substances manufactured, imported or processed in quantities less than 1,000 pounds annually shall be presumed to be manufactured, imported or processed for research and development purposes. No person may report for the inventory any chemical substance in such quantities unless that person can certify, that the substance was not manufactured, imported, or processed solely in small quantities for research and development, as defined in this section.

(z) *State* means any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, the Canal Zone, American Samoa, the Northern Mariana Islands, or any other territory or possession of the United States.

(aa) *Technically qualified individual* means a person: (1) Who because of his education, training, or experience, or a combination of these factors, is capable of appreciating the health and environmental risks associated with the chemical substance which is used under his supervision, (2) who is responsible for enforcing appropriated methods of conducting scientific experimentation, analysis, or chemical research in order to minimize such risks, and (3) who is responsible for the safety assessments and clearances related to the procurement, storage, use, and disposal of the chemical substance as may be appropriate or required within the scope of conducting the research and development activity. The responsibilities in paragraph (aa)(3) of this section may be delegated to another individual, or other individuals, as long as each meets the criteria in paragraph (aa)(1) of this section.

(bb) *Test marketing* means the distribution in commerce of no more than a predetermined amount of a chemical substance, mixture, or article containing that chemical substance or mixture, by a manufacturer or processor to no more than a defined number of potential customers to explore market capability in a competitive situation during a predetermined testing period prior to the broader distribution of that chemical substance, mixture or article in commerce.

(cc) *United States,* when used in the geographic sense, means all of the

States, territories, and possessions of the United States.

(dd) *Master Inventory File* means EPA's comprehensive list of chemical substances which constitute the Chemical Substances Inventory compiled under section 8(b) of the Act. It includes substances reported under Subpart A of this part and substances reported under Part 720 of this chapter for which a Notice of Commencement of Manufacture or Import has been received under § 720.120 of this chapter.

(ee) *Nonisolated intermediate* means any intermediate that is not intentionally removed from the equipment in which it is manufactured, including the reaction vessel in which it is manufactured, equipment which is ancillary to the reaction vessel, and any equipment through which the substance passes during a continuous flow process, but not including tanks or other vessels in which the substance is stored after its manufacture.

(ff) *Site-limited* means a chemical substance is manufactured and processed only within a site and is not distributed for commercial purposes as a substance or as part of a mixture or article outside the site. Imported substances are never site-limited.

[42 FR 64572, Dec. 23, 1977, as amended at 60 FR 31921, June 19, 1995]

### § 710.3 [Reserved]

### § 710.4 Scope of the inventory.

(a) *Chemical substances subject to these regulations.* Only chemical substances which are manufactured, imported, or processed ''for a commercial purpose,'' as defined in § 710.2, are subject to these regulations.

(b) *Naturally occurring chemical substances automatically included.* Any chemical substance which is naturally occurring and:

(1) Which is (i) unprocessed or (ii) processed only by manual, mechanical, or gravitational means; by dissolution in water; by flotation; or by heating solely to remove water; or

(2) Which is extracted from air by any means, shall automatically be included in the inventory under the category ''Naturally Occurring Chemical Substances.'' Examples of such substances are: raw agricultural commodities; water, air, natural gas, and crude oil; and rocks, ores, and minerals.

(c) *Substances excluded by definition or section 8(b) of TSCA.* The following substances are excluded from the inventory:

(1) Any substance which is not considered a ''chemical substance'' as provided in subsection 3(2)(B) of the Act and in the definition of ''chemical substance'' in § 710.2(h);

(2) Any mixture as defined in § 710.2(q);

NOTE: A chemical substance that is manufactured as part of a mixture is subject to these reporting regulations. This exclusion applies only to the mixture and not to the chemical substances of which the mixture is comprised. The term ''mixture'' includes alloys, inorganic glasses, ceramics, frits, and cements, including Portlant cement.

(3) Any chemical substance which is manufactured, imported, or processed solely in small quantities for research and development, as defined in § 710.2(y); and

(4) Any chemical substance not manufactured, processed or imported for a commercial purpose since January 1, 1975.

(d) *Chemical substances excluded from the inventory.* The following chemical substances are excluded from the inventory. Although they are considered to be manufactured or processed for a commercial purpose for the purpose of section 8 of the Act, they are not manufactured or processed for distribution in commerce as chemical substances *per se* and have no commercial purpose separate from the substance, mixture, or article of which they may be a part.

NOTE: In addition, chemical substances excluded here will not be subject to premanufacture notification under section 5 of the Act.

(1) Any impurity.

(2) Any byproduct which has no commercial purpose.

NOTE: A byproduct which has commercial value only to municipal or private organizations who (i) burn it as a fuel, (ii) dispose of it as a waste, including in a landfill or for enriching soil, or (iii) extract component chemical substances which have commercial value, may be reported for the inventory, but will not be subject to premanufacturing notification under section 5 of the Act if not included.

(3) Any chemical substance which results from a chemical reaction that occurs incidental to exposure of another chemical substance, mixture, or article to environmental factors such as air, moisture, microbial organisms, or sunlight.

(4) Any chemical substance which results from a chemical reaction that occurs incidental to storage of another chemical substance, mixture, or article.

(5) Any chemical substance which results from a chemical reaction that occurs upon end use of other chemical substances, mixtures, or articles such as adhesives, paints, miscellaneous cleansers or other housekeeping products, fuels and fuel additives, water softening and treatment agents, photographic, films, batteries, matches, and safety flares, and which is not itself manufactured for distribution in commerce or for use as an intermediate.

(6) Any chemical substance which results from a chemical reaction that occurs upon use of curable plastic or rubber molding compounds, inks, drying oils, metal finishing compounds, adhesives, or paints; or other chemical substances formed during manufacture of an article destined for the marketplace without further chemical change of the chemical substance except for those chemical changes that may occur as described elsewhere in this §710.4(d).

(7) Any chemical substance which results from a chemical reaction that occurs when (i) a stabilizer, colorant, odorant, antioxidant, filler, solvent, carrier, surfactant, plasticizer, corrosion inhibitor, antifoamer or de-foamer, dispersant, precipitation inhibitor, binder, emulsifier, de-emulsifier, dewatering agent, agglomerating agent, adhesion promoter, flow modifier, pH neutralizer, sequesterant, coagulant, flocculant, fire retardant, lubricant, chelating agent, or quality control reagent functions as intended or (ii) a chemical substance, solely intended to impart a specific physicochemical characteristic, functions as intended.

(8) Chemical substances which are not intentionally removed from the equipment in which they were manufactured.

NOTE: See note to definition of ''intermediate'' at §710.2(n) for explanation of ''equipment in which it was manufactured.''

[42 FR 64572, Dec. 23, 1977]

### §710.25 Chemical substances for which information must be reported.

Any chemical substance which is in the Master Inventory File at the beginning of a reporting period described in §710.33, unless the chemical substance is specifically excluded by §710.26.

[51 FR 21447, June 12, 1986]

### §710.26 Chemical substances for which information is not required.

The following categories of chemical substances are excluded from the reporting requirements of this subpart. However, a chemical substance described in paragraphs (a), (b), or (c) of this section is not excluded from the reporting requirements of this subpart if that substance is the subject of a rule proposed or promulgated under section 4, 5(a)(2), 5(b)(4), or 6 of the Act, or is the subject of an order issued under section 5(e) or 5(f) of the Act, or is the subject of relief that has been granted under a civil action under section 5 or 7 of the Act.

(a) *Inorganic chemical substances.* Any chemical substance which does not contain carbon or contains carbon only in the form of carbonato [$=CO_3$], cyano [−CN], cyanato [−OCN], isocyano [−NC], or isocyanato [−NCO] groups, or the chalcogen analogues of such groups.

(b) *Polymers.* (1) Any chemical substance described with the word fragments ''*polym*'', ''*alkyd'', or ''*oxylated'' in the Chemical Abstracts Service Index or Preferred Nomenclature in the Chemical Substance Identities section of the 1985 edition of the Inventory or in the Master Inventory File, where the asterisk (*) indicates that any sets of characters may precede, or follow, the character string defined.

(2) Any chemical substance which is identified in the 1985 edition of the Inventory or the Master Inventory File as siloxane and silicone, silsesquioxane, a protein (albumin, casein, gelatin, gluten, hemoglobin), an

enzyme, a polysaccharide (starch, cellulose, gum), rubber, or lignin. This exclusion, however, does not apply to a chemical substance which has been hydrolyzed, depolymerized, or chemically modified to the extent that the final product is no longer polymeric in structure.

(c) *Microorganisms.* Any combination of chemical substances that is a living organism, such as bacteria, eimeria, fungi, and yeasts. Any chemical substance produced from such a living organism is reportable unless otherwise excluded.

(d) *Naturally occurring chemical substances.* Any naturally occurring chemical substance, as described in § 710.4(b). The applicability of this exclusion is determined in each case by the specific activities of the person who manufactures the substance in question. Some chemical substances can be manufactured both as described in § 710.4(b) and by means other than those described in § 710.4(b). If a person described in § 710.28 manufactures a chemical substance by means other than those described in § 710.4(b), the person must report regardless of whether the substance also could have been produced as described in § 710.4(b). Any chemical substance that is produced from such a naturally occurring chemical substance described in § 710.4(b) is reportable unless otherwise excluded.

[51 FR 21447, June 12, 1986]

### § 710.28 Persons who must report.

Except as provided in §§ 710.29 and 710.30, the following persons are subject to the requirements of this subpart. Persons must determine whether they must report under this § 710.28 for each chemical substance that they manufacture at an individual site.

(a) *Persons subject to initial reportinq.* Any person who manufactured for commercial purposes 10,000 pounds (4,540 kilograms) or more of a chemical substance described in § 710.25 at any single site owned or controlled by that person at any time during the person's latest complete corporate fiscal year before August 25, 1986.

(b) *Persons subject to recurring reporting.* Any person who manufactured for commercial purposes 10,000 pounds (4,540 kilograms) or more of a chemical substance described in § 710.25 at any single site owned or controlled by that person at any time during the person's latest complete corporate fiscal year before August 25, 1990, or before August 25 at four-year intervals thereafter.

(c) *Special provisions for importers.* For purposes of paragraphs (a) and (b) of this section, the site for a person who imports a chemical substance described in § 710.25 is the site of the operating unit within the person's organization which is directly responsible for importing the substance and which controls the import transaction. The import site may in some cases be the organization's headquarters in the U.S. (See also § 710.35(b).)

[51 FR 21447, June 12, 1986]

### § 710.29 Persons not subject to this subpart.

A person described in § 710.28 is not subject to the requirements of this subpart if that person qualifies as a small manufacturer as that term is defined in § 704.3 of this chapter. Notwithstanding this exclusion, a person who qualifies as a small manufacturer is subject to this subpart with respect to any chemical substance that is the subject of a rule proposed or promulgated under section 4, 5(b)(4), or 6 of the Act, or is the subject of an order in effect under section 5(e) of the Act, or is the subject of relief that has been granted under a civil action under section 5 or 7 of the Act.

[51 FR 21447, June 12, 1986]

### § 710.30 Activities for which reporting is not required.

A person described in § 710.28 is not subject to the requirements of this subpart with respect to any chemical substance described in § 710.25 that the person manufactured or imported under the following circumstances:

(a) The person manufactured or imported the chemical substance described in § 710.25 solely in small quantities for research and development,

(b) The person imported the chemical substance described in § 710.25 as part of an article,

(c) The person manufactured the chemical substance described in § 710.25

in a manner described in § 720.30(g) or (h) of this chapter.

[51 FR 21447, June 12, 1986]

**§ 710.32 Reporting information to EPA.**

Any person who must report under this part must submit the information prescribed in this section for each chemical substance described in § 710.25 that the person manufactured for commercial purposes in an amount of 10,000 pounds (4,540 kilograms) or more at a single site during a corporate fiscal year described in § 710.28. (The site for a person who imports a chemical substance is the site of the operating unit within the person's organization which is directly responsible for importing the substance and which controls the import transaction, and may in some cases be the organization's headquarters office in the U.S.). A respondent to this subpart must report information in writing or by magnetic media as prescribed in this section, to the extent that such information is known to or reasonably ascertainable by that person. A respondent to this subpart must report information that applies to the specific corporate fiscal year for which the person is required to report.

(a) *Reporting in writing.* Any person who chooses to report information to EPA in writing must do so by completing the reporting form available from EPA at the address set forth in § 710.39(b). The form must include all information prescribed in paragraph (c) of this section. Persons reporting in writing must submit a separate form for each site for which the person is required to report.

(b) *Reporting by magnetic media.* Any person who chooses to report information to EPA by means of magnetic media must submit the information prescribed in paragraph (c) of this section. Magnetic media submitted in response to this subpart must meet EPA specifications, as described in the instruction booklet available from EPA at the address set forth in § 710.39(b).

(c) *Information to be reported.* Persons reporting information under this subpart must report the following:

(1) The name, company, address, city, State, Zip code, and telephone number of a person who will serve as technical contact for the respondent company, and will be able to answer questions about the information submitted by the company to EPA. Persons reporting by means of magnetic media must submit this information on the reporting form available from EPA at the address set forth in § 710.39.

(2) A certification statement signed and dated by an authorized official of the respondent company. Persons reporting by means of magnetic media must submit this information on the reporting form available from EPA at the address set forth in § 710.39.

(3) The specific chemical name and Chemical Abstracts Service (CAS) Registry Number of each chemical substance for which reporting is required under this subpart. A respondent to this subpart may use other chemical identification numbers in lieu of CAS Registry Numbers when a CAS Registry Number is not known to the respondent as provided in the instruction booklet identified in § 710.39(b), including EPA-designated Accession Numbers for confidential substances, EPA-assigned numbers for *bona fide* or Premanufacture Notification submissions, or Test Market Exemption Applications, or original Inventory form numbers.

(4) The name, street address, city, State, and Zip code of each site at which 10,000 pounds (4,540 kilograms) or more of a chemical substance for which reporting is required under this subpart is manufactured or imported. (The site for a person who imports a chemical substance is the site of the operating unit within the person's organization which is directly responsible for importing the substance and which controls the import transaction, and may in some cases be the organization's headquarters office in the U.S.) A respondent to this subpart must include the appropriate Dun and Bradstreet Number for each plant site reported.

(5) A statement for each substance for which information is being submitted indicating whether the substance is manufactured in the United States or imported into the United States.

(6) A statement for each substance for which information is being submitted indicating whether the substance is site-limited.

(7) The total volume (in pounds) of each subject chemical substance manufactured or imported at each site. This amount must be reported to two significant figures of accuracy provided that the reported figures are within ±10 percent of the actual volume.

[55 FR 39587, Sept. 27, 1990, as amended at 60 FR 31921, June 19, 1995]

### § 710.33 When to report.

All information reported to EPA in response to the requirements of this subpart must be submitted during an applicable reporting period. The following reporting periods are prescribed for this subpart.

(a) *Initial reporting period.* The first reporting period is from August 25, 1986 to December 23, 1986. Any person described in § 710.28(a) must report during this period for each chemical substance described in § 710.25 that the person manufactured during the corporate fiscal year described in § 710.28(a).

(b) *Recurring reporting periods.* The first recurring reporting period is from August 25, 1990 to December 23, 1990. Subsequent recurring reporting periods are from August 25 to December 23 at 4-year intervals thereafter. Any person described in § 710.28(b) must report during the appropriate reporting period for each chemical substance described in § 710.25 that the person manufactured during the applicable corporate fiscal year described in § 710.28(b).

[51 FR 21447, June 12, 1986: 51 FR 22521, June 20, 1986]

### § 710.35 Duplicative reporting.

(a) *With regard to section 8(a) rules.* Any person subject to the requirements of this part who previously has complied with reporting requirements of a rule under section 8(a) of the Act by submitting the information described in § 710.32 for a chemical substance described in § 710.25 to EPA, and has done so within one year of the start of a reporting period described in § 710.33, is not required to report again on the manufacture of that substance at that site during that reporting period.

(b) *With regard to importers.* This part requires that only one report be submitted on each import transaction involving a chemical substance described in § 710.25. When two or more persons are involved in a particular import transaction and each person meets the Agency's definition of ''importer'' as set forth in § 710.2(l) and § 704.3 of this chapter, they may determine among themselves who should submit the required report; if no report is submitted as required under this part, EPA will hold each such person liable for failure to report.

[51 FR 21447, June 12, 1986, as amended at 60 FR 31921, June 19, 1995]

### § 710.37 Recordkeeping requirements.

Each person who is subject to the reporting requirements of this part must maintain records that document any information reported to EPA. For substances that are manufactured or imported at less than 10,000 pounds annually, volume records must be maintained as evidence to support a decision not to submit a report. Records relevant to reporting during a reporting period described in § 710.33 must be retained for a period of four years beginning with the effective date of that reporting period.

[51 FR 21447, June 12, 1986, as amended at 58 FR 34204, June 23, 1993; 60 FR 31921, June 19, 1995]

### § 710.38 Confidentiality.

(a) Any person submitting information under this part may assert a business confidentiality claim for the information. The procedures for asserting confidentiality claims are described in the instruction booklet identified in § 710.39. Information claimed as confidential in accordance with this section and those instructions will be treated and disclosed in accordance with the procedures in Part 2 of this chapter.

(b) A person may assert a claim of confidentiality for the chemical identity of a specific chemical substance only if the identity of that substance is treated as confidential in the Master Inventory File as of the time the report is submitted for that substance under this part.

(c) To assert a claim of confidentiality for the chemical identity of a specific chemical substance, the person must take the following steps:

(1) The person must submit with the report detailed written answers to the following questions signed and dated by an authorized official.

(i) What harmful effects to your competitive position, if any, do you think would result from the identity of the chemical substance being disclosed in connection with reporting under this part? How could a competitor use such information? Would the effects of disclosure be substantial? What is the causal relationship between the disclosure and the harmful effects?

(ii) How long should confidential treatment be given? Until a specific date, the occurrence of a specific event, or permanently? Why?

(iii) Has the chemical substance been patented? If so, have you granted licenses to others with respect to the patent as it applies to the chemical substance? If the chemical substance has been patented and therefore disclosed through the patent, why should it be treated as confidential?

(iv) Has the identity of the chemical substance been kept confidential to the extent that your competitors do not know it is being manufactured or imported for a commercial purpose by anyone?

(v) Is the fact that the chemical substance is being manufactured or imported for a commercial purpose available to the public, for example in technical journals, libraries, or State, local, or Federal agency public files?

(vi) What measures have you taken to prevent undesired disclosure of the fact that this chemical substance is being manufactured or imported for a commercial purpose?

(vii) To what extent has the fact that this chemical substance is manufactured or imported for commercial purposes been revealed to others? What precautions have been taken regarding these disclosures? Have there been public disclosures or disclosures to competitors?

(viii) Does this particular chemical substance leave the site of manufacture in any form, as product, effluent, emission, etc.? If so, what measures have you taken to guard against discovery of its identity?

(ix) If the chemical substance leaves the site in a product that is available to the public or your competitors, can the substance be identified by analysis of the product?

(x) For what purpose do you manufacture or import the substance?

(xi) Has EPA, another Federal agency, or any Federal court made any pertinent confidentiality determinations regarding this chemical substance? If so, please attach copies of such determinations.

(2) If any of the information contained in the answers to the questions is asserted to contain confidential business information, the person must mark that information as ''trade secret,'' ''confidential,'' or other appropriate designation.

(d) If no claim of confidentiality accompanies information at the time it is submitted to EPA under this part or if substantiation required under paragraph (c) of this section is not submitted with the reporting form, EPA may make the information available to the public without further notice to the submitter.

[51 FR 21447, June 12, 1986, as amended at 55 FR 39588, Sept. 27, 1990; 60 FR 31921, June 19, 1995]

### § 710.39 Instructions for submitting information.

(a) All persons submitting written information in response to the requirements of this subpart must use original copies of Form U available from EPA at the address set forth in paragraph (b) of this section.

(b) Complete instructions for completing the reporting form and preparing a magnetic media report are given in the EPA publication entitled ''Instructions for Reporting for 1994 Partial Updating of the TSCA Chemical Inventory Data Base.'' Reporting forms and instruction booklets may be obtained from the following address: TSCA Hotline (7408), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, ATTN: Inventory Update Rule, (202) 554–1404.

(c) Completed reporting forms and magnetic media must be submitted to:

Document Control Officer (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, ATTN: Inventory Update Rule.

[59 FR 30654, June 14, 1994]

# PART 712—CHEMICAL INFORMATION RULES

## Subpart A—General Provisions

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## Subpart B—Manufacturers Reporting—Preliminary Assessment Information

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712.30 Chemical lists and reporting periods.

AUTHORITY: 15 U.S.C. 2607(a).

SOURCE: 47 FR 26998, June 22, 1982, unless otherwise noted.

## Subpart A—General Provisions

### § 712.1 Scope and compliance.

(a) This part establishes procedures for chemical manufacturers and processors to report production, use, and exposure-related information on listed chemical substances. Subpart A establishes requirements that apply to all reporting under this part. Subpart B covers manufacturers' and processors' reporting.

(b) Chemical substances, mixtures, and categories of substances or mixtures which have been recommended by the Interagency Testing Committee for testing consideration by the Agency but not designated for Agency response within 12 months, will be added to § 712.30 using the procedure specified in § 712.30(c) only to the extent that the total number of designated and recommended chemicals has not exceeded 50 in any 1 year. Additional recommended but not designated chemicals may be added after proposal, and consideration of public comment.

[47 FR 26998, June 22, 1982, as amended at 50 FR 34809, Aug. 28, 1985; 60 FR 31921, June 19, 1995]

### § 712.3 Definitions.

The definitions in section 3 of TSCA, 15 U.S.C. 2602, apply for this part. In addition, the following definitions apply:

(a) *Byproduct* means any chemical substance or mixture produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance or mixture.

(b) *EPA* means the U.S. Environmental Protection Agency.

(c) *Import in bulk form* means to import a chemical substance (other than as part of a mixture or article) in any quantity, in cans, bottles, drums, barrels, packages, tanks, bags, or other containers used for purposes of transportation or containment, if the chemical substance has an end use or commercial purpose separate from the container.

(d) *Importer* means anyone who imports a chemical substance, including a chemical substance as part of a mixture or article, into the customs territory of the U.S. and includes the person liable for the payment of any duties on the merchandise, or an authorized agent on his behalf. Importer also includes, as appropriate:

(1) The consignee.

(2) The importer of record.

(3) The actual owner if an actual owner's declaration and superseding bond has been filed in accordance with 19 CFR 141.20.

(4) The transferee, if the right to withdraw merchandise in a bonded warehouse has been transferred in accordance with Subpart C of 19 CFR Part 144. For the purposes of this definition, the customs territory of the U.S. consists of the 50 states, Puerto Rico, and the District of Columbia.

(e) *Impurity* means a chemical substance unintentionally present with another chemical substance or mixture.

(f) *Intermediate* means any chemical substance that is consumed, in whole or in part, in chemical reactions used

for the intentional manufacture of other chemical substances or mixtures, or that is intentionally present for the purpose of altering the rates of such chemical reactions. (See also paragraph (j) of this section.)

(g) *Known to or reasonably ascertainable by* means all information in a person's possession or control, plus all information that a reasonable person similarly situated might be expected to possess, control, or know, or could obtain without unreasonable burden.

(h) *Manufacture for commercial purposes* means to import, produce, or manufacture with the purpose of obtaining an immediate or eventual commercial advantage for the manufacturer and includes, among other things, such ''manufacture'' of any amount of a chemical substance or mixture:

(1) For commercial distribution, including for test marketing.

(2) For use by the manufacturer, including use for product research and development, or as an intermediate. Manufacture for commercial purposes also applies to substances that are produced coincidentally during the manufacture, processing, use, or disposal of another substance or mixture, including byproducts and coproducts that are separated from that other substance or mixture, and impurities that remain in that substance or mixture. Byproducts and impurities may not in themselves have commercial value. They are nonetheless produced for the purpose of obtaining a commercial advantage since they are part of the manufacture of a chemical produced for a commercial purpose.

(i) *Mixture* means any combination of two or more chemical substances if the combination does not occur in nature and is not, in whole or in part, the result of a chemical reaction; except that *mixture* does include (1) any combination which occurs, in whole or in part, as a result of a chemical reaction if the combination could have been manufactured for commercial purposes without a chemical reaction at the time the chemical substances comprising the combination were combined, and if all of the chemical substances comprising the combination are included in the EPA, TSCA Chemical Substance Inventory after the effective date of the premanufacture notification requirement under 40 CFR Part 720, and (2) hydrates of a chemical substance or hydrated ions formed by association of a chemical substance with water. The term mixture includes alloys, inorganic glasses, ceramics, frits, and cements, including Portland cement.

(j) *Non-isolated intermediate* means any intermediate that is not intentionally removed from the equipment in which it is manufactured, including the reaction vessel in which it is manufactured, equipment which is ancillary to the reaction vessel, and any equipment through which the substance passes during a continuous flow process, but not including tanks or other vessels in which the substance is stored after its manufacture. (See also paragraph (f) of this section.)

(k) *Owned or controlled by the parent company* means the parent owns or controls 50 percent or more of the other company's voting stock or other equity rights, or has the power to control the management and policies of the other company.

(l) *Person* means any natural person, firm, company, corporation, joint venture, partnership, sole proprietorship, association, or any other business entity, any State or political subdivision thereof, any municipality, any interstate body, and any department, agency, or instrumentality of the Federal government.

(m) *Process for commercial purposes* means the preparation of a chemical substance or mixture, after its manufacture, for distribution in commerce with the purpose of obtaining an immediate or eventual commercial advantage for the processor. Processing of any amount of a chemical substance or mixture is included. If a chemical or mixture containing impurities is processed for commercial purposes, then those impurities are also processed for commercial purposes.

(n) *Site* means a contiguous property unit. Property divided only by a public right-of-way shall be considered one site. There may be more than one manufacturing plant on a single site.

(o) *Test marketing* means distributing in commerce a limited amount of a

chemical substance or mixture, or article containing such substance or mixture, to a defined number of potential customers, during a predetermined testing period, to explore market capability prior to broader distribution in commerce.

(p) *TSCA* means the Toxic Substances Control Act, 15 U.S.C. 2601 et seq.

### § 712.5 Method of identification of substances for reporting purposes.

(a) *Report on TSCA-regulable quantities.* Unless specifically otherwise required, respondents must report only about quantities of a chemical that is defined as a chemical substance under TSCA section 3(2).

(b) *Chemicals from natural sources.* A manufacturer of a chemical substance which is extracted from an ore, from oil, or from any other natural source must report only about the manufacturing steps for, and the uses of, that chemical, not about production of the natural source material or other crude precursors derived from the natural source material.

For example, persons who manufacture a chemical substance such as ''sweetened naphtha, 64741–87–3,'' but do not refine the naphtha to produce ''hexane, 110–54–3'' would not report on hexane. Only the production of ''hexane'' as an isolated product must be reported—not previous production of more crude, complex substances such as naphtha from which hexane is extracted. Thus, persons who produce crude oil, ores, and other crude natural materials, but do not carry them through further manufacturing steps that produce a listed chemical have no reporting responsibilities under this Part. Note, however, that any method of extraction, refinement, or purification of a listed chemical substance is considered to be manufacturing for the purposes of this rule.

(c) *Chemical substances as marketed.* This part requires reporting about chemical substances as they are marketed or used in practice. The following preparations of a chemical substance must be reported as the substance itself, not as a mixture, since these preparations are regarded as the substance in practice.

(1) The chemical substance in aqueous solution.

(2) The chemical substance containing an additive (such as a stabilizer or other chemical) to maintain the integrity or physical form of the substance.

(3) The chemical substance in any grade of purity.

### § 712.7 Report of readily obtainable information for Subparts B and C.

TSCA section 8(a) authorizes EPA to require persons to report information that is known to or reasonably ascertainable by them. For purposes of Subpart B, however, a lesser standard applies. Companies must report information that is readily obtainable by management and supervisory employees responsible for manufacturing, processing, distributing, technical services, and marketing. Extensive file searches are not required.

[47 FR 26998, June 22, 1982, as amended at 60 FR 31921, June 19, 1995]

### § 712.15 Confidentiality.

(a) Any person submitting information under this part may assert business confidentiality claims for the information as described in the pertinent reporting form and its instructions. Any information covered by a claim will be disclosed by EPA only as provided in the procedures set forth at 40 CFR Part 2.

(b) Persons must certify to the validity of a claim of confidentiality they make for information reported under this part, as specified on the reporting form.

(c) If no claim accompanies the information at the time it is submitted to EPA or if certification as to the claim is not made on the reporting form, EPA may place the information in an open file available to the public without further notice to the submitter.

## Subpart B—Manufacturers Reporting—Preliminary Assessment Information

### § 712.20 Manufacturers and importers who must report.

Except as described in § 712.25, at the time a chemical substance is listed in § 712.3, the following persons must submit the ''Manufacturer's Report—Preliminary Assessment Information'' (as described in § 712.28) for each plant site

at which they manufactured or imported the chemical substance during the reporting period specified in § 712.30:

(a) Persons who manufactured one or more of the chemical substances listed in § 712.30 for commercial purposes.

(b) Persons who imported in bulk form one or more of the chemical substances listed in § 712.30 for commercial purposes.

### § 712.25 Exempt manufacturers and importers.

(a) Persons who manufactured or imported the chemical substance during the reporting period, solely for purposes of scientific experimentation, analysis, or research, including research or analysis for product development, are not subject to reporting under § 712.20.

(b) Persons who, during the reporting period, manufactured or imported fewer than 500 kilograms (1100 pounds) of the chemical substance at a single plant site are not subject to reporting for that site under § 712.20.

(c) Persons who qualify as small manufacturers or importers in respect to a specific chemical substance listed in § 712.30 are exempt. However, this exemption does not apply with respect to any chemical in § 712.30 designated by an asterisk. A manufacturer is qualified as small and is exempt from submitting a report under this subpart for a chemical substance manufactured at a particular plant site if both of the following criteria are met:

(1) Total annual sales taken together of all sites owned or controlled by the foreign or domestic parent company were below $30 million for the reporting period;

(2) Total production of the listed substance for the reporting period was below 45,400 kilograms (100,000 pounds) at the plant site.

(d) Persons are not subject to reporting under § 712.20 if they manufactured or imported the chemical substance during the reporting period only in the following forms:

(1) As a byproduct that was not used or sold or that was formed as described in 40 CFR 710.4(d) (3) through (7).

(2) As a non-isolated interimediate.

(3) As an impurity.

[47 FR 26998, June 22, 1982; 47 FR 28382, June 30, 1982]

### § 712.28 Form and instructions.

(a) Manufacturers and importers subject to this Subpart must submit a single EPA Form No. 7710–35, ''Manufacturer's Report—Preliminary Assessment Information,'' for each plant site manufacturing or importing a chemical substance listed in § 712.30.

(b) Reporting companies may submit their reports through individual plant sites or company headquarters as they choose. A separate form must be submitted for each plant site manufacturing the chemical substance.

(c) Forms must be sent (preferably by certified mail) to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATTN: 8(a) PAIR Reporting.

(d) Form 7710–35, Manufacturer's Report--Preliminary Assessment Information or PAIR form and instructions may be obtained by telephoning or writing the Environmental Assistance Division. The telephone number and the address of the Environmental Assistance Division is: Phone Number (202) 554–1404, TDD (202) 554–0551. Address: Environmental Assistance Division (7406), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460.

[47 FR 26998, June 22, 1982, as amended at 52 FR 20083, May 29, 1987; 53 FR 12523, Apr. 15, 1988; 60 FR 31921, June 19, 1995; 60 FR 34463, July 3, 1995]

### § 712.30 Chemical lists and reporting periods.

(a)(1) Persons subject to this Subpart B must submit a Preliminary Assessment Information Manufacturer's Report for each chemical substance or mixture that is listed or designated in this section.

(2) Unless a respondent has already prepared a Manufacturer's Report in conformity with conditions set forth in paragraph (a)(3) of this section, the information in each Manufacturer's Report must cover the respondent's latest complete corporate fiscal year as of the

effective date. The effective date will be 30 days after the FEDERAL REGISTER publishes a rule amendment making the substance or mixture subject to this Subpart B.

(3) Persons subject to this Subpart B need not comply with the requirements of paragraph (a)(2) of this section if they meet either one of the following conditions:

(i) The respondent has previously and voluntarily provided EPA with a Manufacturer's Report on a chemical substance or mixture subject to this Subpart B, which contains data for a one-year period ending no more than three years prior to the effective date described in paragraph (a)(2) of this section. Respondents meeting this condition must notify EPA by letter of their desire to have the voluntary submission used in lieu of a current data submission and must verify the completeness and current accuracy of the voluntarily submitted data. Such letters must contain the following language: ''I hereby certify that, to the best of my knowledge and belief, all information entered on this form is complete and accurate. I agree to permit access to, and the copying of records by, a duly authorized representative of the EPA Administrator, in accordance with the Toxic Substances Control Act, to document any information reported on the form.'' Notification letters must be submitted prior to the reporting deadline.

(ii) The respondent has previously submitted a Manufacturer's Report on a chemical substance or mixture subject to this Subpart B to the Interagency Testing Committee, but not to EPA, and that Report contained data for a one-year period ending less than three years prior to the effective date described in paragraph (a)(2) of this section. Respondents meeting this condition must submit a copy of the Manufacturer's Report to EPA, and must submit an accompanying letter notifying EPA of the respondent's intent that the submission be used in lieu of a current Manufacturer's Report. The notification letter must verify the completeness and current accuracy of the voluntarily submitted data. Such a letter must contain the following language: ''I hereby certify that, to the best of my knowledge and belief, all information entered on this form is complete and accurate. I agree to permit access to, and the copying of records by, a duly authorized representative of the EPA Administrator, in accordance with the Toxic Substances Control Act, to document any information reported on the form.'' The submission must be made prior to the reporting deadline.

(b) Except as provided in paragraph (c) of this section, chemical substances and designated mixtures will be added after a notice of proposed amendment of this subpart is published in the FEDERAL REGISTER. There will be a 30 day public comment period on each notice; after consideration of the comments, a final amendment will identify the substances and mixtures added.

(c) Chemical substances, mixtures, and categories of substances or mixtures that have been added by the Interagency Testing Committee, established under section 4(e) of TSCA, to the section 4(e) Priority List, for testing consideration by the Agency, will be added to this section 30 days after EPA issues for publication in the FEDERAL REGISTER a rule amendment listing these chemical substances, mixtures and categories. A Preliminary Assessment Information—Manufacturer's Report must be submitted for each chemical substance and mixture within 60 days after the effective date of the listing. At the discretion of the Assistant Administrator for Prevention, Pesticides and Toxic Substances, a listed substance, mixture or category may be withdrawn, for good cause, from the rule's reporting requirements prior to the effective date. Any information submitted showing why a substance, mixture or category should be removed from the rule must be received by EPA within 14 days after the date of publication of the notice under this paragraph. If a substance, mixture or category is removed, a FEDERAL REGISTER notice announcing this decision will be published no later than the effective date of the amendment. Any information submitted must be addressed to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW.,

Washington, DC., 20460, ATTN: 8(a) Auto-ITC.

(d) Manufacturers and importers of the substances listed below must submit a Preliminary Assessment Information Manufacturer's Report for each site at which they manufacture or import each substance by the reporting date shown in the table below. The substances are listed in Chemical Abstracts Service Registry Number order. Typically EPA lists the trivial or common name first, then, following the symbol ''- -'', EPA lists the substance by its TSCA Chemical Substance Inventory name. Whenever EPA lists a single name, the name may be either the TSCA Chemical Substance Inventory name, a trivial name, or a common name. Generally, when a single name is listed, it is the TSCA Chemical Substances Inventory name.

| CAS No. | Substance | Effective date | Reporting date |
|---|---|---|---|
| 90-30-2 | N-Phenyl-1-naphthylamine | 9/30/91 | 11/27/91 |
| 100-40-3 | 4-Vinylcyclohexene | 1/11/90 | 3/12/90 |
| 108-95-5 | Thiophenol | 1/26/94 | 3/28/94 |
| 118-79-6 | 2,4,6-tribromophenol | 1/11/90 | 3/12/90 |
| 143-33-9 | Sodium cyanide | 10/29/90 | 12/27/90 |
| 632-79-1 | Tetrabromophthalic anhydride | 1/11/90 | 3/12/90 |
| 637-92-3 | Ethyl tert-butyl ether | 12/28/94 | 2/27/95 |
| 994-05-8 | Tert-amyl methyl ether | 12/28/94 | 2/27/95 |
| 1163-19-5 | Decabromodiphenyl ether | 1/11/90 | 3/12/90 |
| 3194-55-6 | Hexabromocyclododecane | 1/11/90 | 3/12/90 |
| 3296-90-0 | Dibromoneopentyl glycol | 1/11/90 | 3/12/90 |
| 12185-10-3 | White phosphorus | 1/26/94 | 3/28/94 |
| 32534-81-9 | Pentabromodiphenyl ether | 1/11/90 | 3/12/90 |
| 32536-52-0 | Octabromodiphenyl ether | 1/11/90 | 3/12/90 |
| 32588-76-4 | Ethylene Bis-(tetrabromophthalimide) | 1/11/90 | 3/12/90 |
| 37853-59-1 | 1,2-Bis(tribromophenoxy) ethane | 1/11/90 | 3/12/90 |
| 41291-34-3 | Ethylene(5,6-dibromonorbornane-2,3-dicarboximide) | 1/11/90 | 3/12/90 |
| 52907-07-0 | Ethylene bis(5,6-dibromonorbornane-2,3-dicarboximide) | 1/26/94 | 3/28/94 |
| 57137-10-7 | Tribrominated polystyrene | 1/11/90 | 3/12/90 |
| 61262-53-1 | Ethylene bis(pentabromophenoxide) | 1/11/90 | 3/12/90 |

(e) Manufacturers and importers of the substances listed below by category must submit a Preliminary Assessment Information Manufacturers Report for each site at which they manufacture or import each substance by the reporting date shown in the table below. The categories are listed in alphabetic order with the chemical substances within each category listed by ascending numerical CAS number.

| CAS No. | Substance | Effective date | Reporting date |
|---|---|---|---|
| Aldehydes: | | | |
| 66-77-3 | 1-Naphthalenecarboxaldehyde | 9/30/91 | 11/27/91 |
| 75-07-0 | Acetaldehyde | 9/30/91 | 11/27/91 |
| 75-87-6 | Acetaldehyde, trichloro- | 9/30/91 | 11/27/91 |
| 78-84-2 | Propanal, 2-methyl- | 9/30/91 | 11/27/91 |
| 78-85-3 | 2-Propenal, 2-methyl- | 9/30/91 | 11/27/91 |
| 80-54-6 | Benzenepropanal,4-(1,1-dimethylethyl)-.alpha.-methyl- | 9/30/91 | 11/27/91 |
| 84-83-3 | Acetaldehyde, (1,3-dihydro-1,3, 3-trimethyl-2H-indol-2-ylidene). | | |
| 89-98-5 | Benzaldehyde, 2-chloro- | 9/30/91 | 11/27/91 |
| 90-02-8 | Benzaldehyde, 2-hydroxy- | 9/30/91 | 11/27/91 |
| 93-02-7 | Benzaldehyde, 2,5-dimethoxy- | 9/30/91 | 11/27/91 |
| 93-53-8 | Benzeneacetaldehyde, .alpha.-methyl- | 9/30/91 | 11/27/91 |
| 95-01-2 | Benzaldehyde, 2,4-dihydroxy- | 9/30/91 | 11/27/91 |
| 97-51-8 | Benzaldehyde, 2-hydroxy-5-nitro- | 9/30/91 | 11/27/91 |
| 98-01-1 | 2-Furancarboxaldehyde | 9/30/91 | 11/27/91 |
| 98-03-3 | 2-Thiophenecarboxaldehyde | 9/30/91 | 11/27/91 |
| 100-10-7 | Benzaldehyde, 4-(dimethylamino)- | 9/30/91 | 11/27/91 |
| 100-50-5 | 3-Cyclohexene-1-carboxaldehyde | 9/30/91 | 11/27/91 |
| 100-52-7 | Benzaldehyde | 9/30/91 | 11/27/91 |
| 101-39-3 | 2-Propenal, 2-methyl-3-phenyl- | 9/30/91 | 11/27/91 |
| 101-86-0 | Octanal, 2-(phenylmethylene)- | 9/30/91 | 11/27/91 |
| 103-95-7 | Benzenepropanal, .alpha.-methyl-4-(1-methylethyl)- | 9/30/91 | 11/27/91 |
| 104-09-6 | Benzeneacetaldehyde, 4-methyl- | 9/30/91 | 11/27/91 |
| 104-55-2 | 2-Propenal, 3-phenyl- | 9/30/91 | 11/27/91 |

| CAS No. | Substance | Effective date | Reporting date |
|---|---|---|---|
| 104-87-0 | Benzaldehyde, 4-methyl- | 9/30/91 | 11/27/91 |
| 104-88-1 | Benzaldehyde, 4-chloro- | 9/30/91 | 11/27/91 |
| 106-23-0 | 6-Octenal, 3,7-dimethyl- | 9/30/91 | 11/27/91 |
| 106-26-3 | 2,6-Octadienal, 3,7-dimethyl-, (Z)- | 9/30/91 | 11/27/91 |
| 106-72-9 | 5-Heptenal, 2,6-dimethyl- | 9/30/91 | 11/27/91 |
| 107-02-8 | 2-Propenal | 9/30/91 | 11/27/91 |
| 107-20-0 | Acetaldehyde, chloro- | 9/30/91 | 11/27/91 |
| 107-22-2 | Ethanedial | 9/30/91 | 11/27/91 |
| 107-75-5 | Octanal, 7-hydroxy-3,7-dimethyl- | 9/30/91 | 11/27/91 |
| 110-41-8 | Undecanal, 2-methyl- | 9/30/91 | 11/27/91 |
| 110-62-3 | Pentanal | 9/30/91 | 11/27/91 |
| 111-30-8 | Pentanedial | 9/30/91 | 11/27/91 |
| 111-71-7 | Heptanal | 9/30/91 | 11/27/91 |
| 112-31-2 | Decanal | 9/30/91 | 11/27/91 |
| 112-44-7 | Undecanal | 9/30/91 | 11/27/91 |
| 112-45-8 | 10-Undecenal | 9/30/91 | 11/27/91 |
| 112-54-9 | Dodecanal | 9/30/91 | 11/27/91 |
| 120-14-9 | Benzaldehyde, 3,4-dimethoxy- | 9/30/91 | 11/27/91 |
| 120-21-8 | Benzaldehyde, 4-(diethylamino)- | 9/30/91 | 11/27/91 |
| 120-57-0 | 1,3-Benzodioxole-5-carboxaldehyde | 9/30/91 | 11/27/91 |
| 121-32-4 | Benzaldehyde, 3-ethoxy-4-hydroxy- | 9/30/91 | 11/27/91 |
| 121-33-5 | Benzaldehyde, 4-hydroxy-3-methoxy- | 9/30/91 | 11/27/91 |
| 122-40-7 | Heptanal, 2-(phenylmethylene)- | 9/30/91 | 11/27/91 |
| 122-78-1 | Benzeneacetaldehyde | 9/30/91 | 11/27/91 |
| 123-05-7 | Hexanal, 2-ethyl- | 9/30/91 | 11/27/91 |
| 123-08-0 | Benzaldehyde, 4-hydroxy- | 9/30/91 | 11/27/91 |
| 123-11-5 | Benzaldehyde, 4-methoxy- | 9/30/91 | 11/27/91 |
| 123-38-6 | Propanal | 9/30/91 | 11/27/91 |
| 124-13-0 | Octanal | 9/30/91 | 11/27/91 |
| 124-19-6 | Nonanal | 9/30/91 | 11/27/91 |
| 126-15-8 | 4a(4H)-Dibenzofurancarboxaldehyde, 1,5a,6,9,9a,9b-hexahydro- | 9/30/91 | 11/27/91 |
| 135-02-4 | Benzaldehyde, 2-methoxy- | 9/30/91 | 11/27/91 |
| 141-27-5 | 2,6-Octadienal, 3,7-dimethyl-, (E)- | 9/30/91 | 11/27/91 |
| 143-14-6 | 9-Undecenal | 9/30/91 | 11/27/91 |
| 455-19-6 | Benzaldehyde, 4-(trifluoromethyl)- | 9/30/91 | 11/27/91 |
| 505-57-7 | 02-Hexenal | 9/30/91 | 11/27/91 |
| 552-89-6 | Benzaldehyde, 2-nitro- | 9/30/91 | 11/27/91 |
| 590-86-3 | Butanal, 3-methyl- | 9/30/91 | 11/27/91 |
| 597-31-9 | Propanal, 3-hydroxy-2,2-dimethyl- | 9/30/91 | 11/27/91 |
| 939-97-9 | Benzaldehyde, 4-(1,1-dimethylethyl)- | 9/30/91 | 11/27/91 |
| 1121-60-4 | 2-Pyridinecarboxaldehyde | 9/30/91 | 11/27/91 |
| 1200-14-2 | Benzaldehyde, 4-butyl | 9/30/91 | 11/27/91 |
| 1331-92-6 | 2-Propenal, 3-phenyl-, monopentyl deriv. | 9/30/91 | 11/27/91 |
| 1334-78-7 | Benzaldehyde, methyl- | 9/30/91 | 11/27/91 |
| 1423-46-7 | 3-Cyclohexene-1-carboxaldehyde, 2,4,6-trimethyl- | 9/30/91 | 11/27/91 |
| 1504-74-1 | 2-Propenal, 3-(2-methoxyphenyl)- | 9/30/91 | 11/27/91 |
| 2591-86-8 | 1-Piperidinecarboxaldehyde | 9/30/91 | 11/27/91 |
| 3132-99-8 | Benzaldehyde, 3-bromo- | 9/30/91 | 11/27/91 |
| 3268-49-3 | Propanal, 3-(methylthio)- | 9/30/91 | 11/27/91 |
| 3613-30-7 | Octanal, 7-methoxy-3,7-dimethyl- | 9/30/91 | 11/27/91 |
| 4501-58-0 | 3-Cyclopentene-1-acetaldehyde, 2,2,3-trimethyl- | 9/30/91 | 11/27/91 |
| 5435-64-3 | Hexanal, 3,5,5-trimethyl- | 9/30/91 | 11/27/91 |
| 5780-07-4 | 1,3-Benzodioxole-5-carboxaldehyde, 7-methoxy- | 9/30/91 | 11/27/91 |
| 5949-05-3 | 6-Octenal, 3,7-dimethyl-, (S)- | 9/30/91 | 11/27/91 |
| 5988-91-0 | Octanal, 3,7-dimethyl- | 9/30/91 | 11/27/91 |
| 10031-82-0 | Benzaldehyde, 4-ethoxy- | 9/30/91 | 11/27/91 |
| 13586-68-0 | 2-Propenal, 3- 4-(1,1-dimethylethyl)phenyl-2-methyl- | 9/30/91 | 11/27/91 |
| 17754-90-4 | Benzaldehyde, 4-(diethylamino)-2-hydroxy- | 9/30/91 | 11/27/91 |
| 26266-68-2 | Hexenal, 2-ethyl- | 9/30/91 | 11/27/91 |
| 27939-60-2 | 3-Cyclohexene-1-carboxaldehyde, dimethyl- | 9/30/91 | 11/27/91 |
| 28602-27-9 | Benzaldehyde, (dimethylamino)- | 9/30/91 | 11/27/91 |
| 31906-04-4 | 3-Cyclohexene-1-carboxaldehyde, 4-(4-hydroxy-4-methylpentyl)- | 9/30/91 | 11/27/91 |
| 37677-14-8 | 3-Cyclohexene-1-carboxaldehyde, 4-(4-methyl-3-pentenyl)- | 9/30/91 | 11/27/91 |
| 39515-51-0 | Benzaldehyde, 3-phenoxy- | 9/30/91 | 11/27/91 |
| 52475-86-2 | 3-Cyclohexene-1-carboxaldehyde, 1-methyl-4-(4-methyl-3-pentenyl)- | 9/30/91 | 11/27/91 |
| 66327-54-6 | 3-Cyclohexene-1-carboxaldehyde, 1-methyl-4-(4-methylpentyl)- | 9/30/91 | 11/27/91 |
| Alkyl-, Chloro-, and Hydroxymethyl Diaryl Ethers. | | | |
| 3061–36–7 | 1,4-Diphenoxybenzene | 04/12/93 | 06/10/93 |
| 3586–14–9 | Benzene, 1-methyl-3-phenoxy- | 04/12/93 | 06/10/93 |
| 13826–35–2 | Benzenemethanol, 3-phenoxy-, | 04/12/93 | 06/10/93 |

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|---|---|---|---|
| 28299–41–4 | Benzene, 1,1,′-oxybis[methyl- | 04/12/93 | 06/10/93 |
| 28984–89–6 | 1,1′-Biphenyl, phenoxy- | 04/12/93 | 06/10/93 |
| 42874–96–4 | 2-Chloro-1-(3-methylphenoxy)-4-(trifluoromethyl)benzene | 04/12/93 | 06/10/93 |
| 50594–77–9 | Phenol, 3-[2-chloro-4-(trifluoromethyl)phenoxy]-, acetate | 04/12/93 | 06/10/93 |
| 50789–44–1 | Benzenemethanol, 3-phenoxy-, acetate | 04/12/93 | 06/10/93 |
| 51632–16–7 | Benzene, 1-(bromomethyl)-3-phenoxy- | 04/12/93 | 06/10/93 |
| 61702–88–3 | Benzene, 1,1′-oxybis[(1,1,3,3-tetramethylbutyl)- | 04/12/93 | 06/10/93 |
| 63734–62–3 | Benzoic acid, 3-[2-chloro-4-(trifluoromethyl)phenoxy]-, | 04/12/93 | 06/10/93 |
| 69834–19–1 | Benzene, 1,1′-oxybis[dodecyl- | 04/12/93 | 06/10/93 |
| 72252–48–3 | Benzoic acid, 3-[2-chloro-4-(trifluoromethyl)phenoxy]-, potassium salt | 04/12/93 | 06/10/93 |
| Alkylphenols and Alkylphenol Ethoxylates:. | | | |
| 80–46–6 | 4-tert-Pentylphenol | 3/29/96 | 5/29/96 |
| 88–18–6 | 2-tert-Butylphenol | 3/29/96 | 5/29/96 |
| 94–06–4 | 4-(1-Methylbutyl)phenol | 3/29/96 | 5/29/96 |
| 98–54–4 | 4-tert-Butylphenol | 3/29/96 | 5/29/96 |
| 99–71–8 | 4-sec-Butylphenol | 3/29/96 | 5/29/96 |
| 104–40–5 | 4-Nonylphenol | 3/29/96 | 5/29/96 |
| 104–43–8 | 4-Dodecylphenol | 3/29/96 | 5/29/96 |
| 949–13–3 | 2-Octylphenol | 3/29/96 | 5/29/96 |
| 1300–16–9 | Nonylphenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 1322–69–6 | (1,1,3,3-Tetramethylbutyl)phenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 1331–57–3 | Dodecylphenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 1638–22–8 | 4-n-Butylphenol | 3/29/96 | 5/29/96 |
| 1806–26–4 | 4-Octylphenol | 3/29/96 | 5/29/96 |
| 2315–66–4 | Decaethylene glycol 4-isooctylphenyl ether | 3/29/96 | 5/29/96 |
| 2497–58–7 | Hexaethylene glycol 4-isooctylphenyl ether | 3/29/96 | 5/29/96 |
| 3180–09–4 | 2-Butylphenol | 3/29/96 | 5/29/96 |
| 3884–95–5 | 2-(1,1,3,3-Tetramethylbutyl)phenol | 3/29/96 | 5/29/96 |
| 9002–93–1 | Polyethylene glycol 4-(tert-octyl)phenyl ether | 3/29/96 | 5/29/96 |
| 9036–19–5 | Polyethylene glycol mono(octyl)phenyl ether | 3/29/96 | 5/29/96 |
| 11066–49–2 | Isononylphenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 14938–35–3 | 4-Pentylphenol | 3/29/96 | 5/29/96 |
| 17404–66–9 | 4-(1-Methyloctyl)phenol | 3/29/96 | 5/29/96 |
| 25154–52–3 | Nonylphenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 27178–34–3 | tert-Butylphenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 27193–28–8 | (1,1,3,3-Tetramethylbutyl)phenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 27193–86–8 | Dodecylphenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 27985–70–2 | (1-Methylheptyl)phenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 29932–96–5 | (1,1,3,3-Tetramethylbutyl)phenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 30105–54–5 | (1,1,3,3-Tetramethylbutyl)phenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 31195–95–6 | Isobutylphenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 54932–78–4 | 4-(2,2,3,3-Tetramethylbutyl)phenol | 3/29/96 | 5/29/96 |
| 2744–41–6 | (1,1,3,3-Tetramethylbutyl)phenol (mixed isomers) | 3/29/96 | 5/29/96 |
| 68987–90–6 | Poly(oxy-1,2-ethanediyl), α-(octylphenyl)-ω-hydroxy-, branched | 3/29/96 | 5/29/96 |
| 84852–15–3 | Branched 4-nonylphenol (mixed isomers) | 3/29/96 | 5/29/96 |
| Alkyl phosphates: | | | |
| 78–40–0 | Phosphoric acid, triethyl ester | 10/29/90 | 12/27/90 |
| 78–42–2 | Phosphoric acid, tris(2-ethylhexyl)ester | 10/29/90 | 12/27/90 |
| 78–51–3 | Ethanol, 2-butoxy-, phosphate (3:1) | 10/29/90 | 12/27/90 |
| 107–66–4 | Phosphoric acid, dibutyl ester | 10/29/90 | 12/27/90 |
| 126–71–6 | Phosphoric acid, tris(2-methylpropyl) ester | 10/29/90 | 12/27/90 |
| 126–73–8 | Phosphoric acid tributyl ester | 10/29/90 | 12/27/90 |
| 298–07–7 | Phosphoric acid, bis(2-ethylhexyl)ester | 10/29/90 | 12/27/90 |
| 812–00–0 | Phosphoric acid, monomethyl ester | 10/29/90 | 12/27/90 |
| 1070–03–7 | Phosphoric acid, mono(2-ethylhexyl)ester | 10/29/90 | 12/27/90 |
| 1498–51–7 | Phosphorodichloridic acid, ethylester | 10/29/90 | 12/27/90 |
| 1623–15–0 | Phosphoric acid, monobutyl ester | 10/29/90 | 12/27/90 |
| 1623–24–1 | Phosphoric acid, mono(1-methylethyl)ester | 10/29/90 | 12/27/90 |
| 2958–09–0 | Phosphoric acid, monooctadecyl ester | 10/29/90 | 12/27/90 |
| 3900–04–7 | Phosphoric acid, monohexyl ester | 10/29/90 | 12/27/90 |
| 3991–73–9 | Phosphoric acid, monooctyl ester | 10/29/90 | 12/27/90 |
| 7057–92–3 | Phosphoric acid, didodecyl ester | 10/29/90 | 12/27/90 |
| 7332–46–9 | Ethanol, 2-(2-butoxyethoxy)-, phosphate (3:1) | 10/29/90 | 12/27/90 |
| 12645–31–7 | Phosphoric acid, 2-ethylhexyl ester | 10/29/90 | 12/27/90 |
| 12751–23–4 | Phosphoric acid, dodecyl ester | 10/29/90 | 12/27/90 |
| 27215–10–7 | Phosphoric acid, diisooctyl ester | 10/29/90 | 12/27/90 |
| Brominated flame retardants: | | | |
| 74–97–5 | Methane, bromochloro- | 10/29/90 | 12/27/90 |
| 87–10–5 | Benzamide, 3,5-dibromo-N-(4-bromophenyl)-2-hydroxy- | 10/29/90 | 12/27/90 |
| 87–83–2 | Benzene, pentabromomethyl- | 10/29/90 | 12/27/90 |

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| 87–84–3 | Cyclohexane,1,2,3,4,5-pentabromo-6-chloro- | 10/29/90 | 12/27/90 |
| 96–13–9 | 1-Propanol, 2,3-dibromo- | 10/29/90 | 12/27/90 |
| 593–60–2 | Ethene, bromo- | 10/29/90 | 12/27/90 |
| 615–58–7 | Phenol, 2,4-dibromo- | 10/29/90 | 12/27/90 |
| 4162–45–2 | Ethanol,2,2'-((1-methylethylidene)bis((2,6-dibromo-4,1-phenylene)oxy))bis- | 10/29/90 | 12/27/90 |
| 25327–89–3 | Benzene, 1,1'-(1-methylethylidene)bis(3,5-dibromo-4-(2-propenyloxy)- | 10/29/90 | 12/27/90 |
| 30554–72–4 | Cyclohexane, tetrabromodichloro- | 10/29/90 | 12/27/90 |
| 30554–73–5 | Cyclohexane, tribromotrichloro- | 10/29/90 | 12/27/90 |
| 36483–57–5 | 1-Propanol, 2,2-dimethyl-, tribromo deriv. | 10/29/90 | 12/27/90 |
| 55205–38–4 | 2-Propenoic acid, (1-methylethylidene)bis(2,6-dibromo-4,1-phenylene) ester | 10/29/90 | 12/27/90 |
| 68955–41–9 | Alkanes, C10-18, bromochloro- | 10/29/90 | 12/27/90 |
| 69882–11–7 | Phenol, 2,4(or 2,6)-dibromo-, homopolymer | 10/29/90 | 12/27/90 |
| 88497–56–7 | Benzene, ethenyl-, homopolymer, brominated | 10/29/90 | 12/27/90 |
| Chloralkyl phosphates. | | | |
| 34621–99–3 | 1,2-Ethanediyltetrakis(2-chloro-1-methylethylene) phosphate | 6/14/93 | 8/12/93 |
| 38051–10–4 | 2,2-Bis(chloromethyl)-1,3-propanediyltetrakis(2-chloroethyl) phosphate | 6/14/93 | 8/12/93 |
| 53461–82–8 | Oxydi-2,1-ethanediyltetrakis(2-chloroethyl) phosphate | 6/14/93 | 8/12/93 |
| 76649–15–5 | 2-Chloro-1-methylethylbis(2-chloropropyl) phosphate. | | |
| Cyanoacrylates: | | | |
| 137–05–3 | 2-Propenoic acid, 2-cyano-, methyl ester | 1/26/94 | 3/28/94 |
| 1069–55–2 | 2-Propenoic acid, 2-cyano-, isobutyl ester | 1/26/94 | 3/28/94 |
| 6197–30–4 | 2-Propenoic acid, 2-cyano-3,3-diphenyl-, 2-ethylhexyl ester | 1/26/94 | 3/28/94 |
| 6606–65–1 | 2-Propenoic acid, 2-cyano-, butyl ester | 1/26/94 | 3/28/94 |
| 7085–85–0 | 2-Propenoic acid, 2-cyano-, ethyl ester | 1/26/94 | 3/28/94 |
| 7324–02–9 | 2-Propenoic acid, 2-cyano-, 2-propenyl ester | 1/26/94 | 3/28/94 |
| 10586–17–1 | 2-Propenoic acid, 2-cyano-, 1-methylethyl ester | 1/26/94 | 3/28/94 |
| 21982–43–4 | 2-Propenoic acid, 2-cyano-, ethoxyethyl ester | 1/26/94 | 3/28/94 |
| 23023–91–8 | 2-Propenoic acid, 2-cyano-, 2,2,2-trifluoromethyl ester | 1/26/94 | 3/28/94 |
| 27816–23–5 | 2-Propenoic acid, 2-cyano-, 2-methoxyethyl ester | 1/26/94 | 3/28/94 |
| 64992–16–1 | Ethanaminium, 2-[[2-cyano-3-[4-(diethylamino)phenyl]-1-oxo-2-propenyl]oxy]-*N,N,N*-trimethyl-, chloride. | 1/26/94 | 3/28/94 |
| IRIS Chemicals: | | | |
| 51-28-5 | 2,4 Dinitrophenol | 9/30/91 | 11/27/91 |
| 95-65-8 | 3,4 Dinethylphenol | 9/30/91 | 11/27/91 |
| Isocyanates: | | | |
| 91–97–4 | 1,1'-Biphenyl, 4,4'-diisocyanato-3,3'-dimethyl- | 10/29/90 | 12/27/90 |
| 100–28–7 | Benzene, 1-isocyanato-4-nitro- | 10/29/90 | 12/27/90 |
| 101–68–8 | Benzene, 1,1'-methylenebis(4-isocyanato- | 10/29/90 | 12/27/90 |
| 102–36–3 | Benzene, 1,2-dichloro-4-isocyanato- | 10/29/90 | 12/27/90 |
| 103–71–9 | Benzene, isocyanato- | 10/29/90 | 12/27/90 |
| 104–12–1 | Benzene, 1-chloro-4-isocyanato- | 10/29/90 | 12/27/90 |
| 104–49–4 | Benzene, 1,4-diisocyanato- | 10/29/90 | 12/27/90 |
| 109–90–0 | Ethane, isocyanato- | 10/29/90 | 12/27/90 |
| 110–78–1 | Propane, 1-isocyanato- | 10/29/90 | 12/27/90 |
| 111–36–4 | Butane, 1-isocyanato- | 10/29/90 | 12/27/90 |
| 112–96–9 | Octadecane, 1-isocyanato- | 10/29/90 | 12/27/90 |
| 123–61–5 | Benzene, 1,3-diisocyanato- | 10/29/90 | 12/27/90 |
| 329–01–1 | Benzene, 1-isocyanato-3-(trifluoromethyl)- | 10/29/90 | 12/27/90 |
| 614–68–6 | Benzene, 1-isocyanato-2-methyl- | 10/29/90 | 12/27/90 |
| 622–58–2 | Benzene, 1-isocyanato-4-methyl- | 10/29/90 | 12/27/90 |
| 624–83–9 | Methane, isocyanato- | 10/29/90 | 12/27/90 |
| 1476–23–9 | 1-Propene, 3-isocyanato- | 10/29/90 | 12/27/90 |
| 2422–91–5 | Benzene, 1,1',1''-methylidynetris(4-isocyanato- | 10/29/90 | 12/27/90 |
| 2493–02–9 | Benzene, 1-bromo-4-isocyanato- | 10/29/90 | 12/27/90 |
| 2909–38–8 | Benzene, 1-chloro-3-isocyanato- | 10/29/90 | 12/27/90 |
| 2949–22–6 | Acetic acid, isocyanato-, ethyl ester | 10/29/90 | 12/27/90 |
| 3173–53–3 | Cyclohexane, isocyanato- | 10/29/90 | 12/27/90 |
| 4035–89–6 | Imidodicarbonic diamide,N,N',2-tris(6-isocyanatohexyl)- | 10/29/90 | 12/27/90 |
| 4098–71–9 | Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl- | 10/29/90 | 12/27/90 |
| 4151–51–3 | Phenol, 4-isocyanato-, phosphorothioate (3:1) (ester) | 10/29/90 | 12/27/90 |
| 5124–30–1 | Cyclohexane, 1,1'-methylenebis(4-isocyanato- | 10/29/90 | 12/27/90 |
| 5873–54–1 | Benzene, 1-isocyanato-2-((4-isocyanatophenyl)methyl)- | 10/29/90 | 12/27/90 |
| 10031–75–1 | Benzene, 1,1'-(diisocyanatomethylene)bis- | 10/29/90 | 12/27/90 |
| 15646–96–5 | Hexane, 1,6-diisocyanato-2,4,4-trimethyl- | 10/29/90 | 12/27/90 |
| 16938–22–0 | Hexane, 1,6-diisocyanato-2,2,4-trimethyl- | 10/29/90 | 12/27/90 |
| 25854–16–4 | Benzene, bis(isocyanatomethyl)- | 10/29/90 | 12/27/90 |
| 26447–40–5 | Benzene, 1,1'-methylenebis(isocyanato- | 10/29/90 | 12/27/90 |
| 26603–40–7 | 1,3,5,-Triazine-2,4,6(1H.3H,5H-trione, 1,3,5-tris(3-isocyanatomethylphenyl)- | 10/29/90 | 12/27/90 |
| 26747–90–0 | 1,3-Diazetidine-2,4-dione, 1,3-bis(3-isocyanatomethylphenyl)- | 10/29/90 | 12/27/90 |
| 28178–42–9 | Benzene, 2-isocyanato-1,3-bis(1-methylethyl)- | 10/29/90 | 12/27/90 |
| 28556–81–2 | Benzene, 2-isocyanato-1,3-dimethyl- | 10/29/90 | 12/27/90 |
| 30674–80–7 | 2-Propenoic acid, 2-methyl-,2-isocyanatoethyl ester | 10/29/90 | 12/27/90 |

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| 34893–92–0 | Benzene, 1,3-dichloro-5-isocyanato- | 10/29/90 | 12/27/90 |
| 68239–06–5 | Cyclohexane, 2-heptyl-3,4-bis(9-isocyanatononyl)-1-pentyl- | 10/29/90 | 12/27/90 |
| 73597–26–9 | 2-Propenoic acid, 2-methyl-, 2-(((((5-isocyanato-1,3,3-trimethylcyclohexyl) methyl)amino)carbonyl)oxy)ethyl ester. | 10/29/90 | 12/27/90 |
| Methyl ethylene glycol ethers and esters: | | | |
| 3121-61-7 | Ethylene glycol monomethyl ether acrylate | 1/26/94 | 3/28/94 |
| 23783-42-8 | Tetraethylene glycol monomethyl ether | 1/26/94 | 3/28/94 |
| OSHA Chemicals in Need of Dermal Absorption Testing: | | | |
| 60–29–7 | Ethyl ether | 1/26/94 | 3/28/94 |
| 61–82–5 | Amitrole | 3/11/94 | 5/10/94 |
| 74–96–4 | Ethyl bromide | 3/11/94 | 5/10/94 |
| 75–05–8 | Acetonitrile | 8/4/95 | 10/3/95 |
| 75–12–7 | Formamide | 8/4/95 | 10/3/95 |
| 75–15–0 | Carbon disulfide | 3/11/94 | 5/10/94 |
| 75–25–2 | Bromoform | 3/11/94 | 5/10/94 |
| 75–34–3 | 1,1–Dichloroethane | 3/11/94 | 5/10/94 |
| 75–35–4 | Vinylidene chloride | 8/4/95 | 10/3/95 |
| 75–65–0 | *tert*-Butyl alcohol | 1/26/94 | 3/28/94 |
| 76–22–2 | Camphor | 1/26/94 | 3/28/94 |
| 77–73–6 | Dicyclopentadiene | 8/4/95 | 10/3/95 |
| 77–78–1 | Dimethyl sulfate | 3/11/94 | 5/10/94 |
| 78–59–1 | Isophorone | 8/4/95 | 10/3/95 |
| 78-87-5 | Propylene dichloride | 8/4/95 | 10/3/95 |
| 78–92–2 | *sec*-Butyl alcohol | 1/26/94 | 3/28/94 |
| 79–20–9 | Methyl acetate | 1/26/94 | 3/28/94 |
| 79–46–9 | 2–Nitropropane | 3/11/94 | 5/10/94 |
| 88-72-2 | o-Nitrotoluene | 3/11/94 | 5/10/94 |
| 89-72-5 | o-sec-Butylphenol | 3/11/94 | 5/10/94 |
| 90-04-0 | o-Anisidine | 3/11/94 | 5/10/94 |
| 91-20-3 | Naphthalene | 8/4/95 | 10/3/95 |
| 92-52-4 | Biphenyl | 8/4/95 | 10/3/95 |
| 95-13-6 | Indene | 3/11/94 | 5/10/94 |
| 95-49-8 | o-Chlorotoluene | 3/11/94 | 5/10/94 |
| 95-50-1 | o-Dichlorobenzene | 8/4/95 | 10/3/95 |
| 96-18-4 | 1,2,3-Trichloropropane | 8/4/95 | 10/3/95 |
| 97–77–8 | Disulfiram | 1/26/94 | 3/28/94 |
| 98-29-3 | t-Butylcatechol | 8/4/95 | 10/3/95 |
| 99-08-1 | m-Nitrotoluene | 8/4/95 | 10/3/95 |
| 99-65-0 | m-Dinitrobenzene | 3/11/94 | 5/10/94 |
| 99-99-0 | p-Nitrotoluene | 8/4/95 | 10/3/95 |
| 100-00-5 | p-Nitrochlorobenzene | 3/11/94 | 5/10/94 |
| 100-01-6 | p-Nitroaniline | 3/11/94 | 5/10/94 |
| 100-44-7 | Benzyl chloride | 3/11/94 | 5/10/94 |
| 100–25–4 | *p*-Dinitrobenzene | 1/26/94 | 3/28/94 |
| 100-63-0 | Phenylhydrazine | 3/11/94 | 5/10/94 |
| 105–46–4 | *sec*-Butyl acetate | 1/26/94 | 3/28/94 |
| 106–42–3 | *p*-Xylene | 1/26/94 | 3/28/94 |
| 106-46-7 | p-Dichlorobenzene | 8/4/95 | 10/3/95 |
| 106-49-0 | p-Toluidine | 3/11/94 | 5/10/94 |
| 107-06-2 | Ethylene dichloride | 8/4/95 | 10/3/95 |
| 107–31–3 | Methyl formate | 1/26/94 | 3/28/94 |
| 107–66–4 | Dibutyl phosphate | 1/26/94 | 3/28/94 |
| 108–03–2 | 1-Nitropropane | 1/26/94 | 3/28/94 |
| 108-44-1 | m-Toluidine | 3/11/94 | 5/10/94 |
| 108–87–2 | Methylcyclohexane | 1/26/94 | 3/28/94 |
| 108-90-7 | Chlorobenzene | 3/11/94 | 5/10/94 |
| 108-93-0 | Cyclohexanol | 8/4/95 | 10/3/95 |
| 109–66–0 | Pentane | 1/26/94 | 3/28/94 |
| 109-99-9 | Tetrahydrofuran | 3/11/94 | 5/10/94 |
| 110-12-3 | Methyl isoamyl ketone | 8/4/95 | 10/3/95 |
| 110–83–8 | Cyclohexene | 1/26/94 | 3/28/94 |
| 111–84–2 | Nonane | 1/26/94 | 3/28/94 |
| 120-80-9 | Catechol | 8/4/95 | 10/3/95 |
| 121-14-2 | 2,4-Dinitrotoluene | 3/11/94 | 5/10/94 |
| 121-69-7 | Dimethylaniline | 8/4/95 | 10/3/95 |
| 122-39-4 | Diphenylamine | 3/11/94 | 5/10/94 |
| 123-42-2 | Diacetone alcohol | 8/4/95 | 10/3/95 |
| 123–92–2 | Isoamyl acetate | 1/26/94 | 3/28/94 |

| CAS No. | Substance | Effective date | Reporting date |
|---|---|---|---|
| 126-99-8 | beta-Chloroprene | 3/11/94 | 5/10/94 |
| 127-19-5 | Dimethyl acetamide | 8/4/95 | 10/3/95 |
| 142–82–5 | Heptane (*n*-Heptane) | 1/26/94 | 3/28/94 |
| 150-76-5 | p-Methoxyphenol | 3/11/94 | 5/10/94 |
| 287–92–3 | Cyclopentane | 1/26/94 | 3/28/94 |
| 528-29-0 | o-Dinitrobenzene | 3/11/94 | 5/10/94 |
| 532–27–4 | *a*-Chloroacetophenone | 1/26/94 | 3/28/94 |
| 540-59-0 | 1,2-Dichloroethylene | 3/11/94 | 5/10/94 |
| 540–88–5 | *tert*-Butyl acetate | 1/26/94 | 3/28/94 |
| 542-92-7 | Cyclopentadiene | 8/4/95 | 10/3/95 |
| 626-17-5 | m-Phthalodinitrile | 3/11/94 | 5/10/94 |
| 628–63–7 | *n*-Amyl acetate | 1/26/94 | 3/28/94 |
| 768-52-5 | N-Isopropylaniline | 3/11/94 | 5/10/94 |
| 1300-73-8 | Xylidine | 3/11/94 | 5/10/94 |
| 6423-43-4 | Propylene glycol dinitrate | 3/11/94 | 5/10/94 |
| 7631–90–5 | Sodium bisulfite | 1/26/94 | 3/28/94 |
| 7681–57–4 | Sodium metabisulfite | 1/26/94 | 3/28/94 |
| 25013-15-4 | Vinyl toluene | 3/11/94 | 5/10/94 |
| 34590-94-8 | Dipropylene glycol methyl ether | 8/4/95 | 10/3/95 |
| Propylene glycol ethers and esters: | | | |
| 108–65–6 | Propylene glycol monomethyl ether acetate | 1/26/94 | 3/28/94 |
| 110–98–5 | Dipropylene glycol | 1/26/94 | 3/28/94 |
| 770–35–4 | 1–Phenoxy-2-propanol | 1/26/94 | 3/28/94 |
| 20324–32–7 | 1–(2-Methoxy-1-methylethoxy)-2-propanol | 1/26/94 | 3/28/94 |
| 20324–33–8 | Tripropylene glycol methyl ether | 1/26/94 | 3/28/94 |
| 28677–93–2 | Methoxy-1-propanol | 1/26/94 | 3/28/94 |
| 29387–86–8 | Propylene glycol monobutyl ether | 1/26/94 | 3/28/94 |
| 29911–28–2 | Dipropylene glycol butyl ether | 1/26/94 | 3/28/94 |
| 42978–66–5 | Tripropylene glycol diacrylate | 1/26/94 | 3/28/94 |
| 57018–52–7 | Propylene glycol mono-*tert*-butyl ether | 1/26/94 | 3/28/94 |
| 88917–22–0 | Dipropylene glycol monomethyl ether acetate | 1/26/94 | 3/28/94 |
| Siloxanes: | | | |
| 107–46–0 | Hexamethyldisiloxane | 10/12/93 | 2/28/94 |
| 107–50–6 | Tetradecamethylcycloheptasiloxane | 10/12/93 | 2/28/94 |
| 107–51–7 | Octamethyltrisiloxane | 10/12/93 | 2/28/94 |
| 107–52–8 | Tetradecamethylhexasiloxane | 10/12/93 | 2/28/94 |
| 107–53–9 | Tetracosamethylundecasiloxane | 10/12/93 | 2/28/94 |
| 141–62–8 | Decamethyltetrasiloxane | 10/12/93 | 2/28/94 |
| 141–63–9 | Dodecamethylpentasiloxane | 10/12/93 | 2/28/94 |
| 540–97–6 | Dodecamethylcyclohexasiloxane | 10/12/93 | 2/28/94 |
| 541–01–5 | Hexadecamethylheptasiloxane | 10/12/93 | 2/28/94 |
| 541–02–6 | Decamethylcyclopentasiloxane | 10/12/93 | 2/28/94 |
| 541–05–9 | Hexamethylcyclotrisiloxane | 10/12/93 | 2/28/94 |
| 546–56–5 | Octaphenylcyclotetrasiloxane | 10/12/93 | 2/28/94 |
| 556–67–2 | Octamethylcyclotetrasiloxane | 10/12/93 | 2/28/94 |
| 556–68–3 | Hexadecamethylcyclooctasiloxane | 10/12/93 | 2/28/94 |
| 556–69–4 | Octadecamethyloctasiloxane | 10/12/93 | 2/28/94 |
| 556–70–7 | Docosamethyldecasiloxane | 10/12/93 | 2/28/94 |
| 556–71–8 | Octadecamethylcyclononasiloxane | 10/12/93 | 2/28/94 |
| 999–97–3 | Hexamethyldisilazane | 10/12/93 | 2/28/94 |
| 2370–88–9 | Tetramethylcyclotetrasiloxane | 10/12/93 | 2/28/94 |
| 2374–14–3 | Trifluoropropylmethylcyclotrisiloxane | 10/12/93 | 2/28/94 |
| 2471–08–1 | Hexacosamethyldodecasiloxane | 10/12/93 | 2/28/94 |
| 2471–09–2 | Octacosamethyltridecasiloxane | 10/12/93 | 2/28/94 |
| 2471–10–5 | Triacontamethyltetradecasiloxane | 10/12/93 | 2/28/94 |
| 2471–11–6 | Dotriacontamethylpentadecasiloxane | 10/12/93 | 2/28/94 |
| 2554–06–5 | Methylvinylcyclosiloxane | 10/12/93 | 2/28/94 |
| 2627–95–4 | Tetramethyldivinyldisiloxane | 10/12/93 | 2/28/94 |
| 2652–13–3 | Eicosamethylnonasiloxane | 10/12/93 | 2/28/94 |
| 70131-67-8 | Siloxanes and silicones, di-Me, hydroxy-terminated | 10/12/93 | 2/28/94 |
| 9004–73–3 | Methylpolysiloxane | 10/12/93 | 2/28/94 |
| 18766–38–6 | Docosamethylcycloundecasiloxane | 10/12/93 | 2/28/94 |
| 18772–36–6 | Eicosamethylcyclodecasiloxane | 10/12/93 | 2/28/94 |
| 18844–04–7 | Hexatriacontamethylheptadecasiloxane | 10/12/93 | 2/28/94 |
| 18919–94–3 | Tetracosamethylcyclododecasiloxane | 10/12/93 | 2/28/94 |
| 23523–12–8 | Hexatriacontamethylcyclooctadecasiloxane | 10/12/93 | 2/28/94 |
| 23523–14–0 | Triacontamethylcyclopentadecasiloxane | 10/12/93 | 2/28/94 |
| 23732–94–7 | Hexacosamethylcyclotridecasiloxane | 10/12/93 | 2/28/94 |
| 36938–50–8 | Tetratriacontamethyl hexadecasiloxane | 10/12/93 | 2/28/94 |
| 36938–52–0 | Octatriacontamethyl octadecasiloxane | 10/12/93 | 2/28/94 |
| 63148–62–9 | Dimethyl silicones and siloxanes | 10/12/93 | 2/28/94 |

| CAS No. | Substance | Effective date | Reporting date |
|---|---|---|---|
| 67762–90–7 | Dimethyl silicones and siloxane, reaction products with silica | 10/12/93 | 2/28/94 |
| 67762–94–1 | Dimethylmethylvinylsiloxane | 10/12/93 | 2/28/94 |
| 68037–59–2 | Dimethylhydropolylsiloxane | 10/12/93 | 2/28/94 |
| 68037–74–1 | Dimethylpolysiloxanes | 10/12/93 | 2/28/94 |
| 68083–14–7 | Dimethyldiphenylsiloxane | 10/12/93 | 2/28/94 |
| 69430–24–6 | Cyclopolydimethylsiloxane | 10/12/93 | 2/28/94 |
| 115361-68-7 | Dimethylmethyl 3,3,3-trifluoropropyl siloxane | 10/12/93 | 2/28/94 |
| 149050-40-8 | Octacosamethylcyclotetradecasiloxane | 10/12/93 | 2/28/94 |
| 150026–95–2 | Dotriacontamethylcyclohexadecasiloxane | 10/12/93 | 2/28/94 |
| 150026–96–3 | Tetratriacontamethylcycloheptadecasiloxane | 10/12/93 | 2/28/94 |
| 150026–97–4 | Octatriacontamethylcyclononadecasiloxane | 10/12/93 | 2/28/94 |
| 150026–98–5 | Tetracontamethylcycloeicosasiloxane | 10/12/93 | 2/28/94 |
| 150026-99-6 | Tetracontamethylnonadecasiloxane | 10/12/93 | 2/28/94 |
| 150027–00–2 | Dotetracontamethyleicosasiloxane | 10/12/93 | 2/28/94 |
| not available | Polymethyloctadecylsiloxane | 10/12/93 | 2/28/94 |
| Substantially produced chemicals in need of subchronic tests: | | | |
| 80-51-3 | p,p'-Oxybis(benzenesulfonylhydrazide) | 9/30/91 | 11/27/91 |
| 81-84-5 | Naphthalenedicarboxylic anhydride | 9/30/91 | 11/27/91 |
| 84-51-5 | 2-Ethylanthraquinone | 9/30/91 | 11/27/91 |
| 87-02-5 | 7-Amino-4-hydroxy-2-naphthalenesulfonic acid | 9/30/91 | 11/27/91 |
| 90-15-3 | 1-Naphthol | 9/30/91 | 11/27/91 |
| 92-70-6 | 3-Hydroxy-2-naphthoic acid | 9/30/91 | 11/27/91 |
| 94-28-0 | Triethylene glycol bis(2-ethylhexanoate) | 9/30/91 | 11/27/91 |
| 95-32-9 | 2-(4-Morpholinyldithio)-benzothiazole | 9/30/91 | 11/27/91 |
| 97-88-1 | N-Butyl methacrylate | 9/30/91 | 11/27/91 |
| 98-48-6 | 1,3-Benzenedisulfonic Acid | 9/30/91 | 11/27/91 |
| 99-54-7 | 3,4-Dichloronitrobenzene | 9/30/91 | 11/27/91 |
| 99-63-8 | Isophthaloyl chloride | 9/30/91 | 11/27/91 |
| 100-20-9 | Terephthaloyl chloride | 9/30/91 | 11/27/91 |
| 100-29-8 | 4-Ethoxynitrobenzene | 9/30/91 | 11/27/91 |
| 102-01-2 | Acetoacetanilide | 9/30/91 | 11/27/91 |
| 106-31-0 | Butyric anhydride | 9/30/91 | 11/27/91 |
| 106-63-8 | Isobutyl acrylate | 9/30/91 | 11/27/91 |
| 111-96-6 | Diethylene glycol dimethyl ether | 9/30/91 | 11/27/91 |
| 112–15–2 | Ethanol, 2-(2-ethoxyethoxy)-, acetate | 9/30/91 | 11/27/91 |
| 116-81-4 | Bromamine acid | 9/30/91 | 11/27/91 |
| 119-33-5 | 4-Methyl-2-nitro-phenol | 9/30/91 | 11/27/91 |
| 121-60-8 | 4-(Acetylamino)benzenesulfonyl chloride | 9/30/91 | 11/27/91 |
| 123-54-6 | 2,4-Pentanedione | 9/30/91 | 11/27/91 |
| 123-62-6 | Propanoic anhydride | 9/30/91 | 11/27/91 |
| 142-16-5 | Bis(2-ethylhexyl)-2-butenedioate | 9/30/91 | 11/27/91 |
| 311-89-7 | Perfluorotributylamine | 9/30/91 | 11/27/91 |
| 355-42-0 | Perfluoro-N-hexane | 9/30/91 | 11/27/91 |
| 594-42-3 | Trichloromethanesulfenyl chloride | 9/30/91 | 11/27/91 |
| 616-21-7 | 1,2-Dichlorobutane | 9/30/91 | 11/27/91 |
| 626-17-5 | 1,3-Dicyanobenzene | 9/30/91 | 11/27/91 |
| 760-23-6 | 3,4-Dichlorobutene | 9/30/91 | 11/27/91 |
| 929–06–6 | 2-(2-Aminoethoxy)-ethanol | 6/30/92 | 9/28/92 |
| 1047-16-1 | Quinacridone | 9/30/91 | 11/27/91 |
| 1111-78-0 | Ammonium carbamate | 9/30/91 | 11/27/91 |
| 3089-11-0 | Hexa(methoxymethyl) melamine | 9/30/91 | 11/27/91 |
| Sulphones: | | | |
| 67-71-0 | Dimethylsulfone | 9/30/91 | 11/27/91 |
| 77–79–2 | 3-Sulfolene | 9/30/91 | 11/27/91 |
| 80-07-9 | Sulfonyl bis-(4-chlorobenzene) | 9/30/91 | 11/27/91 |
| 80-08-0 | 4,4'-Diaminodiphenyl sulfone | 9/30/91 | 11/27/91 |
| 80-09-1 | Bisphenol S | 9/30/91 | 11/27/91 |
| 98-30-6 | 2-Amino-4-(methylsulfonyl)phenol | 9/30/91 | 11/27/91 |
| 126-33-0 | Sulfolane | 9/30/91 | 11/27/91 |
| 127-63-9 | Diphenylsulfone | 9/30/91 | 11/27/91 |
| 2580-77-0 | 2,2'-Sulfonyl bis-ethanol | 9/30/91 | 11/27/91 |
| 3278-22-6 | 1,1'-[Methylene bis(sulfonyl)]bisethene | 9/30/91 | 11/27/91 |
| 5246-57-1 | 2-[(3-Aminophenyl)sulfonyl]ethanol | 9/30/91 | 11/27/91 |
| 16588-67-3 | 3-[N-Ethyl-4-[[6-(methylsulfonyl)-2-benzothiazolyl] azo]-m-toluidino]- propionitrile. | 9/30/91 | 11/27/91 |
| 17557-67-4 | 6-(Methylsulfonyl)-2-benzothiazolamine | 9/30/91 | 11/27/91 |
| 17601-96-6 | 2-Amino-4-[(2-hydroxyethyl) sulfonyl]phenol | 9/30/91 | 11/27/91 |
| 17688-68-5 | 4-Phenylthiomorpholine, 1,1-dioxide | 9/30/91 | 11/27/91 |
| 17741-62-7 | 4-[4-[(2,6-Dichloro-4-nitrophenyl) azo]phenyl]thiomorpholine, 1,1-dioxide- | 9/30/91 | 11/27/91 |

| CAS No. | Substance | Effective date | Reporting date |
|---|---|---|---|
| 18760-44-6 | 3-(Decyloxy)tetrahydrothiophene 1,1-dioxide | 9/30/91 | 11/27/91 |
| 20018-09-1 | 1-(Diiodomethyl) sulfonyl-4-methyl benzene | 9/30/91 | 11/27/91 |
| 26750-50-5 | 1,1'-[Oxybis(methylenesulfonyl)] bisethene | 9/30/91 | 11/27/91 |
| 36724-43-3 | 2,2'-[Oxybis(methylenesulfonyl)]bisethanol | 9/30/91 | 11/27/91 |
| 41123-59-5 | 1,1'-[Methylenebis(sulfonyl)]bis-2-chloroethane | 9/30/91 | 11/27/91 |
| 41123-69-7 | 2,2'-[Methylenebis(sulfonyl)]bisethanol | 9/30/91 | 11/27/91 |
| 41687-30-3 | 2-[(3-Nitrophenyl)sulfonyl]ethanol | 9/30/91 | 11/27/91 |
| 52218-35-6 | 2-[(6-Amino-2-naphthalenyl)sulfonyl]ethanol | 9/30/91 | 11/27/91 |
| 53061-10-2 | 1,1'-[Oxybis(methylenesulfonyl)]bis-2-chloroethane | 9/30/91 | 11/27/91 |
| 63134-33-8 | 4-[[4-(Phenylmethoxy)phenyl]sulfonyl]phenol | 9/30/91 | 11/27/91 |

(Secs 8(a) and 8(d), 90 Stat. 2027, 2029; 15 U.S.C. 2607 (a) and (d))

[47 FR 26998, June 22, 1982]

EDITORIAL NOTE 1: For FEDERAL REGISTER citations affecting §712.30, see the List of CFR Sections Affected in the Finding Aids section of this volume.

EFFECTIVE DATE NOTE : At 59 FR 14115, Mar. 25, 1994, in §712.30 paragraph (x), the chemical substances under the category ''propylene glycol ethers esters'' and all related dates was stayed, effective March 25, 1994.

2. At 60 FR 31921, June 19, 1995, §712.30 was amended in part by redesignating paragraph (x) as paragraph (e).

# PART 716—HEALTH AND SAFETY DATA REPORTING

## Subpart A—General Provisions

Sec.
716.1 Scope and compliance.
716.3 Definitions.
716.5 Persons who must report.
716.10 Studies to be reported.
716.20 Studies not subject to the reporting requirements.
716.25 Adequate file search.
716.30 Submission of copies of studies.
716.35 Submission of lists of studies.
716.40 EPA requests for submission of further information.
716.45 How to report on substances and mixtures.
716.50 Reporting physical and chemical properties.
716.55 Confidentiality claims.
716.60 Reporting schedule.
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## Subpart B—Specific Chemical Listings

716.105 Additions of substances and mixtures to which this subpart applies.
716.120 Substances and listed mixtures to which this subpart applies.

AUTHORITY: 15 U.S.C. 2607(d).

SOURCE: 51 FR 32726, Sept. 15, 1986, unless otherwise noted.

## Subpart—General Provisions

### § 716.1 Scope and compliance.

(a) This subpart sets forth requirements for the submission of lists and copies of health and safety studies on chemical substances and mixtures selected for priority consideration for testing rules under section 4(a) of the Toxic Substances Control Act (TSCA) and on other chemical substances and mixtures for which EPA requires health and safety information in fulfilling the purposes of TSCA.

(b) Section 15(3) of TSCA makes it unlawful for any person to fail or refuse to submit information required under this subpart. Section 16 provides that a violation of section 15 renders a person liable to the United States for a civil penalty and possible criminal prosecution. Under section 17, the district courts of the United States have jurisdiction to restrain any violation of section 15.

### § 716.3 Definitions.

The definitions in section 3 of TSCA apply to this subpart. In addition, the following definitions are provided for the purposes of this subpart:

*Byproduct* means a chemical substance produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance(s) or mixture(s).

*Co-product* means a chemical substance produced for a commercial purpose during the manufacture, processing, use, or disposal of another chemical substance(s) or mixture(s).

*Copy of study* means the written presentation of the purpose and methodology of a study and its results.

*EPA* means the United States Environmental Protection Agency.

*Health and safety study* or *study* means any study of any effect of a chemical substance or mixture on health or the environment or on both, including underlying data and epidemiological studies, studies of occupational exposure to a chemical substance or mixture, toxicological, clinical, and ecological or other studies of a chemical substance or mixture, and any test performed under TSCA.

(1) It is intended that the term *health and safety study* be interpreted broadly. Not only is information which arises as a result of a formal, disciplined study included, but other information relating to the effects of a chemical substance or mixture on health or the environment is also included. Any data that bear on the effects of a chemical substance on health or the environment would be included. Chemical identity is part of, or underlying data to, a health and safety study.

(2) Examples are:

(i) Long- and short-term tests of mutagenicity, carcinogenicity, or teratogenicity; data on behavioral disorders; dermatoxicity; pharmacological effects; mammalian absorption, distribution, metabolism, and excretion; cumulative, additive, and synergistic effects; and acute, subchronic, and chronic effects.

(ii) Tests for ecological or other environmental effects on invertebrates, fish, or other animals, and plants, including: Acute toxicity tests, chronic toxicity tests, critical life-stage tests, behavioral tests, algal growth tests, seed germination tests, plant growth or damage tests, microbial function tests, bioconcentration or bioaccumulation tests, and model ecosystem (microcosm) studies.

(iii) Assessments of human and environmental exposure, including workplace exposure, and impacts of a particular chemical substance or mixture on the environment, including surveys, tests, and studies of: Biological, photochemical, and chemical degradation; structure/activity relationships; air, water, and soil transport; biomagnification and bioconcentration; and chemical and physical properties, e.g., boiling point, vapor pressure, evaporation rates from soil and water, octanol/water partition coefficient, and water solubility.

(iv) Monitoring data, when they have been aggregated and analyzed to measure the exposure of humans or the environment to a chemical substance or mixture.

*Import* means to import for commercial purposes.

*Import for commercial purposes* means to import with the purpose of obtaining an immediate or eventual commercial advantage for the importer, and includes the importation of any amount of a chemical substance or mixture. If a chemical substance or mixture containing impurities is imported for commercial purposes, then those impurities are also imported for commercial purposes.

*Importer* means any person who imports a chemical substance, including a chemical substance as a part of a mixture or article, into the customs territory of the United States and includes the person primarily liable for the payment of any duties on the merchandise or an authorized agent acting on his behalf (as defined in 19 CFR 1.11). Importer also includes, as appropriate:

(1) The consignee.

(2) The importer of record.

(3) The actual owner, if an actual owner's declaration and superseding bond has been filed in accordance with 19 CFR 141.20.

(4) The transferee, if the right to draw merchandise in a bonded warehouse has been transferred in accordance with Subpart C of 19 CFR Part 144. For the purpose of this definition, the customs territory of the United States consists of the 50 States, Puerto Rico, and the District of Columbia.

*Impurity* means a chemical substance which is unintentionally present with another chemical substance.

*Listed mixture* means any mixture listed in § 716.120.

*Manufacture* means to manufacture for commercial purposes.

*Manufacture for commercial purposes* means: (1) To produce, with the purpose of obtaining an immediate or eventual commercial advantage for the manufacturer, and includes among other things such ''manufacture'' of any amount of a chemical substance or mixture:

(i) For commercial distribution, including for test marketing.

(ii) For use by the manufacturer, including use for product research and development, or as an intermediate.

(2) Manufacture for commercial purposes also applies to substances that are produced coincidentally during the manufacture, processing, use, or disposal of another substance or mixture, including byproducts and impurities. Such byproducts and impurities may, or may not, in themselves have commercial value. They are nonetheless produced for the purpose of obtaining a commercial advantage since they are part of the manufacture of a chemical product for a commercial purpose.

*Manufacturer* means a person who produces or manufactures a chemical substance. A person who extracts a component chemical substance from a previously existing chemical substance or a complex combination of substances is a manufacturer of that component chemical substance.

*Person* includes any individual, firm, company, corporation, joint-venture, partnership, sole proprietorship, association, or any other business entity, any State or political subdivision thereof, any municipality, any interstate body, and any department, agency, or instrumentality of the Federal government.

*Process* means to process for commercial purposes.

*Process for commercial purposes* means the preparation of a chemical substance or mixture, after its manufacture, for distribution in commerce with the purpose of obtaining an immediate or eventual commercial advantage for the processor. Processing of any amount of a chemical substance or mixture is included. If a chemical substance or mixture containing impurities is processed for commercial purposes, then those impurities are also processed for commercial purposes.

*Propose to manufacture, import, or process* means that a person has made a management decision to commit financial resources toward the manufacture, importation, or processing of a substance or mixture.

*Substance* means *chemical substance* as defined at section 3(2)(A) of TSCA, 15 U.S.C. 2602(2)(A).

*TSCA* means the Toxic Substances Control Act (15 U.S.C. 2601 *et seq.*).

### § 716.5 Persons who must report.

(a)(1) A person who, in the 10 years preceding the effective date that a substance or mixture is added to § 716.120, either had proposed to manufacture, import, or process, or had manufactured, imported, or processed the substance or listed mixture.

(2) A person who, at the effective date that a substance or mixture is added to § 716.120, proposes to manufacture, import, or process, or is manufacturing, importing, or processing the substance or listed mixture.

(3) A person who, after the effective date that a substance or mixture is added to § 716.120, proposes to manufacture, import, or process the substance or listed mixture.

(b) [Reserved]

### § 716.10 Studies to be reported.

(a) In general, health and safety studies, as defined in § 716.3, on any substance or listed mixture listed in § 716.120, that are unpublished are reportable, i.e., must be submitted or listed. However, this requirement has limitations according to the nature of the material studied, so that:

(1) All studies of substances and listed mixtures are reportable. However, in the case of physical and chemical properties, only those studies listed in § 716.50 must be submitted.

(2) Studies of mixtures known to contain substances or listed mixtures listed in § 716.120 are reportable except for studies of physical and chemical properties and the studies exempted at § 716.20(a)(6)(i) through (vi).

(3) Studies of substances or listed mixtures that a person who is reporting has manufactured, imported, or processed or proposed to manufacture,

import, or process only as impurities are not generally reportable under § 716.20(a)(9).

(4) Underlying data, such as medical or health records, individual files, lab notebooks, and daily monitoring records supporting studies do not have to be submitted initially. EPA may request underlying data later under § 716.40.

(b) [Reserved]

**§ 716.20 Studies not subject to the reporting requirements.**

(a) Excluding paragraph (a)(3) of this section, the following types of studies are exempt from the copy and list submission requirements of §§ 716.30 and 716.35.

(1) Studies which have been published in the scientific literature.

(2) Studies previously submitted to the EPA Office of Pollution Prevention and Toxics. These studies are limited to section 8(e) submissions, studies submitted during section 4 proceedings, studies submitted with premanufacture notices or significant new use notices, and studies submitted ''for your information'' (FYI submissions) in support of EPA's TSCA Existing Chemicals Program. Studies which have been initiated pursuant to a TSCA section 4(a) test rule, for which the person has submitted a letter of intent to conduct testing in accordance with the provisions of § 790.25 of Part 790 of this chapter, are exempt from the list submission requirements of § 716.35.

(3) Except for those studies described in paragraph (a)(2) of this section, studies previously submitted to any Federal agency with no claims of confidentiality are exempt only from the copy submission requirements of § 716.30, and must be listed in accordance with the provisions of § 716.35.

(4) Studies conducted or initiated by or for another person who is subject to, and who will report the studies under §§ 716.30 and 716.35.

(5) Studies of chemical substances which are not on the TSCA Chemical Substances Inventory. This exemption applies only to those substances within categories listed under § 716.120(c).

(6) The following types of studies when the subject of the study is a mixture known to contain a substance or listed mixture listed under § 716.120.

(i) Acute oral toxicity studies.

(ii) Acute dermal toxicity studies.

(iii) Acute inhalation toxicity studies.

(iv) Primary eye irritation studies.

(v) Primary dermal irritation studies.

(vi) Dermal sensitization studies.

(vii) Physical and chemical properties.

If the substance or listed mixture is an impurity, no reporting is required (see paragraph (a)(9) of this section).

(7) Analyzed aggregations of monitoring data based on monitoring data acquired more than 5 years preceding the date the substance or listed mixture was added to the list under § 716.120.

(8) Analyzed aggregations of monitoring data on mixtures known to contain one or more substances or listed mixtures listed in § 716.120, when the monitoring data are not analyzed to determine the exposure or concentration levels of the substances or listed mixture listed under § 716.120.

(9) Studies on a substance or listed mixture listed under § 716.120 that the person who is reporting has manufactured, imported, or processed or proposed to manufacture, import, or process only as an impurity. When reporting of such studies is to be required, that reporting will be separately proposed in the FEDERAL REGISTER.

(10) Studies of chemical substances or listed mixtures previously submitted by trade associations in accordance with the provisions of § 716.30.

(b) The following types of studies on substances or listed mixtures listed under § 716.120 are exempt from the copy and list submission requirements of §§ 716.30 and 716.35.

(1) For the listed ureaformaldehyde resins (CAS Nos. 9011–05–6 and 68611–64–3), studies on agronomic plant growth or damage which demonstrate only that the resins stimulate plant growth or cause plant damage when applied as a fertilizer.

(2) For the specified chemicals in § 716.120(d) under the category ''Siloxanes,'' acute oral, dermal, and inhalation toxicity studies and primary eye and dermal irritation studies.

(3) For the listed chemicals under § 716.120(d) in the category ''OSHA Chemicals in Need of Dermal Absorption Testing,'' studies on ecological effects.

(4) For the chemicals listed at § 716.120 with a special exemption referencing this paragraph, studies on mixtures containing the listed substance at levels below 1 percent of the mixture, except when a purpose of the study includes the investigation of the effects of the listed substance at levels below 1 percent.

[51 FR 32726, Sept. 15, 1986, as amended at 58 FR 47649, Sept. 10, 1993; 58 FR 68315, Dec. 27, 1993; 60 FR 34884, July 5, 1995]

### § 716.25 Adequate file search.

The scope of a person's responsibility to search records is limited to records where the required information is ordinarily kept, and to records kept by the person's individual employees whose assigned duty is to advise the person on the health and environmental effects of chemicals. Persons are not required to search any records retired prior to December 31, 1979 for information to comply with this subpart.

### § 716.30 Submission of copies of studies.

(a)(1) Except as provided in §§ 716.20 and 716.50, persons must send to EPA copies of any health and safety studies in their possession for the substances or listed mixtures listed in § 716.120. Persons are responsible for submitting copies on only the substances or listed mixtures which they: Have manufactured, imported, or processed or proposed to manufacture, import, or process (including as known byproducts) within the 10 years preceding the effective date for reporting on the substances or listed mixtures; manufacture, import, or process on the effective date for reporting on the substances or listed mixtures; and propose to manufacture, import, or process following the effective date for reporting on the substances or listed mixtures. Persons who list studies as ongoing or initiated under § 716.35(a) (1) and (2) must submit them when they are completed.

(2) [Reserved]

(b) Submissions under paragraph (a) of this section must be identified either on the face of the study or otherwise by the applicable chemical name and CAS number (if any) listed in § 716.120(a) (1) and (2), and must be accompanied by a cover letter containing the name, job title, address and telephone number of the submitting official, and the name and address of the manufacturing or processing establishment on whose behalf the submission is made. In the cover letter, submitters must identify any impurity or additive known to have been present in the substance or listed mixtures as studied unless its presence is specifically noted in the study itself. The cover letter accompanying a study submitted by a trade association must also state that the submission is to satisfy reporting requirements under this part.

(c) Copies of health and safety studies and the accompanying cover letters must be submitted, preferably by certified mail, to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATTN: 8(d) Health and Safety Reporting Rule (Notification/Reporting).

[51 FR 32726, Sept. 15, 1986, as amended at 52 FR 20084, May 29, 1987; 52 FR 44828, Nov. 20, 1987; 53 FR 12523, Apr. 15, 1988; 60 FR 34463, July 3, 1995]

### § 716.35 Submission of lists of studies.

(a) Except as provided in §§ 716.20 and 716.50, persons must send the lists described in paragraph (a) of this section to EPA for each of the substances or listed mixtures in § 716.120 which they are manufacturing, importing, or processing; or propose to manufacture, import, or process (including as known byproducts).

(1) *Ongoing studies.* As of the date a person becomes subject to this part, a list of ongoing health and safety studies being conducted by or initiated for them, noting for each entry: The beginning date of the study, the purpose of the study, the types of data to be collected, the anticipated date of completion, and the name and address of the laboratory conducting the study.

(2) *Initiated studies.* After the date a person becomes subject to this part, a list of studies initiated by or for them, noting for each entry: The beginning date of the study, the purpose of the study, the types of data to be collected, the anticipated date of completion, and the name and address of the laboratory conducting the study.

(3) *Studies which are known but without possession of copies.* As of the date a person becomes subject to this part, a list of unpublished health and safety studies known to them of which they do not have copies. The name and address of any person known to them to possess a copy of the unpublished study must accompany each entry on the list. For purposes of this section only, an unpublished study will be considered to be ''known to'' a person, if the study can be discovered by a file search in accordance with §716.25.

(4) *Studies previously sent to Federal agencies without confidentiality claims.* A list of unpublished studies which have been sent to a Federal Agency with no claims of confidentiality. The submission must for each study: Identify the study by title, state the name and address to whom the study was sent, and the month and year in which the study was submitted. Any study identified will be treated as if it were submitted under section 8(d) and will be available for public disclosure under section 14(b) of TSCA. Persons subject to this requirement may submit either a list of unpublished health and safety studies previously submitted to any Federal agency without claims of confidentiality in accordance with §716.35(a)(4), or copies of each such study in accordance with §716.30.

(b) Submission under paragraph (a) of this section must be identified either on the face of the study or otherwise by the applicable chemical name and CAS number (if any) listed in §716.120(a) (1) and (2), and must be accompanied by a cover letter containing the name, job title, address and telephone numbers of the submitting official, and the name and address of the manufacturing or processing establishment on whose behalf the submission is made.

(c) Lists of health and safety studies should be submitted, preferably by certified mail, to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATTN: 8(d) Health and Safety Reporting Rule (Notification Reporting).

[51 FR 32726, Sept. 15, 1986, as amended at 52 FR 20084, May 29, 1987; 52 FR 44828, Nov. 20, 1987; 53 FR 12523, Apr. 15, 1988; 53 FR 46746, Nov. 18, 1988; 60 FR 34463, July 3, 1995]

### §716.40 EPA requests for submission of further information.

EPA may, by letter, request a person to submit or make available for review the following information after the initial reporting under §§716.30 and 716.35. If the requested submissions are not made, EPA may subpoena them under section 11 of TSCA, 15 U.S.C. 2610.

(a) Submission of underlying data of the kind described in §716.10(a)(4) by persons who submit copies of studies under §716.30 or list studies under §716.35(a)(1) or §716.35(a)(2).

(b) Submission of preliminary reports of ongoing studies by persons who list the studies under §716.35(a)(1) or §716.35(a)(2).

(c) Submission of copies of studies by persons listed under §716.35(a)(3) as possessing them.

### §716.45 How to report on substances and mixtures.

Section 716.120 lists substances and mixtures, in order by Chemical Abstract Service Registry Number and by alphabetical order. Studies of listed substances and listed mixtures shall be reported as follows:

(a) When a substance is individually listed under §716.120(a), studies of the substance and studies of mixtures known to contain the substance must be reported as studies of that substance.

(b) When two or more substances are listed as a mixture under §716.120(b), studies of the listed mixture and studies of any mixture known to contain the listed mixture must be reported as studies of the listed mixture.

(c) Studies of the following preparations of a substance must be reported as studies of the substance itself, not

as studies of mixtures known to contain the substance.

(1) The substance in aqueous solution.

(2) The substance containing a small amount of an additive, such as a stabilizer, emulsifier, or other chemical added for purposes of maintaining the integrity or physical form of the substance.

(3) The substance at any grade of purity.

### § 716.50 Reporting physical and chemical properties.

Studies of physical and chemical properties must be reported under this subpart if performed for the purpose of determining the environmental or biological fate of a substance, and only if they investigated one or more of the following properties:

(a) Water solubility.

(b) Adsorption/desorption on particulate surfaces, e.g., soil.

(c) Vapor pressure.

(d) Octanol/water partition coefficient.

(e) Density/relative density (specific gravity).

(f) Particle size distribution for insoluble solids.

(g) Dissociation constant.

(h) Degradation by photochemical mechanisms—aquatic and atmospheric.

(i) Degradation by chemical mechanisms—hydrolytic, reductive, and oxidative.

(j) Degradation by biological mechanisms—aerobic and anaerobic.

### § 716.55 Confidentiality claims.

(a)(1) Section 14(b) of TSCA provides that EPA may not withhold from disclosure, on the grounds that they are confidential business information, health and safety studies of any substance or mixture that has been offered for commercial distribution (including for test marketing purposes and for use in research and development), any substance or mixture for which testinq is required under TSCA section 4, or any substance for which notice is required under TSCA section 5, except to the extent that disclosure of data from such studies would reveal—

(i) Processes used in the manufacturing, importing, or processing of the substance or mixture, or

(ii) The portion of a mixture comprised by any of the substances in the mixture.

(2) Any respondent who wishes to assert a claim that part of a study should be withheld from disclosure because disclosure would reveal a confidential process or quantitative mixture composition should briefly state the basis of the claim, e.g., by saying ''reveals confidential mixture proportion data,'' and clearly identify the material subject to the claim.

(3) Any respondent may assert a confidentiality claim for company name or address, financial statistics, and product codes used by a company. This information will not be subject to the disclosure requirements of section 14(b) of TSCA.

(4) Information other than company name or address, financial statistics, and product codes used by a company, which is contained in a study, the disclosure of which would clearly be an unwarranted invasion of personal privacy (such as individual medical records), will be considered confidential by EPA as provided in Title 5, United States Code, section 552(b)(6).

(b) To assert a claim of confidentiality for data contained in a submitted document, the respondent must submit two copies of the document:

(1) One copy must be complete. In that copy, the respondent must indicate what data, if any, are claimed as confidential by bracketing or underlining the specific information. Each page containing data claimed as confidential must also contain a brief statement for the basis of the claim as well as a label such as ''confidential,'' ''proprietary,'' or ''trade secret.''

(2) The second copy must be complete, except that all information claimed as confidential in the first copy must be deleted. The second copy will be immediately subject to public disclosure.

(3) Failure to furnish a second copy when information is claimed as confidential in the first copy will be considered a presumptive waiver of the claim of confidentiality. EPA will notify the respondent by certified mail

that a finding of a presumptive waiver of the claim of confidentiality has been made. The respondent will be given 30 days from the date of his or her receipt of this notification to submit the required second copy. If the respondent fails to submit the second copy within the 30 days, EPA will place the first copy in the public file.

(c) If no claim of confidentiality accompanies a document at the time it is submitted to EPA, the document will be placed in an open file available to the public without further notice to the respondent.

**§ 716.60 Reporting schedule.**

(a) *General requirements.* Except as provided in paragraphs (b) and (c) of this section, submissions under §§ 716.30 and 716.35 must be postmarked on or before 60 days after the effective date of the listing of a substance or listed mixture in § 716.120 or within 60 days of proposing to manufacture, import, or process a substance or listed mixture if first done after the effective date of the substance's or listed mixture's listing in § 716.120.

(b)(1) *Submission of lists of initiated studies.* Persons subject to the listing requirements of § 716.35(a)(2) must inform EPA of the initiated study within 30 days of its initiation.

(2) *Submission of copies of completed studies.* Persons must submit copies of studies listed as ongoing or initiated under § 716.35(a)(1) and (2) within 30 days of completing the study.

(c) *Requests for extensions of time.* Respondents who cannot meet a deadline under this section may apply for a reasonable extension of time. Requests for extensions must be in writing and addressed to the Director, Office of Pollution Prevention and Toxics (7401), U.S. Environmental Protection Agency, Room E–539, 401 M St., SW., Washington, DC, 20460, ATTN: Section 8(d) extension. Extension requests must be postmarked on or before 40 days after the effective date of the listing of a substance or mixture in § 716.120. The Director of EPA's Office of Pollution Prevention and Toxics will grant or deny extension requests.

[51 FR 32726, Sept. 15, 1986, as amended at 60 FR 34464, July 3, 1995]

**§ 716.65 Reporting period.**

(a) The reporting period on a substance or listed mixture will terminate no later than: 10 years after the effective date on which a substance or listed mixture is added to § 716.120; or on the removal of the substance or listed mixture from § 716.120. The Assistant Administrator for Prevention, Pesticides and Toxic Substances has the authority to remove a substance or listed mixture from § 716.120.

(b) The EPA Office of Pollution Prevention and Toxics (OPPT) will conduct a biennial review of all of the chemical substances and mixtures listed in § 716.120, and request from other EPA offices and certain Federal agencies, all reasonable justifications for retaining each substance or mixture on, or removing each substance or mixture from, the § 716.120 list. Following each such review, the Assistant Administrator for Prevention, Pesticides and Toxic Substances will remove any substance or mixture for which no reasonable justification has been received to retain such substance or mixture on the § 716.120 list. The Assistant Administrator may remove a substance or listed mixture from § 716.120 by publishing, without notice and comment, a final rule to that effect in the FEDERAL REGISTER. The rule shall not be effective any earlier than 90 days after its publication. Persons who believe that EPA should not remove a substance or listed mixture from § 716.120 may notify EPA and provide reasons for retaining the substance or listed mixture. If a reasonable justification for retaining a substance or listed mixture on the § 716.120 list is received, EPA will withdraw the substance from the final rule before its effective date.

(c) Notwithstanding the termination by the sunset provision in (a) above, removing a substance or listed mixture from § 716.120 also terminates the applicability of § 716.5(a)(3) to that substance or listed mixture so that persons first proposing to manufacture, import, or process the substance or listed mixture after the effective date of the removal have no reporting obligation under section 8(d) with respect to that substance or listed mixture. The removal also terminates the continuing obligation under § 716.35(a)(2) of

persons previously subject to the rule under § 716.5(a)(2) or (3) to notify EPA of any initiation of studies on the removed substance or listed mixture that occur after the effective date of the removal. Only one reporting requirement would remain in effect. Persons who have been subject to the rule under § 716.5(a)(2) or (3) and who have submitted to EPA lists of ongoing or initiated studies under § 716.35(a)(1) or (2) must notify EPA of the completed study and submit the study regardless of the study's completion date.

## Subpart B—Specific Chemical Listings

### § 716.105 Additions of substances and mixtures to which this subpart applies.

The requirements of this subpart will be extended periodically to cover additional substances and mixtures. Two procedures will be used to add substances and mixtures.

(a) Except as provided in paragraph (b) of this section, substances and mixtures will be added to § 716.120 after publication in the FEDERAL REGISTER of a notice of proposed amendment to this subpart. There will be at least a 30-day public comment period on the notice. After consideration of the comments, EPA will amend § 716.120 by final rule to add the substances and listed mixtures.

(b) Except as provided in paragraph (c) of this section, chemical substances, mixtures, and categories of chemical substances that have been added to the TSCA section 4(e) Priority List by the Interagency Testing Committee, established under section 4 of TSCA, will be added to § 716.120 but only to the extent that the total number of designated and recommended substances, mixtures and categories of chemical substances has not exceeded 50 in any 1 year. The addition of such chemical substances, mixtures, and categories of chemical substances to § 716.120 will be effective 30 days after publication of a notice to that effect in the FEDERAL REGISTER.

(c) Prior to the effective date of an amendment under paragraph (b) of this section, the Assistant Administrator for Prevention, Pesticides and Toxic Substances may for good cause withdraw a chemical substance, mixture, or category of chemical substances from § 716.120. Any information submitted showing why a chemical substance, mixture, or category of chemical substances should be withdrawn from the amendment must be received by EPA within 14 days after the date of publication of the notice under paragraph (b) of this section. If a chemical substance, mixture, or category of chemical substances is withdrawn, a FEDERAL REGISTER notice announcing this decision will be published no later than the effective date of the amendment under paragraph (b) of this section. Persons who wish to submit information that shows why a chemical should be withdrawn must address their comments, in writing to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATTN: 8(d) Auto-ITC.

[51 FR 32726, Sept. 15, 1986, as amended at 60 FR 34464, July 3, 1995]

### § 716.120 Substances and listed mixtures to which this subpart applies.

Substances listed in this section appear in order by Chemical Abstract Service Registry Number. Chemical mixtures and categories are listed separately and by alphabetical order. Chemical substances listed within a category are provided only as examples of the category, and are not included on the list of substances. When a chemical substance in the substance or category list had been listed previously by a trivial (or common) name, it appears first, followed by the Chemical Abstract Service (CAS) name appearing in the TSCA Chemical Substance Inventory.

(a) *List of substances.* The following chemical substances are subject to all the provisions of part 716. Manufacturers, importers, and processors of a listed substance are subject to the reporting requirements of subpart A for that substance.

| CAS No. | Substance | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| 62–74–8 | Acetic acid, fluoro-, sodium salt | | 03/07/86 | 03/07/96 |
| 67–63–0 | 2-Propanol | | 12/15/86 | 12/15/96 |
| 67–66–3 | Methane, trichloro- | | 06/01/87 | 06/01/97 |
| 67–72–1 | Ethane, hexachloro- | | 04/29/83 | 01/13/86 |
| 68–12–2 | Dimethyl formamide-Formamide, N,N-dimethyl- | | 4/13/89 | 12/19/95 |
| 71–55–6 | 1,1,1-Trichloroethane—Ethane, 1,1,1-trichloro- | | 10/04/82 | 10/04/92 |
| 74–83–9 | Methane, bromo- | | 06/01/87 | 06/01/97 |
| 74–87–3 | Chloromethane—Methane, chloro- | | 10/04/82 | 10/04/92 |
| 74–95–3 | Methane, dibromo- | | 6/1/87 | 12/19/95 |
| 74–97–5 | Methane, bromochloro- | | 6/1/87 | 12/19/95 |
| 75–00–3 | Ethane, chloro- | | 06/01/87 | 06/01/97 |
| 75–02–5 | Vinyl fluoride—Ethene, fluoro- | | 10/04/82 | 10/04/92 |
| 75–04–7 | Ethanamine | | 6/1/87 | 12/19/95 |
| 75–05–8 | Acetonitrile | | 10/04/82 | 10/04/92 |
| 75–09–2 | Methylene chloride—Methane, dichloro- | | 10/04/82 | 10/04/92 |
| 75–12–7 | Formamide | | 04/29/83 | 04/29/93 |
| 75–21–8 | Oxirane | | 10/04/82 | 10/04/92 |
| 75–25–2 | Methane, tribromo- | | 06/01/87 | 06/01/97 |
| 75–27–4 | Methane, bromodichloro- | | 6/1/87 | 12/19/95 |
| 75–29–6 | Propane, 2-chloro- | | 6/1/87 | 12/19/95 |
| 75–34–3 | Ethane, 1,1-dichloro- | | 06/01/87 | 06/01/97 |
| 75–37–6 | 1,1-Difluoroethane-Ethane, 1,1-difluoro- | | 4/13/89 | 12/19/95 |
| 75–38–7 | Vinylidene fluoride—Ethene, 1,1-difluoro- | | 10/04/82 | 10/04/92 |
| 75–43–4 | Dichloromonofluoromethane-Methane, dichlorofluoro- | | 4/13/89 | 12/19/95 |
| 75–45–6 | Chlorodifluoromethane—Methane, chlorodifluoro- | | 4/13/89 | 4/13/99 |
| 75–52–5 | Nitromethane-Methane, nitro- | | 4/13/89 | 12/19/95 |
| 75–56–9 | Oxirane, methyl- | | 10/04/82 | 10/04/92 |
| 75–68–3 | 1-Chloro-1,1-difluoroethane-Ethane, 1-chloro-1,1-difluoro. | | 4/13/89 | 12/19/95 |
| 75–86–5 | Propanenitrile, 2-hydroxy-2-methyl- | | 3/7/86 | 12/19/95 |
| 75–88–7 | Ethane, 2-chloro- 1,1,1-trifluoro | | 10/15/90 | 11/09/93 |
| 76–13–1 | 1,1,2-Trichloro-1,2,2-trifluoroethane-Ethane, 1,1,2-trichloro-1,2,2-trifluoro-1. | | 4/13/89 | 12/19/95 |
| 77–47–4 | Hexachlorocyclopentadiene—1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-. | | 10/04/82 | 10/04/92 |
| 77–58–7 | Dibutyltin dilaurate—Stannane, dibutylbis[(1-oxododecyl)oxy]-. | | 01/03/83 | 01/03/93 |
| 78–59–1 | Isophorone—2-Cyclohexen-1-one, 3,5,5-trimethyl- | | 10/04/82 | 10/04/92 |
| 78–83–1 | 1-Propanol, 2-methyl- | | 03/07/86 | 03/07/96 |
| 78–87–5 | 1,2-Dichloropropane—Propane, 1,2-dichloro- | | 10/04/82 | 10/04/92 |
| 78–88–6 | 1-Propene, 2,3-dichloro- | | 6/1/87 | 12/19/95 |
| 78–93–3 | Methyl ethyl ketone—2-Butanone | | 10/04/82 | 10/04/92 |
| 78–97–7 | Propanenitrile, 2-hydroxy- | | 6/1/87 | 12/19/95 |
| 78–99–9 | Propane, 1,1-dichloro- | | 3/7/86 | 12/19/95 |
| 79–00–5 | Ethane, 1,1,2-trichloro- | | 06/01/87 | 06/01/97 |
| 79–06–1 | Acrylamide—2-Propenamide | | 10/04/82 | 10/04/92 |
| 79–24–3 | Nitroethane-Ethane, nitro- | | 4/13/89 | 12/19/95 |
| 79–94–7 | Tetrabromobisphenol A—Phenol, 4,4′-(methylethylidene)bis[2,6-dibromo-. | | 06/20/85 | 06/20/95 |
| 80–05–7 | Bisphenol A—Phenol, 4,4′-(1-methylethylidene)bis- | | 06/28/84 | 06/28/94 |
| 80–15–9 | Hydroperoxide, 1-methyl-1-phenylethyl | | 3/7/86 | 12/19/95 |
| 80–62–6 | Methyl methacrylate—2-Propenoic acid, 2-methyl-, methyl ester. | | 4/13/89 | 4/13/99 |
| 84–65–1 | Anthraquinone—9,10-Anthracenedione | | 12/28/84 | 11/09/93 |
| 85–22–3 | Pentabromoethylbenzene—Benzene, pentabromoethyl-. | | 12/28/84 | 12/28/94 |
| 85–68–7 | Benzyl butyl phthalate—1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester. | | 04/29/83 | 04/29/93 |
| 86–74–8 | 9*H*-Carbazole | | 03/07/86 | 03/07/96 |
| 87–68–3 | Hexachloro-1,3-butadiene—1,3-Butadiene, 1,1,2,3,4,4-hexachloro-. | | 10/04/82 | 10/04/92 |
| 88–04–0 | p-Chloro-m-xylenol-Phenol, 4-chloro-3,5-dimethyl- | | l4/13/89 | 12/19/95 |
| 90–30–2 | N-Phenyl-1-naphthylamine | | 9/30/91 | 12/19/95 |
| 90–42–6 | [1,1′-Bicyclohexyl]-2-one | | 06/01/87 | 11/09/93 |
| 91–08–7 | Benzene, 1,3-diisocyanato-2-methyl- | | 6/1/87 | 12/19/95 |
| 91–20–3 | Naphthalene | | 06/01/87 | 06/01/97 |
| 91–58–7 | Naphthalene, 2-chloro- | | 10/04/82 | 10/04/92 |
| 92–52–4 | 1,1′-Biphenyl | | 04/29/83 | 04/29/93 |
| 92–69–3 | [1,1'-Biphenyl]-4-ol | | 6/1/87 | 12/19/95 |
| 92–84–2 | 10*H*-Phenothiazine | | 06/01/87 | 06/01/97 |
| 92–87–5 | [1,1′-Biphenyl]-4,4′-diamine | | 06/01/87 | 06/01/97 |
| 95–14–7 | 1,2,3-Benzotriazole-1H-Benzotriazole | | 4/13/89 | 12/19/95 |
| 95–47–6 | *o*-Xylene—Benzene, 1,2-dimethyl- | | 10/04/82 | 10/04/92 |

| CAS No. | Substance | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| 95–48–7 | *o*-Cresol—Phenol, 2-methyl- | | 10/04/82 | 10/04/92 |
| 95–49–8 | 2/Chlorotoluene—Benzene, 1-chloro-2-methyl- | | 04/29/83 | 04/29/93 |
| 95–53–4 | Benzenamine, 2-methyl- | | 3/7/86 | 12/19/95 |
| 95–63–6 | 1,2,4-Trimethylbenzene—Benzene, 1,2,4-trimethyl- | | 04/29/83 | 04/29/93 |
| 96–18–4 | Propane, 1,2,3-trichloro- | | 06/01/87 | 06/01/97 |
| 96–29–7 | 2-Butanone, oxime | | 12/15/86 | 12/19/95 |
| 96–37–7 | Methylcyclopentane—Cyclopentane, methyl- | | 06/20/85 | 11/09/93 |
| 97–18–7 | Phenol, 2,2'-thiobis[4,6-dichloro- | | 6/1/87 | 12/19/95 |
| 97–23–4 | Phenol, 2,2'-methylenebis[4-chloro- | | 6/1/87 | 12/19/95 |
| 97–88–1 | Butyl methacrylate-2-Propenoic acid, 2-methyl-,butyl ester. | | 4/13/89 | 12/19/95 |
| 98–01–1 | 2-Furancarboxaldehyde | | 06/01/87 | 06/01/97 |
| 98–06–6 | Benzene, (1,1-dimethylethyl)- | | 6/1/87 | 12/19/95 |
| 98–09–9 | Benzenesulfonyl chloride | | 3/7/86 | 12/19/95 |
| 98–51–1 | *p-tert*-Butyltoluene—Benzene, 1-(1,1-dimethylethyl)-4-methyl-. | | 06/25/86 | 06/25/96 |
| 98–56–6 | 4-Chlorobenzotrifluoride—Benzene, 1-chloro-4-(trifluoromethyl)-. | | 04/29/83 | 04/29/93 |
| 98–73–7 | p-tert-Butylbenzoic acid-Benzoic acid, 4-(1,1-dimethylethyl)-. | | 6/25/86 | 12/19/95 |
| 98–82–8 | Cumene—Benzene, (1-methylethyl)- | | 12/28/84 | 12/28/94 |
| 98–83–9 | Benzene, (1-methylethenyl)- | | 06/01/87 | 11/09/93 |
| 98–95–3 | Nitrobenzene—Benzene, nitro- | | 10/04/82 | 10/04/92 |
| 100–02–7 | *p*-Nitrophenol—Phenol, 4-nitro- | | 4/13/89 | 4/13/99 |
| 100–40–3 | 4-Vinylcyclohexene | | 1/11/90 | 11/09/93 |
| 100–41–4 | Benzene, ethyl- | | 06/19/87 | 06/19/97 |
| 100–48–1 | 4-Pyridinecarbonitrile | | 06/01/87 | 06/01/87 |
| 100–54–9 | 3-Pyridinecarbonitrile | | 06/01/87 | 12/29/88 |
| 100–70–9 | 2-Pyridinecarbonitrile | | 06/01/87 | 11/09/93 |
| 101–68–8 | Benzene, 1,1′-methylenebis[4-isocyanato- | | 06/01/87 | 06/01/97 |
| 101–77–9 | Benzenamine, 4,4′-methylenebis- | | 10/04/82 | 10/04/92 |
| 101–84–8 | Diphenyl oxide—Benzene, 1,1′-oxybis- | | 4/13/89 | 4/13/99 |
| 102–71–6 | Triethanolamine-Ethanol, 2,2',2''-nitrilotris- | | 4/13/89 | 12/19/95 |
| 104–49–4 | Benzene, 1,4-diisocyanato- | | 06/01/87 | 11/09/93 |
| 104–51–8 | Benzene, butyl- | | 6/1/87 | 12/19/95 |
| 104–76–7 | 1-Hexanol, 2-ethyl- | | 6/1/87 | 12/19/95 |
| 105–60–2 | 2*H*-Azepin-2-one, hexahydro- | | 06/01/87 | 06/01/97 |
| 106–42–3 | *p*-Xylene—Benzene, 1,4-dimethyl- | | 10/04/82 | 10/04/92 |
| 106–43–4 | Benzene, 1-chloro-4-methyl- | | 6/1/87 | 12/19/95 |
| 106–44–5 | *p*-Cresol—Phenol, 4-methyl- | | 10/04/82 | 10/04/92 |
| 106–49–0 | Benzenamine, 4-methyl- | | 03/07/86 | 03/07/96 |
| 106–50–3 | *p*-Phenylenediamine—1,4-Benzenediamine | | 10/04/82 | 10/04/92 |
| 106–51–4 | Quinone—2,5-Cyclohexadiene-1,4-dione | | 10/04/82 | 10/04/92 |
| 106–88–7 | Oxirane, ethyl- | | 10/04/82 | 10/04/92 |
| 106–89–8 | Oxirane, (chloromethyl)- | | 10/04/82 | 10/04/92 |
| 107–06–2 | Ethane, 1,2-dichloro- | | 06/01/87 | 06/01/97 |
| 107–10–8 | 1-Propanamine | | 3/7/86 | 12/19/95 |
| 107–19–7 | 2-Propyn-1-ol | | 3/7/86 | 12/19/95 |
| 107–98–2 | 1-Methoxy-2-propanol—2-Propanol, 1-methoxy- | | 4/13/89 | 4/13/99 |
| 108–05–4 | Vinyl acetate—Acetic acid ethenyl ester | | 02/10/86 | 02/10/96 |
| 108–10–1 | Methyl isobutyl ketone—2-Pentanone, 4-methyl- | | 10/04/82 | 10/04/92 |
| 108–31–6 | Maleic anhydride—2,5-Furandione | | 09/10/84 | 09/10/94 |
| 108–38–3 | *m*-Xylene—Benzene, 1,3-dimethyl- | | 10/04/82 | 10/04/92 |
| 108–39–4 | *m*-Cresol—Phenol, 3-methyl- | | 10/04/82 | 10/04/92 |
| 108–60–1 | Propane, 2,2'-oxybis[1-chloro- | | 6/1/87 | 12/19/95 |
| 108–67–8 | 1,3,5-Trimethylbenezene—Benzene, 1,3,5-trimethyl- | | 02/13/84 | 02/13/94 |
| 108–86–1 | Benzene, bromo- | | 6/1/87 | 12/19/95 |
| 108–88–3 | Toluene—Benzene, methyl- | | 10/04/82 | 10/04/92 |
| 108–89–4 | 4-Methylpyridine—Pyridine, 4-methyl- | | 09/10/84 | 09/10/94 |
| 108–94–1 | Cyclohexanone | | 10/04/82 | 10/04/92 |
| 108–95–2 | Phenol | | 06/01/87 | 06/01/97 |
| 108–95–5 | Thiophenol | | 1/26/94 | 12/19/95 |
| 108–98–5 | Benzenethiol | | 03/07/86 | 03/07/96 |
| 108–99–6 | 3-Methylpyridine—Pyridine, 3-methyl- | | 09/10/84 | 09/10/94 |
| 109–06–8 | 2-Methylpyridine—Pyridine, 2-methyl- | | 09/10/84 | 09/10/94 |
| 109–77–3 | Propanedinitrile | | 3/7/86 | 12/19/95 |
| 109–87–5 | Methane, Dimethoxy- | | 6/1/87 | 12/19/95 |
| 109–89–7 | Ethanamine, *N*-ethyl- | | 06/01/87 | 06/01/97 |
| 110–75–8 | Ethene, (2-chloroethoxy)- | | 3/7/86 | 12/19/95 |
| 110–82–7 | Cyclohexane | | 12/19/85 | 12/19/95 |
| 110–86–1 | Pyridine | | 10/04/82 | 10/04/92 |
| 111–21–7 | Ethylene bisoxyethylene diacetate—Ethanol, 2,2']-[1,2-ethanediylbis(oxy)]bis-, diacetate. | | 01/13/84 | 12/29/88 |

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|---|---|---|---|---|
| 111–40–0 | Diethylenetriamine—1,2-Ethanediamine, *N*-(2-aminoethyl)-. | | 04/29/83 | 04/29/93 |
| 111–42–2 | Diethanolamine—Ethanol, 2,2′-iminobis- | | 4/13/89 | 4/13/99 |
| 111–69–3 | Hexanedinitrile | | 6/1/87 | 12/19/95 |
| 111–76–2 | 2-Butoxyethanol—Ethanol, 2-butoxy- | | 4/13/89 | 4/13/99 |
| 111–77–3 | Diethylene glycol monomethyl ether-Ethanol, 2-(2-methoxyethoxy)-. | | 4/13/89 | 12/19/95 |
| 111–90–0 | Diethylene glycol monoethyl ether-Ethanol, 2-(2-ethoxyethoxy)-. | | 4/13/89 | 12/19/95 |
| 111–91–1 | Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro- | | 3/7/86 | 12/19/95 |
| 111–92–2 | 1-Butanamine, N-butyl- | | 6/1/87 | 12/19/95 |
| 112–35–6 | Triethyleneglycol monomethyl ether—Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-. | | 06/20/85 | 06/20/95 |
| 112–50–5 | Triethyleneglycol monoethyl ether—Ethanol, 2-[2-(2-ethoxyethoxy)ethoxy]-. | | 06/20/85 | 06/20/95 |
| 112–90–3 | Oleylamine—9-Octadecen-1-amine, (*Z*)- | | 01/13/84 | 01/13/94 |
| 115–28–6 | Chlorendic acid—Bicyclo[2.2.1] hept-5-ene-2,3-dicarboxylic acid, 1,4,5,6,7,7-hexachloro-. | | 04/29/83 | 01/13/86 |
| 115–96–8 | Ethanol, 2-chloro-, phosphate (3:1) | | 12/16/88 | 11/09/93 |
| 118–79–6 | 2,4,6-Tribromophenol | | 1/11/90 | 1/11/00 |
| 120–20–7 | Anthracene | | 06/01/87 | 06/01/97 |
| 120–32–1 | 2-Benzyl-4-chlorophenol-Phenol, 4-chloro-2-chlorophenol(phenyl methyl)-. | | 4/13/89 | 12/19/95 |
| 121–44–8 | Ethanamine, *N,N*-diethyl- | | 01/13/84 | 01/13/94 |
| 121–47–1 | Benzenesulfonic acid, 3-amino- | | 06/01/87 | 12/29/88 |
| 122–09–8 | Benzeneethanamine, alpha,alpha-dimethyl- | | 3/7/86 | 12/19/95 |
| 122–66–7 | Hydrazine, 1,2-diphenyl- | | 06/01/87 | 06/01/97 |
| 122–99–6 | 2-Phenoxyethanol—Ethanol, 2-phenoxy- | | 07/01/83 | 07/01/93 |
| 123–31–9 | Hydroquinone—1,4-Benzenediol | | 10/04/84 | 10/04/94 |
| 123–61–5 | Benzene, 1,3-diisocyanato- | | 06/01/87 | 11/09/93 |
| 123–72–8 | Butanal | | 12/16/88 | 12/19/95 |
| 124–16–3 | 1-Butoxyethoxy-2-propanol-2-Propanol, 1-(2-butoxyethoxy)-. | | 4/13/89 | 12/19/95 |
| 124–17–4 | 2-(2-Butoxyethoxy)ethyl acetate—Ethanol, 2-(2-butoxyethoxy)-, acetate. | | 01/13/82 | 01/13/92 |
| 124–48–1 | Methane, dibromochloro- | | 06/01/87 | 06/01/97 |
| 126–73–8 | Phosphoric acid, tributyl ester | | 06/18/86 | 06/18/96 |
| 126–99–8 | Chloroprene—1,3-Butadiene, 2-chloro- | | 12/28/84 | 12/28/94 |
| 127–18–4 | Ethene, tetrachloro- | | 06/01/87 | 06/01/97 |
| 128–39–2 | Phenol, 2,6-bis(1,1-dimethylethyl)- | | 12/19/85 | 11/09/93 |
| 128–86–9 | 2,6-Anthracenedisulfonic acid, 4,8-diamino-9,10-dihydro-1,5-dihydroxy-9,10-dioxo-. | | 12/21/87 | 11/09/93 |
| 129–00–0 | Pyrene | | 06/01/87 | 06/01/97 |
| 131–17–9 | Diallyl phthalate-1,2-Benzenedicarboxylic acid, di-2-propenyl ester. | | 4/13/89 | 12/19/95 |
| 135–98–8 | Benzene, (1-methylpropyl)- | | 6/1/87 | 12/19/95 |
| 137–20–2 | Soldium *N*-methyl-*N*-oleoyltaurine—Ethanesulfonic acid, 2-[methyl (1-oxo-9-octadecenyl)amino]-, sodium salt, (*Z*)-. | | 12/28/84 | 12/28/94 |
| 137–26–8 | Thioperoxydicarbonic diamide, tetramethyl- | | 6/1/87 | 12/19/95 |
| 139–25–3 | Benzene, 1,1 [1]-methylenebis[4-isocyanato-3-methyl- | | 06/01/87 | 11/09/93 |
| 140–08–9 | Tris(2-chloroethyl)phosphite—Ethanol, 2-chloro-, phosphite (3:1). | | 04/29/83 | 01/13/86 |
| 140–66–9 | 4-(1,1,3,3-Tetramethylbutyl) phenol—Phenol, 4-(1,1,3,3-tetramethylbutyl)-. | | 01/30/83 | 12/29/88 |
| 140–88–5 | Ethyl acrylate—2-Propenoic acid, ethyl ester | | 4/13/89 | 4/13/99 |
| 141–79–7 | Mesityl oxide—3-Penten-2-one, 4-methyl- | | 10/04/82 | 10/04/92 |
| 142–28–9 | Propane, 1,3,-dichloro- | | 3/7/86 | 12/19/95 |
| 142–84–7 | 1-Propanamine, *N*-propyl- | | 03/07/86 | 12/5/90 |
| 143–22–6 | Triethyleneglycol monobutyl ether—Ethanol, 2-[-2-(2-butoxyethoxy)ethoxy]-. | | 06/20/85 | 06/20/95 |
| 143–33–9 | Sodium cyanide | | 10/29/90 | 12/19/95 |
| 149–30–4 | Mercaptobenzothiazole—2(3*H*-Benzothiazolethione | | 12/28/84 | 12/28/94 |
| 149–57–5 | 2-Ethylhexanoic acid—Hexanoic acid, 2-ethyl- | | 06/28/84 | 06/28/94 |
| 306–83–2 | Ethane, 2,2-dichloro-1,1,1-trifluoro | | 10/15/90 | 11/09/93 |
| 328–84–7 | 3,4-Dichlorobenzotrifluoride—Benzene, 1,2-dichloro-4-(trifluoromethyl)-. | | 05/08/85 | 11/09/93 |
| 354–33–6 | Ethane, pentafluoro | | 10/15/90 | 11/09/93 |
| 357–57–3 | Strychnidin-10-one, 2,3-dimethoxy- | | 3/7/86 | 12/19/95 |
| 428–59–1 | Oxirane, trifluoro(trifluoromethyl)- | | 10/04/82 | 10/04/92 |
| 472–41–3 | Phenol, 4-(3,4-dihydro-2,2,4-trimethyl-2*H*-1-benzopyran-4-yl)-. | | 06/01/87 | 12/29/88 |
| 506–96–7 | Acetyl bromide | | 6/1/87 | 12/19/95 |

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|---|---|---|---|---|
| 526–73–8 | 1,2,3-Trimethylbenzene—Benzene, 1,2,3-trimethyl- | | 02/13/84 | 11/09/93 |
| 530–50–7 | Hydrazine, 1,1-diphenyl- | | 6/1/87 | 12/19/95 |
| 534–07–6 | 2-Propanone, 1,3-dichloro- | | 6/1/87 | 12/19/95 |
| 540–54–5 | Propane, 1-chloro- | | 6/1/87 | 12/19/95 |
| 540–84–1 | Pentane, 2,2,4-trimethyl- | | 6/1/87 | 12/19/95 |
| 542–75–6 | 1-Propene, 1,3-dichloro- | | 06/01/87 | 06/01/97 |
| 556–67–2 | Octamethylcyclotetrasiloxane—Cyclotetrasiloxane, octamethyl-. | | 12/28/84 | 12/28/94 |
| 563–54–2 | 1-Propene, 1,2-dichloro- | | 03/07/86 | 12/29/88 |
| 563–58–6 | 1-Propene, 1,1-dichloro- | | 03/07/86 | 12/29/88 |
| 580–51–8 | [1,1′-Biphenyl]-3-ol | | 06/01/87 | 11/09/93 |
| 584–84–9 | Benzene, 2,4-diisocyanato-1-methyl- | | 06/01/87 | 06/01/97 |
| 591–08–2 | Acetamide, N-(aminothioxomethyl)- | | 3/7/86 | 12/19/95 |
| 594–20–7 | Propane, 2,2-dichloro- | | 3/7/86 | 12/19/95 |
| 598–21–0 | Acetyl bromide, bromo- | | 6/1/87 | 12/19/95 |
| 598–31–2 | 2-Propanone, 1-bromo- | | 3/7/86 | 12/19/95 |
| 616–23–9 | 1-Propanol, 2,3-dichloro- | | 3/7/86 | 12/19/95 |
| 620–14–4 | *m*-Ethyltoluene—Benzene, 1-ethyl-3-methyl- | | 04/29/83 | 04/29/93 |
| 622–96–8 | *p*-Ethyltoluene—Benzene, 1-ethyl-4-methyl- | | 04/29/83 | 04/29/93 |
| 630–20–6 | Ethane, 1,1,1,2-tetrachloro- | | 6/1/87 | 12/19/95 |
| 632–79–1 | Tetrabromophthalic anhydride | | 1/11/90 | 12/19/95 |
| 637–92–3 | Ethyl-tert-butyl ether | § 716.20(b)(3) applies | 12/28/94 | 12/28/04 |
| 646–06–0 | 1,3-Dioxolane | | 01/03/83 | 01/03/93 |
| 677–21–4 | Trifluoromethylethene—1-Propene, 3,3,3-trifluoro- | | 04/29/83 | 01/13/86 |
| 685–91–6 | Acetamide, *N,N*-diethyl- | | 06/01/87 | 11/09/93 |
| 692–42–2 | Arsine, diethyl- | | 3/7/86 | 12/19/95 |
| 696–28–6 | Arsonous dichloride, phenyl- | | 3/7/86 | 12/19/95 |
| 757–58–4 | Tetraphosphoric acid, hexaethyl ester | | 3/7/86 | 12/19/95 |
| 811–97–2 | Ethane, 1,1,2-tetrafluoro- | | 10/15/90 | 11/09/93 |
| 812–03–3 | Propane, 1,1,1,2-tetrachloro- | | 6/1/87 | 12/19/95 |
| 822–06–0 | Hexane, 1,6-diisocyanato- | | 6/1/87 | 12/19/95 |
| 828–00–2 | 1,3-Dioxan-4-ol, 2,6-dimethyl-, acetate | | 6/1/87 | 12/19/95 |
| 930–22–3 | Oxirane, ethenyl- | | 10/04/82 | 10/04/92 |
| 939–97–9 | *p-tert*-Butylbenzaldehyde—Benzaldehyde, 4-(1,1-dimethylethyl)-. | | 06/25/86 | 11/09/93 |
| 994–05–8 | Tert-amyl methyl ether | § 716.20(b)(3) applies | 12/28/94 | 12/28/04 |
| 1000–82–4 | Methylolurea—Urea, (hydroxymethyl)- | | 07/01/83 | 07/01/93 |
| 1070–78–6 | Propane, 1,1,1,3-tetrachloro- | | 6/1/87 | 12/19/95 |
| 1163–19–5 | Decabromodiphenyl ether | | 1/11/90 | 1/11/00 |
| 1185–81–5 | Dibutyltin bis(lauryl mercaptide)—Stannane, dibutyl-bis(dodecylthio). | | 01/03/83 | 01/03/93 |
| 1208–52–2 | Benzenamine, 2-[(4-aminophenyl)methyl]- | | 06/01/87 | 11/09/93 |
| 1300–71–6 | Phenol, dimethyl- | | 6/1/87 | 12/19/95 |
| 1309–64–4 | Antimony trioxide | | 10/04/82 | 10/04/92 |
| 1321–38–6 | Benzene, diisocyanatomethyl-(unspecified isomer) | | 06/01/87 | 11/09/93 |
| 1321–64–8 | Naphthalene, pentachloro- | | 10/04/82 | 10/04/92 |
| 1321–65–9 | Naphthalene, trichloro- | | 10/04/82 | 10/04/92 |
| 1331–47–1 | [1,1′-Biphenyl]-4,4′-diamino, dichloro- | | 06/01/87 | 11/09/93 |
| 1333–41–1 | Methyl pyridine—Pyridine, methyl- | | 09/10/84 | 12/29/88 |
| 1335–87–1 | Naphthalene, hexachloro- | | 10/04/82 | 10/04/92 |
| 1335–88–2 | Naphthalene, tetrachloro- | | 10/04/82 | 10/04/92 |
| 1345–04–6 | Antimony trisulfide | | 10/04/82 | 10/04/92 |
| 1464–53–5 | 2,2′-Bioxirane | | 10/04/82 | 10/04/92 |
| 1634–04–4 | Propane, 2-methoxy-2-methyl- | | 12/15/86 | 12/15/96 |
| 1649–08–7 | Ethane, 1,2-dichloro-1,1-difluoro | | 10/15/90 | 12/19/95 |
| 1717–00–6 | Ethane, 1,1-dichloro-1-fluoro- | | 10/15/90 | 11/09/93 |
| 1825–30–5 | Naphthalene, 1,5-dichloro- | | 10/04/82 | 10/04/92 |
| 1825–31–6 | Naphthalene, 1,4-dichloro- | | 10/04/82 | 10/04/92 |
| 1888–71–7 | 1-Propene, 1,1,2,3,3,3-hexachloro- | | 3/7/87 | 12/19/95 |
| 2050–69–3 | Naphthalene, 1,2-dichloro- | | 10/04/82 | 10/04/92 |
| 2050–72–8 | Naphthalene, 1,6-dichloro- | | 10/04/82 | 10/04/92 |
| 2050–73–9 | Naphthalene, 1,7-dichloro- | | 10/04/82 | 10/04/92 |
| 2050–74–0 | Naphthalene, 1,8-dichloro- | | 10/04/82 | 10/04/92 |
| 2050–75–1 | Naphthalene, 2,3-dichloro- | | 10/04/82 | 10/04/92 |
| 2065–70–5 | Naphthalene, 2,6-dichloro- | | 10/04/82 | 10/04/92 |
| 2198–75–6 | Naphthalene, 1,3-dichloro- | | 10/04/82 | 10/04/92 |
| 2198–77–8 | Naphthalene, 2,7-dichloro- | | 10/04/82 | 10/04/92 |
| 2234–13–1 | Naphthalene, octachloro- | | 10/04/82 | 10/04/92 |
| 2536–05–2 | Benzene, 1,1′-methylenebis[2-isocyanato- | | 06/01/87 | 11/09/93 |
| 2556–36–7 | Cyclohexane, 1,4-diisocyanato | | 06/01/87 | 11/09/93 |
| 2763–96–4 | 3(2H)-Isoxazolone, 5-(aminomethyl)- | | 3/7/86 | 2/19/95 |
| 2778–42–9 | Benzene, 1,3-bis(1-isocyanato-1-methylethyl- | | 06/01/87 | 11/09/93 |
| 2861–02–1 | 2,6-Anthracenedisulfonic acid, 4,8-diamino-9,10-dihydro-1,5-dihydroxy-9,10-dioxo-, disodium salt | | 12/21/87 | 12/19/95 |

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|---|---|---|---|---|
| 2873–89–0 | Ethane, 2-chloro-1,1,1,2-tetrafluoro- | | 10/15/90 | 11/09/93 |
| 3083–25–8 | Oxirane, (2,2,2-trichloroethyl)- | | 10/04/82 | 10/04/92 |
| 3173–72–6 | Naphthalene, 1,5,-diisocyanato- | | 6/1/87 | 12/19/95 |
| 3194–55–6 | Hexabromocyclododecane | | 1/11/90 | 12/19/95 |
| 3288–58–2 | Phosphorodithioic acid, O,O-diethyl-S-methyl ester | | 3/7/86 | 12/19/95 |
| 3296–90–0 | 1,3-Propanediol, 2,2-bis(bromomethyl)- | | 6/1/87 | 12/19/95 |
| 3319–31–1 | Tris(2-ethylhexyl) trimellitate—1,2,4-Benzenetricarboxylic acid, tris(2-ethylhexyl)ester. | | 01/03/83 | 01/03/93 |
| 3322–93–8 | 1,2-Dibromo-4-(1,2-dibromoethyl) cyclohexane—Cyclohexane, 1,2-dibromo-4-(1,2-dibromoethyl)-. | | 06/28/84 | 12/29/88 |
| 3389–71–7 | 1,2,3,4,7,7-Hexachloronorbornadiene—Bicyclo[2.2.1]hepta-2,5-diene, 1,2,3,4,7,7-hexachloro-. | | 01/13/84 | 01/13/94 |
| 3618–72–2 | Acetamide, *N*-[5-[bis[2-(acetyloxy)ethyl]amino]-2-[(2-bromo-4,6-dinitrophenyl)azo]-4- methoxyphenyl]-. | | 06/19/87 | 11/09/93 |
| 3618-73–3 | Acetamide, *N*-[5-[bis[2-(acetyloxy)ethyl]amino]-2-[(2-chloro-4,6-dinitrophenyl)azo]-4-methoxyphenyl]-. | | 06/19/87 | 11/09/93 |
| 3956–55–6 | Acetamide, *N*-[5-[bis[2-(acetyloxy)ethyl]-amino]-2-[(2-bromo-4,6-dinitrophenyl)azo]-4-ethoxyphenyl. | | 12/15/86 | 11/09/93 |
| 4098–71–9 | Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-. | | 06/01/87 | 06/01/97 |
| 4170–30–3 | 2-Butenal | | 3/7/86 | 12/19/95 |
| 5124–30–1 | Cyclohexane, 1,1′-methylenebis[4-isocyanato- | | 06/01/87 | 06/01/97 |
| 5131–66–8 | 1-Butoxy-2-propanol-2-Propanol, 1-butoxy- | | 4/13/89 | 12/19/95 |
| 5344–82–1 | Thiourea, (2-chlorophenyl)- | | 3/7/86 | 12/19/95 |
| 5873–54–1 | Benzene, 1-isocyanato-2-[4-isocyanatophenyl)methyl]- | | 06/01/87 | 11/09/93 |
| 6145–73–9 | 1-Propanol, 2-chloro-, phosphate (3:1) | | 12/16/88 | 11/09/93 |
| 6247–34–3 | 2-Anthracenesulfonic acid, 4-[[4-(acetylamino)phenyl]amino]-1-amino-9,10-dihydro-9,10-dioxo-. | | 12/21/87 | 11/09/93 |
| 6422–86–2 | Bis(2-ethylhexyl) terephthalate—1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester. | | 01/03/83 | 01/03/93 |
| 6424–85–7 | 2-Anthracenesulfonic acid, 4-[[4-(acetylamino)phenyl]amino]- 1-amino-9,10-dihydro-9,10-dioxo-, monosodium salt. | | 12/21/87 | 12/19/95 |
| 7320–37–8 | Oxirane, tetradecyl- | | 10/04/82 | 10/04/92 |
| 7440–28–0 | Thallium | | 06/01/87 | 06/01/97 |
| 7440–36–0 | Antimony | | 10/04/82 | 10/04/92 |
| 7440–48–4 | Cobalt | | 06/01/87 | 06/01/97 |
| 7723–14–0 | White phosphorus | | 04/12/93 | 04/12/03 |
| 9011–05–6 | Urea, polymer with formaldehyde | § 716.20(b)(1) applies | 06/03/85 | 06/03/95 |
| 9016–87–9 | Isocyanic acid, polymethylenepolyphenylene ester | | 6/1/87 | 12/19/95 |
| 10347–54–3 | Cyclohexane, 1,4-bis(isocyanatomethyl)- | | 06/01/87 | 06/01/87 |
| 10436–39–2 | 1-Propene, 1,1,2,3-tetrachloro- | | 6/1/87 | 12/19/95 |
| 12001–85–3 | Naphthenic acids, zinc salts | | 6/1/87 | 12/19/95 |
| 12185–10–3 | White phosphorus | | 01/26/94 | 01/26/04 |
| 12217–79–7 | 9,10-Anthracenedione, 1,5-diamino-chloro-4,8-dihydroxy-. | | 12/21/87 | 11/09/93 |
| 13414–54–5 | Methallyl 2-nitrophenyl ether—Benzene, 1-[(2-methyl-2-propenyl)oxy]-2-nitro-. | | 02/13/84 | 11/09/93 |
| 13414–55–6 | 7-Nitro-2,2-dimethyl-2,3-dihydro-benzofuran—Benzofuran, 2,3-dihydro-2,2-dimethyl-7-nitro-. | | 02/13/84 | 02/13/94 |
| 13674–84–5 | 2-Propanol, 1-chloro-, phosphate (3:1) | | 12/16/88 | 11/09/93 |
| 13674–87–8 | 2-Propanol, 1,3-dichloro-, phosphate (3:1) | | 12/16/88 | 12/19/95 |
| 15646–96–5 | Hexane, 1,6-diisocyanato-2,4,4-trimethyl- | | 06/01/87 | 11/09/93 |
| 16938–22–0 | Hexane, 1,6-diisocyanato-2,2,4-trimethyl- | | 06/01/87 | 11/09/93 |
| 17418–58–5 | 9,10-Anthracenedione, 1-amino-4-hydroxy-2-phenoxy- | | 12/21/87 | 12/19/95 |
| 18495–30–2 | Propane, 1,1,2,3-tetrachloro- | | 06/01/87 | 12/29/88 |
| 18633–25–5 | Oxirane, tridecyl- | | 10/04/82 | 10/04/92 |
| 19660–16–3 | 2-Propenoic acid, 2,3-dibromopropyl ester | | 06/01/87 | 12/29/88 |
| 21429–43–6 | Acetamide, *N*-[5-[bis[2-(acetyloxy)ethyl]amino]-2-[(2-chloro-4,6-dinitrophenyl)azo]-4-methoxyphenyl]-. | | 06/19/87 | 11/09/93 |
| 25168–06–3 | Isopropyl phenol—Phenol, (1-methylethyl)- | | 04/13/89 | 11/09/93 |
| 25168–21-2 | Dibutyltin bis (isooctyl maleate)—2-Butenoic acid, 4,4′-[(dibutylstannylene)bis(oxy)]bis-[4-oxo-, diisoctyl ester, (*Z,Z*)-. | | 01/03/83 | 01/03/93 |
| 25498–49–1 | Tripropylene glycol monomethyl ether-Propanol, [2-(2-methoxy methylethoxy)methylethoxy]-. | | 4/13/89 | 12/19/95 |
| 25550–14–5 | Benzene, ethylmethyl- (mixed isomers) | | 04/29/83 | 04/29/93 |
| 25550–98–5 | Phosphorous acid, diisodecyl phenyl ester | | 12/19/85 | 12/19/95 |
| 25551–13–7 | Trimethylbenzene—Benzene, trimethyl- (mixed isomers). | | 02/13/84 | 02/13/94 |
| 25640–78–2 | Isopropyl biphenyl—1,1′-Biphenyl, (1-methylethyl)- | | 06/28/84 | 11/09/93 |

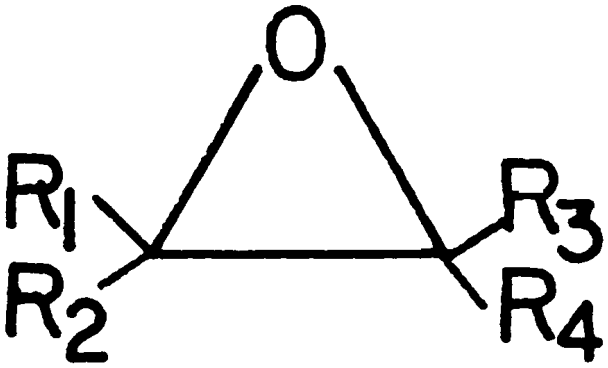
| CAS No. | Substance | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| 25852–70–4 | Monobutyltin tris (isooctyl) mercapto-acetate—Acetic acid, 2,2′,2″-[(butylstannylidyne)tris(thio)]tris-, triisooctyl ester. | | 01/03/83 | 01/03/93 |
| 26447–40–5 | Benzene, 1,1′-methylenebis[isocyanato- | | 06/01/87 | 06/01/97 |
| 26471–62–5 | Benzene, 1,3-diisocyanatomethyl- | | 06/01/87 | 06/01/97 |
| 26530–20–1 | 3(2*H*)-Isothiazolone, 2-octyl- | | 06/01/87 | 12/29/88 |
| 26952–23–8 | 1-Propene, dichloro- | | 6/1/87 | 12/19/95 |
| 29385–43–1 | Tolyl triazole-1H-Benzotriazole, methyl- | | 4/13/89 | 12/19/95 |
| 32052–51–0 | Isocyanic acid, trimethylcyclohexyl ester | | 06/01/87 | 11/09/93 |
| 32534–81–9 | Pentabromodiphenyl ether | | 1/11/90 | 1/11/00 |
| 32536–52–0 | Octabromodiphenyl ether | | 1/11/90 | 1/11/00 |
| 32588–76–4 | Ethylene Bis-(tetrabromophthalimide) | | 1/11/90 | 12/19/95 |
| 33125–86–9 | Phosphoric acid, 1,2-ethanediyl tetrakis (2-chloroethyl) ester. | | 12/16/88 | 11/09/93 |
| 34590–94–8 | Dipropylene glycol monomethyl ether—Propanol, (2-methoxymethylethoxy)-. | | 4/13/89 | 4/13/99 |
| 37853–59–1 | 1,2-Bis(tribromophenoxy) ethane | | 1/11/90 | 1/11/00 |
| 38661–72–2 | Cyclohexane, 1,3-bis(isocyanatomethyl)- | | 06/01/87 | 11/09/93 |
| 41291–34–3 | Ethylene(5,6-dibromonorbornane-2,3-dicarboximide) | | 1/11/90 | 12/19/95 |
| 52907–07–0 | Ethylene bis(5,6-dibromonorbornane-2,3-dicarboximide. | | 1/26/94 | 12/19/95 |
| 57137–10–7 | Tribrominated polystyrene | | 1/11/90 | 12/19/95 |
| 61262–53–1 | Ethylene bis(pentabromophenoxide) | | 1/11/90 | 12/19/95 |
| 61788–33–8 | Terphenyl, chlorinated | | 10/04/82 | 12/29/88 |
| 61789–36–4 | Calcium naphthenate—Naphthenic acids, calcium salts. | | 07/01/83 | 07/01/93 |
| 61789–51–3 | Cobalt naphthenate—Naphthenic acids, cobalt salts | | 07/01/83 | 07/01/93 |
| 61790–14–5 | Lead naphthenate—Naphthenic acids, lead salts | | 07/01/83 | 07/01/93 |
| 64742–95–6 | Solvent naphtha (petroleum), light arom | | 2/13/84 | 2/13/94 |
| 68081–84–5 | Oxirane, mono[($C_{10-16}$-alkyloxy) methyl] derivatives | | 10/04/82 | 10/04/92 |
| 68122–86–1 | Imidazolium compounds, 4,5-dihydro-1-methyl-2-nortallow alkyl-1-(2-tallow amidoethyl), methyl sulfates. | | 6/20/88 | 12/19/95 |
| 68153-35–5 | Ethanaminium, 2-amino-*N*-(2-aminoethyl-*N*-(2-hydroxyethyl)-*N*-methyl-, *N,N′*-ditallow acyl derivatives, methyl sulfates (salts). | | 06/20/88 | 11/09/93 |
| 68298–46–4 | 7-Amino-2,2-dimethyl-2,3-dihydrobenzofuran—7-Benzofuranamine,2,3-dihydro-2,2-dimethyl-. | | 02/13/84 | 12/29/88 |
| 68389–88–8 | Poly(oxy-1,2-ethanediyl), α-[2-[bis(2-aminoethyl)methylammonio]ethyl]-ω-hydroxy-, *N,N′*-dicoco acyl derivatives, methyl sulfates (salts). | | 06/20/88 | 11/09/93 |
| 68389–89–9 | Poly(oxy-1,2-ethanediyl), α-[2-[bis(2-aminoethyl)methylammonio]ethyl]-ω-hydroxy-,*N,N′*-bis(hydrogenated tallow acyl) derivatives, methyl sulfates (salts). | | 06/20/88 | 11/09/93 |
| 68410–69–5 | Poly(oxy-1,2-ethanediyl), alpha-[2-[bis(2-aminoethyl) methylammonio]ethyl]-w-hydroxy,- N,N′-ditallow acyl derivatives, methyl sulfates (salts). | | 6/20/88 | 12/19/95 |
| 68413–04–7 | Poly[oxy(methyl-1,2-ethanediyl)], α-[2-[bis(2-aminoethyl)methylammonio] methylethyl]-ω-hydroxy-, *N,N′*-ditallow acyl derivatives, methyl sulfates (salts). | | 06/20/88 | 11/09/93 |
| 68554–06–3 | Poly(oxy-1,2-ethanediyl), α-[3-[bis(2-aminoethyl)methylammonio]-2-hydroxy-propyl]-ω-hydroxy-, *N*-coco acyl derivatives, methyl sulfates (salts). | | 06/20/88 | 11/09/93 |
| 68611–64–3 | Urea, reaction products with formaldehyde | § 716.20(b)(1) applies | 06/03/85 | 11/09/93 |
| 69009–90–1 | Diisopropyl biphenyl—1,1′-Biphenyl, bis(1-methylethyl)-. | | 06/28/84 | 12/29/88 |
| 70914–09–9 | Poly(oxy-1,2-ethanediyl), α-[2-[bis(2-aminoethyl)methylammonio]ethyl]-ω-hydroxy-, *N,N′*-di[$C_{14-18}$ acyl] derivatives, methyl sulfates (salts). | | 06/20/88 | 06/20/88 |
| 75790–84–0 | Benzene, 2-isocyanato-4-[(4-isocyanatophenyl)methyl]-1-methyl-. | | 06/01/87 | 11/09/93 |
| 75790–87–3 | Benzene, 1-isocyanato-2-[(4-isocyanato-phenyl)thio]- | | 06/01/87 | 11/09/93 |

(b) [Reserved]

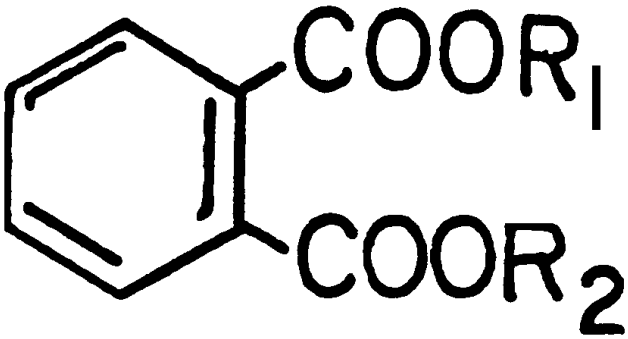
(c) *By category*. The following categories are listed in alphabetical order. Chemical substances listed within a category are provided only as examples of the category. All chemical substances within a category are subject to all the provisions of Part 716 for the

time period from the effective date of the category until the sunset date. Manufacturers, importers, and processors of any chemical substance within a category are subject to the reporting requirements of Subpart A for that category, except when the sunset date for the particular substance predates the sunset date for the category, or when the exemption of § 716.20(b) of this Part applies.

| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| Alkyl epoxides—including all noncyclic aliphatic hydrocarbons with one or more epoxy functional groups. | | | 10/04/82 | 12/29/88 |

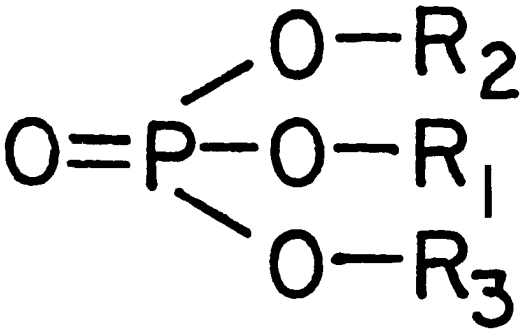



| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| $R_1$=$R_2$=$R_3$=$R_4$=H or alkyl. Groups $R_1$–$R_4$ may contain one or more epoxide functions. | | | | |
| Oxirane, decyl- | 2855–19–8 | | 10/04/82 | 12/29/88 |
| Oxirane, 2,2-dimethyl- | 558–30–5 | | 10/04/82 | 12/29/88 |
| Oxirane, 2,3-dimethyl- | 3266–23–7 | | 10/04/82 | 12/29/88 |
| Oxirane, dodecyl | 3234–28–4 | | 10/04/82 | 12/29/88 |
| Oxirane, heptadecyl- | 67860–04–2 | | 10/04/82 | 12/29/88 |
| Oxirane, octyl- | 2404–44–6 | | 10/04/82 | 12/29/88 |
| Oxirane, pentadecyl- | 22092–38–2 | | 10/04/82 | 12/29/88 |
| Alkyl phthalates—all alkyl esters of 1,2-benzenedicarboxylic acid (*ortho*-phthalic acid). | | | 10/04/82 | 10/04/92 |




| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| $R_1$=$R_2$=alkyl. | | | | |
| 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester | 117–81–7 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, bis(1-methylheptyl) ester | 131–15–7 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, bis(2-methylpropyl) ester | 84–69–5 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, 2-butoxy-2-oxyethyl butyl ester | 85–70–1 | | 10/04/82 | 01/13/86 |
| 1,2-Benzenedicarboxylic acid, butyl cyclohexyl ester | 84–64–0 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, butyl 2-ethylhexyl ester | 85–69–8 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, butyl octyl ester | 84–78–6 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, decyl hexyl ester | 25724–58–7 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, decyl octyl ester | 119–07–3 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, dibutyl ester | 84–74–2 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, dicyclohexyl ester | 84–61–7 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, diethyl ester | 84–66–2 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, dihexyl ester | 84–75–3 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, diisodecyl ester | 26761–40–0 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, diisononyl ester | 28553–12–0 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, diisooctyl ester | 27554–26–3 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, demethyl ester | 131–11–3 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, dinonyl ester | 84–76–4 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, dioctyl ester | 117–84–0 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, diundecyl ester | 119–06–2 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, isodecyl tridecyl ester | 3648–20–2 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, 2-ethylhexyl-8-methylnonyl ester | 89–13–4 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, hexyl isodecyl ester | 61702–81–6 | | 10/04/82 | 10/04/92 |
| 1,2-Benzenedicarboxylic acid, isodecyl tridecyl ester | 61886–60–0 | | 10/04/82 | 10/04/92 |
| Alkyltin compounds. | | | 01/03/83 | 12/29/88 |
| Dibutyltin *S,S'*-bis(isooctyl mercaptoacetate)—Acetic acid, 2,2'-[(dibutylstannylene)bis(thio)]bis-, diisooctyl ester | 25168–24–5 | | 01/03/83 | 12/29/88 |
| Dibutyltin *S,S'*-bis(isooctyl mercaptoacetate)—Acetic acid, 2,2'-[(dimethylstannylene)bis(thio)]bis-, diisooctyl ester | 26636–01–1 | | 01/03/83 | 12/29/88 |
| Mono methyltin tris(isooctylmercaptoacetate) Acetic acid, 2,2',2''-[(methylstannylidyne)tris(thio)]tris-triisoacetyl ester | 54849–38–6 | | 01/03/83 | 12/29/88 |
| Aniline and chloro-, bromo-, and/or nitroanilines. | | | 10/04/82 | 10/04/92 |
| Benzenamine | 62–53–3 | | 10/04/82 | 10/04/92 |
| Benzenamine, 4-bromo- | 106–40–1 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2-bromo-6-chloro-4-nitro- | 99–29–6 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2-bromo-,4,6-dinitro- | 1817–73–8 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2-chloro- | 95–51–2 | | 10/04/82 | 10/04/92 |
| Benzenamine, 3-chloro- | 108–42–9 | | 10/04/82 | 10/04/92 |
| Benzenamine, 4-chloro- | 106–47–8 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2-chloro-4,6-dinitro- | 3531–19–9 | | 10/04/82 | 10/04/92 |
| Benzenamine, 4-chloro-2,6-dinitro- | 5388–62–5 | | 10/04/82 | 10/04/92 |
| Benzenamine, 3-chloro-, hydrochloride | 141–85–5 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2-chloro-4-nitro- | 121-87-9 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2-chloro-5-nitro- | 6283–25–6 | | 10/04/82 | 10/04/92 |
| Benzenamine, 4-chloro-2-nitro- | 89–63–4 | | 10/04/82 | 10/04/92 |
| Benzenamine, 4-chloro-3-nitro- | 635–22–3 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2,6-dibromo-4-nitro- | 827–94–1 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2,3-dichloro- | 608–27–5 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2,4-dichloro- | 554–00–7 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2,5-dichloro- | 95–82–9 | | 10/04/82 | 10/04/92 |
| Benzenamine, 3,4-dichloro- | 95–76–1 | | 10/04/82 | 10/04/92 |

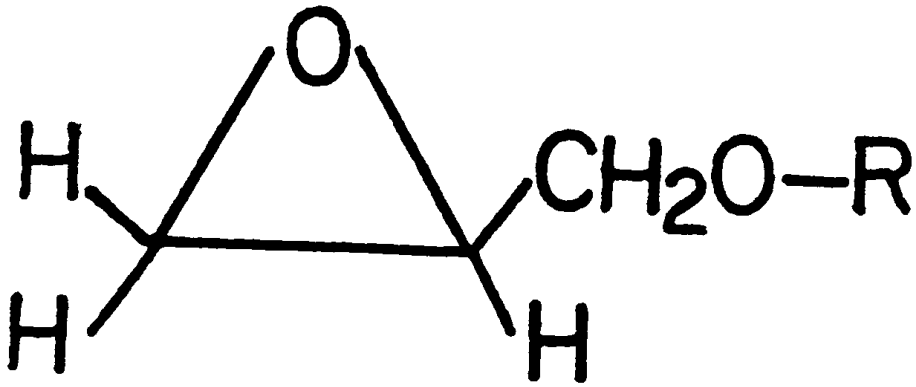
| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| Benzenamine, 3,5-dichloro- | 626–43–7 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2,6-dichloro-4-nitro- | 99–30–9 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2,4-dinitro- | 97–02–9 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2-nitro- | 88–74–4 | | 10/04/82 | 10/04/92 |
| Benzenamine, 3-nitro- | 99–09–2 | | 10/04/82 | 10/04/92 |
| Benzenamine, 4-nitro- | 100–01–6 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2,4,6-tribromo- | 147–82–0 | | 10/04/82 | 10/04/92 |
| Benzenamine, 2,4,6-trichloro- | 634–93–5 | | 10/04/82 | 10/04/92 |
| Aryl phosphates—phosphate esters of phenol or of alkyl-substituted phenols. Triaryl and mixed alkyl and aryl esters are included but trialkyl esters are excluded | | | 10/04/82 | 10/04/92 |



| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| $R_1$=phenyl, either unsubstituted or substituted with one or more alkyl or aralkyl groups $R_2$=$R_3$ alkyl; or phenyl, either unsubstituted or substituted with one or more alkyl or aralkyl groups | | | | |
| Phenol, dimethyl-, phosphate (3:1) | 25155–23–1 | | 10/04/82 | 10/04/92 |
| Phenol, 4-(1,1-dimethylethyl)-, phosphate (3:1) | 78–33–1 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, dibutyl phenyl ester | 2528–36–1 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, diisodecyl phenyl ester | 51363–64–5 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, (1,1-dimethylethyl) phenyl diphenyl ester | 56803–37–3 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, 2-ethylhexyl diphenyl ester | 1241–94–7 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, isodecyl diphenyl ester | 29761–21–5 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, (1-methylethyl)phenyl diphenyl ester | 28108–99–8 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, methylphenyl diphenyl ester | 25444–49–5 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, (1-methyl-l-phenylethyl)phenyl diphenyl ester | 34364–42–6 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, triphenyl ester | 115–86–6 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, tris(methylphenyl) ester | 1330–78–5 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, tris(2-methylphenyl) ester | 78–30–8 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, tris(3-methylphenyl) ester | 563–04–2 | | 10/04/82 | 10/04/92 |
| Phosphoric acid, tris(4-methylphenyl) ester | 78–32–0 | | 10/04/82 | 10/04/92 |
| Asbestos—asbestiform varieties of chrysolite (serpentine); crocidolite (riebeckite); amosite (cummingtonite—grunerite); anthophyllite; tremolite; and actinolite. | | | 10/04/82 | 10/04/92 |
| Asbestos | 1332–21–4 | | 10/04/82 | 10/04/92 |
| Asbestiform minerals | 12001–29–5 | | 10/04/82 | 10/04/92 |
| Asbestiform minerals | 17068–78–9 | | 10/04/82 | 10/04/92 |
| Asbestiform minerals | 12172–73–5 | | 10/04/82 | 10/04/92 |
| Bisazobiphenyl dyes derived from benzidine and its congeners, *ortho*-toluidine (dimethylbenzidine) and dianisidine (dimethoxybenzidine). | | | 10/04/82 | 10/04/92 |
| Benoic acid, 2-[[2-amino-6-[[4′-[(-carboxy-4-hydroxphenyl) azo[-3,3′-dimethoxy[1,1′-biphenyl]-4-yl]azo]-5-hydroxy-7-sulfo-1-naphthalenylazo]-5-nitro-, trisodium salt | 6739–62–4 | | 10/04/82 | 10/04/92 |
| Benzoic acid, 5-[[4′-[2-amino-8-hydroxy-6-sulfo-1-naphthalenyl) azo] [1,1′-biphenyl]-4-yl]-azo]-2-hydroxy-, disodium salt | 2429–84–7 | | 10/04/82 | 10/04/92 |
| Benzoic acid, 5-[[4′-[7-amino-1-hydroxy-3-sulfo-2-naphthalenyl)azo] [1,1′-biphenyl]-4-yl]azo]-2-hydroxy-, disodium salt | 2429–82–5 | | 10/04/82 | 10/04/92 |

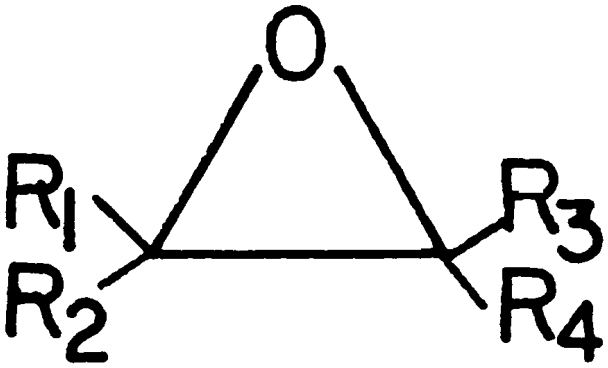
| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| Benzoic acid, 5-[[4′-[(1-amino-4-sulfo-2-naphthalenyl)azo] [1,1′-biphenyl]-4-yl]azo]-2-hydroxy-, disodium salt | 2429–79–0 | | 10/04/82 | 10/04/92 |
| Benzoic acid, 5-[[4′-[[2,6-diamino-3-[[8-hydroxy-3,6-disulfo-7-[(4-sulfo-1-naphthalenyl)azo]-2-naphthalenyl]azo]-5-methylphenyl]azo] [1,1′-biphenyl]-4-yl]azo]-2-hydroxy-, tetrasodium salt | 2429–81–4 | | 10/04/82 | 10/04/92 |
| Benzoic acid, 5-[[4′-[(2,6-diamino-3-methyl-5-sulfophenyl)azo]-3,3′-dimethyl[1,1′-biphenyl]-4-yl]azo]-2-hydroxy-, disodium salt | 6637–88–3 | | 10/04/82 | 10/04/92 |
| Benzoic acid, 5-[[4′-[[2,6-diamino-3-methyl-5-[(4-sulfophenyl)azo]phenyl]azo][1,1′-biphenyl]-4-yl]azo]-2-hydroxy-, disodium salt | 2586–58–5 | | 10/04/82 | 10/04/92 |
| Benzoic acid, 5-[[4′-[[2,6-diamino-3-methyl-5-[(4-sulfophenyl)azo]phenyl]azo]1,1′-biphenyl]-4-yl]azo]-2-hydroxy-3-methly-, disodium salt | 6360–54–9 | | 10/04/82 | 10/04/92 |
| Benzoic acid, 5-[[4′-[[2,4-dihydroxy-3-[(4-sulfophenyl)azo]phenyl]azo] [1,1′-biphenyl]-4-yl]azo]-2-hydroxy-, disodium salt | 2893–80–3 | | 10/04/82 | 10/04/92 |
| Benzoic acid, 3,3′-[(3,7-disulfo-1,5-naphthalene-diyl)bis[azo(6-hydroxy-3,1-phenylene)azo[6(or 7)-sulfo-4,1-naphthalenediyl]azo[1,1′-biphenyl]-4,4′-diylazo]]bis[6-hydroxy-, hexasodium salt | 8014–91–3 | | 10/04/82 | 10/04/92 |
| [1,1′-Biphenyl]-4,1′-bis diazonium), 3,3′-dimethoxy- | 20282–70–6 | | 10/04/82 | 10/04/92 |
| Butanamide, *N,N′*-(3,3′-dimethyl [1,1′-biphenyl]-4,4′-diyl)bis[3-oxo- | 91–96–3 | | 10/04/82 | 10/04/92 |
| C.I. Direct Blue 218 | 10401–50–0 | | 10/04/82 | 10/04/92 |
| Cuprate(2-), [5-[[4′-[[2,6-dihydroxy-3-[(2-hydroxy-5-sulfophenyl)azo]phenyl]azo][1,1′-biphenyl]-4-yl]azo]-2-hydroxybenzoato(4-)]-, disodium | 16071–86–6 | | 10/04/82 | 10/04/92 |
| Cuprate(3-), [μ-[7-[[3,3′-dihydroxy-4′-[[1-hydroxy-6-(phenylamino)-3-sulfo-2-naphthalenyl]azo] [1,1′-biphenyl]-4-yl]azo]-8-hydroxy-1,6-naphthalenedisulfonato(7-)]]di-, tri-sodium | 6656–03–7 | | 10/04/82 | 10/04/92 |
| Cuprate(4-), [μ-[[6,6′-[3,3′-dihydroxy[1,1′-biphenyl]-4-4′-diyl)bis(azo)]bis[4-amino-5-hydroxy-1,3-naphthalendisulfonato]](8-)]]di-, tetrasodium | 16143–79–6 | | 10/04/82 | 10/04/92 |
| 2-Naphthalenecarboxamide, *N,N′*-(3,3′-dimethoxy[1,1′-biphenyl]-4,4′-diyl)bis[3-hydroxy- | 91–92–9 | | 10/04/82 | 10/04/92 |
| 1,3-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-6-[[4′-[(2hydroxy-1-naphthalenyl)azo]-3,3′-dimethoxy[1,1′-biphenyl]-4-yl]azo]-, disodium salt | 2586–57–4 | | 10/04/82 | 10/04/92 |
| 1,3-Naphthalenedisulfonic acid, 6,6′-[(3,3′-dimethoxy[1,1′-biphenyl]-4,4′diyl)bis(azo)]bis[4-amino-5-hydroxy-, tetrasodium salt | 2610–05–1 | | 10/04/82 | 10/04/92 |
| 1,3-Naphthalenedisulfonic acid, 8-[[4′-[(4-ethoxyphenyl)azo] [1,1′-biphenyl]-4-yl]azo]-7-hydroxy-, disodium salt | 3530–19–6– | | 10/04/82 | 10/04/92 |
| 1,3-Naphthalenedisulfonic acid, 8-[[4′-[4-ethoxyphenyl)azo]-3,3′-dimethyl] [1,1′-biphenyl]-4-yl]azo]-7-hydroxy-, disodium salt | 6358–29–8 | | 10/04/82 | 10/04/92 |
| 1,3-Naphthalenedisulfonic acid, 7-hydroxy-8-[[4′-[[4-[[(4-methylphenyl) sulfonyl]oxy]phenyl]-azo] [1,1′-biphenyl]-4-yl]azo]-, disodium salt | 3567–65–5 | | 10/04/82 | 10/04/92 |
| 2,7-Naphthalenedisulfonic acid, 5-amino-3-[[4′-(7-amino-1-hydroxy-3-sulfo-2-naphthalenyl)-azo] [1,1′-biphenyl]-4-yl]azo]-4-hydroxy-, trisodium salt | 2429–73–4 | | 10/04/82 | 10/04/92 |
| 2,7-Naphthalenedisulfonic acid, 4-amino-3-[[4′-[(2,4-diamino-5-methylphenyl)azo] [1,1′-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)-, disodium salt | 2429–83–6 | | 10/04/82 | 10/04/92 |
| 2,7-Naphthalenedisulfonic acid, 4-amino-3-[[4′-[(2,4-diaminophenyl)azo] [1,1′-biphenyl]-4-yl]azo] 5-hydroxy-6-(phenylazo)-, disodium salt | 1937–37–7 | | 10/04/82 | 10/04/92 |
| 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-6[[4′-[(4-hydroxyphenyl)azo] [1,1′-biphenyl]-4-yl]-azo]-3-[(4-nitrophenyl)azo]-, disodium salt | 4335–09–5 | | 10/04/82 | 10/04/92 |
| 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[[4′-[(4-hydroxyphenyl)azo] [1,1′-biphenyl]-4-yl]azo)-6-(phenylazo)-, disodium salt | 3626–28–6 | | 10/04/82 | 10/04/92 |
| 2,7-Naphthalenedisulfonic acid, 3,3′-[[1,1′-biphenyl]-4,4′-diylbis(azo)]bis[5-amino-4-hydroxy-, tetrasodium salt | 2602–46–2 | | 10/04/82 | 10/04/92 |
| 2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethoxy[1,1′-biphenyl]-4,4′-diyl)bis(azo)]bis[5-amino-4-hydroxy-, tetrasodium salt | 2429–74–5 | | 10/04/82 | 10/04/92 |

| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| 2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethyl-[1,1′-biphenyl]-4,4′-diyl)bis(azo)]bis[5-amino-4-hydroxy-, tetrasodium salt | 72–57–1 | | 10/04/82 | 10/04/92 |
| 2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethyl-[1,1′-biphenyl]-4,4′-diyl)bis(azo)]bis-[4,5-dihydroxy-, tetrasodium salt | 2150–54–1 | | 10/04/82 | 10/04/92 |
| 1-Naphthalenesulfonic acid, 3-[[4′[(6-amino-1-hydroxy-3-sulfo-2-naphthalenyl)azo]-3,3′-dimethoxy[1,1′-biphenyl]-4-yl]azo]-4-hydroxy-, disodium salt | 6449–35–0 | | 10/04/82 | 10/04/92 |
| 1-Naphthalenesulfonic acid, 3,3′-[[1,1′-biphenyl]-4,4′-diyl-4,4′-diyl)bis(azo)]bis[(4-amino-,disodium salt | 573–58–0 | | 10/04/82 | 10/04/92 |
| 1-Naphthalenesulfonic acid, 3,3′-[3,3′-dimethoxy-[1,1′-biphenyl]-4,4′-diyl)bis(azo)]bis[4-hydroxy-, disodium salt | 2429–71–2 | | 10/04/82 | 10/04/92 |
| 1-Naphthalenesulfonic acid, 3,3′-[(3,3′dimethyl[1,1′-biphenyl]-4,4′-diyl)bis(azo)]bis[4-amino-,disodium salt | 992–59–6 | | 10/04/82 | 10/04/92 |
| Chlorinated benzenes, mono-, di-, tri-, tetra-, and penta- | | | 10/04/82 | 10/04/92 |
| Benzene, chloro- | 108–90–7 | | 10/04/82 | 10/04/92 |
| Benzene, 1,2-dichloro- | 95–50–1 | | 10/04/82 | 10/04/92 |
| Benzene, 1,3-dichloro- | 541–73–1 | | 10/04/82 | 10/04/92 |
| Benzene, 1,4-dichloro- | 106–46–7 | | 10/04/82 | 10/04/92 |
| Benzene, pentachloro- | 608–93–5 | | 10/04/82 | 10/04/92 |
| Benzene, 1,2,3,4-tetrachloro- | 634–66–2 | | 10/04/82 | 10/04/92 |
| Benzene, 1,2,3,5-tetrachloro- | 634–90–2 | | 10/04/82 | 10/04/92 |
| Benzene, 1,2,4,5-tetrachloro- | 95–94–3 | | 10/04/82 | 10/04/92 |
| Benzene, 1,2,3-trichloro- | 87–61–6 | | 10/04/82 | 10/04/92 |
| Benzene, 1,2,4-trichloro- | 120–82–1 | | 10/04/82 | 10/04/92 |
| Benzene, 1,3,5-trichloro- | 108–70–3 | | 10/04/82 | 10/04/92 |
| Chlorinated naphthalenes—chlorinated derivatives of naphthalene (empirical formula) $C_{10}H_xCl_y$ where x+y=8. | | | 10/04/82 | 12/29/88 |
| Naphthalene, chloro- | 25586–43–0 | | 10/04/82 | 12/29/88 |
| Naphthalene, chloro derivatives | 70776–03–3 | | 10/04/82 | 12/29/88 |
| Naphthalene, 1-chloro- | 90–13–1 | | 10/04/82 | 12/29/88 |
| Naphthalene, heptachloro- | 32241–08–0 | | 10/04/82 | 12/29/88 |
| Chlorinated paraffins—chlorinated paraffin oils and chlorinated paraffin waxes, with chlorine content of 35 percent through 70 percent by weight. | | | 10/04/82 | 10/04/92 |
| Alkanes, chloro- | 61788–76–9 | | 10/04/82 | 10/04/92 |
| Alkanes, $C_{6–18}$, chloro- | 68920–70–7 | | 10/04/82 | 10/04/92 |
| Paraffin waxes and hydrocarbon waxes, chlorinated | 63449–39–8 | | 10/04/82 | 10/04/92 |
| Ethyltoluenes—This category consists of ethyltoluene (mixed isomers) and the ortho (1,2-), meta (1,3-) and para (1,4-) isomers | | | 04/29/83 | 12/29/88 |
| Benzene, 1-ethyl-2-methyl- | 611–14–3 | | 04/29/83 | 12/29/88 |
| Fluoroalkenes—This category is defined as fluroalkenes of the general formula: $C_nH_{2n-x}F_x$ where n equals 2 to 3 and X equals 1 to 6. | | | 04/29/83 | 04/29/93 |
| Ethene, tetrafluoro- | 116–14–3 | | 04/29/83 | 04/29/93 |
| Ethene, trifluoro- | 359–11–5 | | 04/29/83 | 01/13/86 |
| 1-Propene, 1,1,2,3,3,3-hexafluoro- | 116–15–4 | | 04/29/83 | 04/29/93 |
| Glycidol (oxiranemethanol) and its derivatives | | | 10/04/82 | 10/04/92 |




| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| R=H; alkyl, alkenyl or alkynyl; aryl; acyl. where R=alkyl, alkenyl, alkynyl, aryl, or acyl; any substituents or functional groups may be present with the alkyl, etc., groups | | | | |
| 1,2-Cyclohexanedicarboxylic acid, bis(oxiranylmethyl) ester | 5493–45–8 | | 10/04/82 | 10/04/92 |
| Disiloxane, 1,1,3,3-tetramethyl-1,3-bis[3-oxiranylmethoxy)propyl]- | 126–80–7 | | 10/04/82 | 10/04/92 |
| 2,4-Imidazolidinedione, 5,5-dimethyl-3-[2-(oxiranylmethoxy)propyl]-1-(oxiranylmethyl)- | 32568–89–1 | | 10/04/82 | 10/04/92 |
| 2,4-Imidazolidenedione, 3,3′-[2-(oxiranylmethoxy)-1,3-propanediyl]bis[5,5-dimethyl-1-(oxiranyl-methyl)- | 38304–52–8 | | 10/04/82 | 10/04/92 |
| Neodecanoic acid, oxiranylmethyl ester | 26761–45–5 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[1,4-butanediylbis(oxymethylene)]bis | 2425–79–8 | | 10/04/82 | 10/04/92 |
| Oxirane, (butoxymethyl)- | 2426–08–6 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[1,4-cyclohexanedilbis (methyleneoxymethylene)]bis- | 14228–73–0 | | 10/04/82 | 10/04/92 |
| Oxirane, [(2,4-dibromophenoxy)methyl]- | 20217–01–0 | | 10/04/82 | 10/04/92 |
| Oxirane, [(1,2-dibromopropoxy)methyl]- | 35243–89–1 | | 10/04/82 | 10/04/92 |
| Oxirane, [(1,1-dimethylethoxy)methyl]- | 7665–72–7 | | 10/04/82 | 10/04/92 |
| Oxirane, [[4-(1,1-dimethylethyl)phenoxy]methyl]- | 3101–60–8 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis- | 17557–23–2 | | 10/04/82 | 10/04/92 |
| Oxirane, [(dodecyloxy)methyl]- | 2461–18–9 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[1,2-ethanediylbis (oxymethylene)]bis- | 2224–15–9 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′,2′′,2′′′-[1,2-ethanediylidenetetrakis-(4,1-phenyleneoxymethylene)]tetrakis- | 7328–97–4 | | 10/04/82 | 10/04/92 |
| Oxirane, (ethoxymethyl)- | 4016–11–9 | | 10/04/82 | 10/04/92 |
| Oxirane, [[(2-ethylhexyl)oxy]methyl]- | 2461–15–6 | | 10/04/82 | 10/04/92 |
| Oxirane, [(hexadecyloxy)methyl]- | 15965–99–8 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′,2′′-[1,2,6-hexanetriyltris-(oxymethylene)]tris- | 68959–23–9 | | 10/04/82 | 10/04/92 |
| Oxirane, (methoxymethyl)- | 930–37–0 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[methylenebis(phenyleneoxymethylene)]bis- | 39817–09–9 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[methylenebis(2,1-phenyleneoxymethylene)]bis- | 54208–63–8 | | 10/04/82 | 10/04/92 |
| Oxirane, [(1-methylethoxy)methyl]- | 4016–14–2 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[(1-methylethylidene)bis[4,1-phenyl-eneoxy[1-(butoxymethyl)-2,1-ethanediyl]oxymethylene]]bis- | 71033–08–4 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[1-methylethylidene) bis(4,1-phenyl-eneoxymethylene)]bis- | 1675–54–3 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[(1-methylethylidene)bis(4,1-phenyl-eneoxymethylene)[bis-, homopolymer | 25085–99–8 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[(1-methylethylidene)bis[4,1-phenyleneoxy-3,1-propanediyloxy-4,1-phenylene(1-methylethylidene)-4,1-phenyleneoxymethylene]]bis- | 72319–24–5 | | 10/04/82 | 10/04/92 |
| Oxirane, [(methylphenoxy)methyl]- | 26447–14–3 | | 10/04/82 | 10/04/92 |
| Oxirane, [(2-methylphenoxy)methyl]- | 2210–79–9 | | 10/04/82 | 10/04/92 |
| Oxirane, [[4-(1-methyl-1-phenylethyl)phenoxy]-methyl]- | 61578–04–9 | | 10/04/82 | 10/04/92 |
| Oxirane, mono[$C_6$-$C_{12}$-alkyloxy)methyl]derivatives | 68987–80–4 | | 10/04/82 | 10/04/92 |
| Oxirane, mono[($C_8$-$C_{12}$-alkyloxy)methyl]derivatives | 68609–96–1 | | 10/04/82 | 10/04/92 |
| Oxirane, mono[$C_{10}$-$C_{16}$-alkyloxy)methyl]derivatives | 68081–84–5 | | 10/04/82 | 10/04/92 |
| Oxirane, mono[($C_{10}$-$C_{14}$-alkyloxy)methyl]derivatives | 68609–97–2 | | 10/04/82 | 10/04/92 |
| Oxirane, [(4-nitrophenoxy)methyl]- | 5255–75–4 | | 10/04/82 | 10/04/92 |

| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| Oxirane, [(4-nonylphenoxy)methyl]- | 6178–32–1 | | 10/04/82 | 10/04/92 |
| Oxirane, [(9-octadecenyloxy)methyl]-, (*Z*)- | 60501–41–9 | | 10/04/82 | 10/04/92 |
| Oxirane, [(octadecyloxy)methyl]- | 16245–97–9 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-(oxiranylmethoxy)-1,3-phenylene]bis(methylene)]bis- | 13561–08–5 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[[[2-oxiranylmethyoxy) phenyl]methylene]bis(4,1-phenyl-eneoxymethylene)]bis- | 67786–03–2 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[oxybis(methylene)]bis- | 2238–07–5 | | 10/04/82 | 10/04/92 |
| Oxirane, (phenoxymethyl)- | 122–60–1 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[1,3-phenylenebis (oxymethylene)]bis- | 2425–01–6 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′-[1,4-phenylenebis (oxymethylene)]bis- | 101–90–6 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′,2″-[1,2,3-propanetriyl tris(oxymethylene)]tris- | 13236–02–7 | | 10/04/82 | 10/04/92 |
| Oxirane, [(2-propenyloxy)methyl]- | 106–92–3 | | 10/04/82 | 10/04/92 |
| Oxirane, 2,2′,2″-[propylidynetris (4,1-phenyleneoxymethylene)]tris- | 68517–02–2 | | 10/04/82 | 10/04/92 |
| Oxirane, [(tetradecyloxy)methyl]- | 38954–75–5 | | 10/04/82 | 10/04/92 |
| Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester | 77–83–8 | | 10/04/82 | 10/04/92 |
| Poly(oxy-1,2-ethanediyl),-α-[4-oxiranylmethyoxy)benzoyl]-ω-[[4-oxiranylmethoxy)benzoyl]oxy]- | 69943–75–5 | | 10/04/82 | 10/04/92 |
| 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester | 106–91–2 | | 10/04/82 | 10/04/92 |
| 2-Propenoic acid, oxiranylmethyl ester | 106–90–1 | | 10/04/82 | 10/04/92 |
| Silane, [(3-chloropropyl)(dimethoxy)[3-(oxiranylmethoxy)propyl]- | 71808–64–5 | | 10/04/82 | 10/04/92 |
| Silane, diethoxymethyl[3-(oxiranyl-methoxy)propyl]- | 2897–60–1 | | 10/04/82 | 10/04/92 |
| Silane, ethoxydimethyl[3-(oxiranyl-methoxy)propyl]- | 17963–04–1 | | 10/04/82 | 10/04/92 |
| Silane, trimethyoxy[3-(oxiranyl-methoxy)propyl]- | 2530–83–8 | | 10/04/82 | 10/04/92 |
| Tetrasiloxane, 1,1,1,3,5,7,7,7-octamethyl-3,5-bis[3-(oxiranylmethoxy)propyl]- | 69155–42–6 | | 10/04/82 | 10/04/92 |
| Trisiloxane, 1,1,1,3,5,5,5-heptamethyl-3-[3-(oxiranyl-methoxy)propyl]- | 7422–52–8 | | 10/04/82 | 10/04/92 |
| Halogenated alkyl epoxides—halogenated noncyclic aliphatic hydrocarbons with one or more epoxy functional groups. | | | 10/04/82 | 12/29/88 |

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|---|---|---|---|---|
| $R_1$=X or $C_nH_{2n+1-y}X_y$(y=1 to 1n+1) | | | | |
| $R_2$=H or X or $C_nH_{2n+1-y}X_y$(y=0 to 2n+1) | | | | |
| $R_3$=H or X or $C_nH_{2n+1-y}X_y$(y=0 to 2n+1) | | | | |
| $R_4$=H or X or $C_nH_{2n+1-y}X_y$(y=0 to 2n+1) | | | | |
| X=halogen. Groups $R_1$–$R_4$ may contain one or more expoxide functions. | | | | |
| Oxirane, (bromomethyl)- | 3132–463–7 | | 10/04/82 | 12/29/88 |
| Oxirane, (2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoroheptyl)- | 38565–52–5 | | 10/04/82 | 12/29/88 |

| Category | CAS No. (examples for category) | Special exemptions | Effective date | Sunset date |
|---|---|---|---|---|
| Phenylenediamines (Benzenediamines). This category is defined as all nitrogen unsubstituted phenylenediamines and their salts with zero to two substitutents on the ring selected from the same of different members of the group of halo, nitro, hydroxy, hydroxy-lower alkoxy, lower-alkyl, and lower alkoxy. For this purpose, the term ''lower'' is defined as a group containing between one and four carbons. | | | 04/29/83 | 04/29/93 |
| 1,2-Benzenediamine | 95–54–5 | | 04/29/83 | 04/29/93 |
| 1,3-Benzenediamine | 108–45–2 | | 04/29/83 | 04/29/93 |
| 1,2-Benzenediamine, 4-butyl- | 3663–23–8 | | 04/29/83 | 12/29/88 |
| 1,2-Benzenediamine, 4-butyl- | 95–83–0 | | 04/29/83 | 04/29/83 |
| 1,3-Benzenediamine, 4-chloro- | 5131–60–2 | | 04/29/83 | 04/29/93 |
| 1,4-Benzenediamine, 2-chloro-, dihydrochloride | 615–46–3 | | 04/29/83 | 12/29/88 |
| 1,2-Benzenediamine, 5-chloro-3-nitro- | 42389–30–0 | | 04/29/83 | 12/29/88 |
| 1,2-Benzenediamine, 4-chloro-, sulfate (1:1) | 68459–98–3 | | 04/29/83 | 12/29/88 |
| 1,3-Benzenediamine, 4-chloro-, sulfate (1:1) | 68239–80–5 | | 04/29/83 | 12/29/88 |
| 1,4-Benzenediamine, 2-chloro-, sulfate | 6219–71–2 | | 04/29/83 | 12/29/88 |
| 1,4-Benzenediamine, 2,5-dichloro- | 20103–09–7 | | 04/29/83 | 12/29/88 |
| 1,2-Benzenediamine, dihydrochloride | 615–28–1 | | 04/29/83 | 04/29/93 |
| 1,3-Benzenediamine, dihydrochloride | 541–69–5 | | 04/29/83 | 04/29/93 |
| 1,4-Benzenediamine, dihydrochloride | 624–18–0 | | 04/29/83 | 04/29/93 |
| 1,4-Benzenediamine, ethanedioate (1:1) | 62654–17–5 | | 04/29/83 | 04/29/93 |
| 1,2-Benzenediamine, 4-ethoxy- | 1197–37–1 | | 04/29/83 | 12/29/88 |
| 1,3-Benzenediamine, 4-ethoxy-dihydrochloride | 67801–06–3 | | 04/29/83 | 12/29/88 |
| 1,3-Benzenediamine, 4-ethoxy-, sulfate (1:1) | 68015–98–5 | | 04/29/83 | 12/29/88 |
| 1,3-Benzenediamine, *ar*-ethyl-*ar*-methyl- | 68966–84–7 | | 04/29/83 | 12/29/88 |
| 1,4-Benzenediamine, 2-methoxy | 5307–02–8 | | 04/29/83 | 04/29/93 |
| 1,2-Benzenediamine, 4-methoxy-, dihydrochloride | 614–94–8 | | 04/29/83 | 12/29/88 |
| 1,3-Benzenediamine, 4-methoxy-, sulfate | 6219–67–6 | | 04/29/83 | 12/29/88 |
| 1,3-Benzenediamine, 4-methoxy-, sulfate (1:1) | 39156–41–7 | | 04/29/83 | 04/29/93 |
| Benzenediamine, *ar*-methyl- | 25376–45–8 | | 04/29/83 | 04/29/93 |
| 1,2-Benzenediamine, 3-methyl- | 2687–25–4 | | 04/29/83 | 04/29/93 |
| 1,2-Benzenediamine, 4-methyl- | 496–72–0 | | 04/29/83 | 04/29/93 |
| 1,3-Benzenediamine, 2-methyl- | 823–40–5 | | 04/29/83 | 04/29/93 |
| 1,3-Benzenediamine, 4-methyl- | 95–80–7 | | 04/29/83 | 04/29/93 |
| 1,3-Benzenediamine, 5-methyl- | 108–71–4 | | 04/29/83 | 04/29/93 |
| 1,4-Benzenediamine, 2-methyl- | 95–70–5 | | 04/29/83 | 04/29/93 |
| 1,4-Benzenediamine, 2-methyl-, dihydrochloride- | 615–45–2 | | 04/29/83 | 04/29/93 |
| 1,4-Benzenediamine, 2-methyl-, sulfate | 6369–59–1 | | 04/29/83 | 04/29/93 |
| 1,4-Benzenediamine, 2-methyl-, sulfate (1:1) | 615–50–9 | | 04/29/83 | 04/29/93 |
| 1,2-Benzenediamine, 4-nitro- | 99–56–9 | | 04/29/83 | 04/29/93 |
| 1,3-Benzenediamine, 4-nitro-, | 5131–58–8 | | 04/29/83 | 12/29/88 |
| 1,3-Benzenediamine, 5-nitro-, | 5042–55–7 | | 04/29/83 | 12/29/88 |
| 1,4-Benzenediamine, 2-nitro-, | 5307–14–2 | | 04/29/83 | 04/29/93 |
| 1,2-Benzenediamine, 4-nitro-, dihydrochloride | 6219–77–8 | | 04/29/83 | 12/29/88 |
| 1,4-Benzenediamine, 2-nitro-, dihydrochloride | 18266–52–9 | | 04/29/83 | 12/29/88 |
| 1,2-Benzenediamine, 4-nitro-, sulfate (1:1) | 68239–82–7 | | 04/29/83 | 12/29/88 |
| 1,4-Benzenediamine, 2-nitro-, sulfate (1:1) | 68239–83–8 | | 04/29/83 | 12/29/88 |
| 1,3-Benzenediamine, sulfate (1:1) | 541–70–8 | | 04/29/83 | 04/29/93 |
| 1,4-Benzenediamine, sulfate (1:1) | 16245–77–5 | | 04/29/83 | 04/29/93 |
| Ethanol, 2-(2,4-diaminophenoxy)-, dihydrochloride | 66422–95–5 | | 04/29/83 | 12/29/88 |
| Phenol, 2,4-diamino-, dihydrochloride | 137–09–7 | | 04/29/83 | 04/29/93 |
| Phenol, 2,4-diamino-6-methyl- | 15872–73–8 | | 04/29/83 | 12/29/88 |
| Phenol, 2,4-diamino-6-methyl-, hydrochloride | 65879–44–9 | | 04/29/83 | 12/29/88 |

(d) *Listed members of categories.* The following categories are listed in alphabetical order with the chemical substances identified in each category also listed alphabetically. Only those chemical substances specifically listed within a category are subject to all provisions of part 716 for the time period from the effective date of the rule until the sunset date.

| Category | CAS No. (exemptions for category) | Special Exemptions | Effective Date | Sunset Date |
|---|---|---|---|---|
| Aldehydes:. | | | | |
| Acetaldehyde | 75–07–0 | | 9/30/91 | 9/30/01 |
| Acetaldehyde, chloro- | 107–20–0 | | 9/30/91 | 9/30/01 |
| Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2*H*-indol-2-ylidene) | 84–83–3 | | 9/30/91 | 9/30/01 |
| Acetaldehyde, trichloro- | 75–87–6 | | 9/30/91 | 9/30/01 |
| Benzaldehyde | 100–52–7 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 3-bromo- | 3132–99–8 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 4-butyl- | 1200–14–2 | | 9/30/91 | 12/19/95 |
| Benzaldehyde, 2-chloro- | 89–98–5 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 4-chloro- | 104–88–1 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 4-(diethylamino)- | 120–21–8 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 4-(diethylamino)-2-hydroxy- | 17754–90–4 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 2,4-dihydroxy- | 95–01–2 | | 9/30/91 | 12/19/95 |
| Benzaldehyde, 2,5-dimethoxy- | 93–02–7 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 3,4-dimethoxy- | 120–14–9 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, (dimethylamino)- | 28602–27–9 | | 9/30/91 | 12/19/95 |
| Benzaldehyde, 4-(dimethylamino)- | 100–10–7 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 4-ethoxy- | 10031–82–0 | | I9/30/91 | 12/19/95 |
| Benzaldehyde, 3-ethoxy-4-hydroxy- | 121–32–4 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 2-hydroxy- | 90–02–8 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 4-hydroxy- | 123–08–0 | | 9/30/91 | 12/19/95 |
| Benzaldehyde, 4-hydroxy-3-methoxy- | 121–33–5 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 2-hydroxy-5-nitro- | 97–51–8 | | 9/30/91 | 12/19/95 |
| Benzaldehyde, 2-methoxy- | 135–02–4 | | 9/30/91 | 12/19/95 |
| Benzaldehyde, 4-methoxy- | 123–11–5 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, methyl- | 1334–78–7 | | 9/30/91 | 12/19/95 |
| Benzaldehyde, 4-methyl- | 104–87–0 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 2-nitro- | 552–89–6 | | 9/30/91 | 12/19/95 |
| Benzaldehyde, 3-phenoxy- | 39515–51–0 | | 9/30/91 | 9/30/01 |
| Benzaldehyde, 4-(trifluoromethyl)- | 455–19–6 | | 9/30/91 | 12/19/95 |
| Benzeneacetaldehyde | 122–78–1 | | 9/30/91 | 9/30/01 |
| Benzeneacetaldehyde, alpha-methyl- | 93–53–8 | | 9/30/91 | 12/19/95 |
| Benzeneacetaldehyde, 4-methyl- | 104–09–6 | | 9/30/91 | 12/19/95 |
| Benzenepropanal, 4-(1,1-dimethylethyl)-.α.-methyl- | 80–54–6 | | 9/30/91 | 9/30/01 |
| Benzenepropanal, .α.-methyl-4-(1-methylethyl)- | 103–95–7 | | 9/30/91 | 9/30/01 |
| 1,3-Benzodioxole-5-carboxaldehyde | 120–57–0 | | 9/30/91 | 9/30/01 |
| 1,3-Benzodioxole-5-carboxaldehyde, 7-methoxy- | 5780–07–4 | | 9/30/91 | 12/19/95 |
| Butanal, 3-methyl- | 590–86–3 | | 9/30/91 | 9/30/01 |
| 3-Cyclohexene-1-carboxaldehyde | 100–50–5 | | 9/30/91 | 9/30/01 |
| 3-Cyclohexene-1-carboxaldehyde, dimethyl- | 27939–60–2 | | 9/30/91 | 9/30/01 |
| 3-Cyclohexene-1-carboxaldehyde, 4-(4-hydroxy-4-methylpentyl)- | 31906–04–4 | | 9/30/91 | 9/30/01 |
| 3-Cyclohexene-1-carboxaldehyde, 1-methyl-4-(4-methyl-3-pentenyl)- | 52475–86–2 | | 9/30/91 | 9/30/01 |
| 3-Cyclohexene-1-carboxaldehyde, 1-methyl-4-(4-methylpentyl)- | 66327–54–6 | | 9/30/91 | 9/30/01 |
| 3-Cyclohexene-1-carboxaldehyde, 4-(4-methyl-3-pentenyl)- | 37677–14–8 | | 9/30/91 | 12/19/95 |
| 3-Cyclohexene-1-carboxaldehyde, 2,4,6-trimethyl- | 1423–46–7 | | 9/30/91 | 12/19/95 |
| 3-Cyclopentene-1-acetaldehyde, 2,2,3-trimethyl- | 4501–58–0 | | 9/30/91 | 9/30/01 |
| Decanal | 112–31–2 | | 9/30/91 | 9/30/01 |

| Category | CAS No. (exemptions for category) | Special Exemptions | Effective Date | Sunset Date |
|---|---|---|---|---|
| 4a(4*H*)-Dibenzofurancarboxaldehyde, 1,5a,6,9,9a,9b-hexahydro- | 126–15–8 | | 9/30/91 | 9/30/01 |
| Dodecanal | 112–54–9 | | 9/30/91 | 9/30/01 |
| Ethanedial | 107–22–2 | | 9/30/91 | 9/30/01 |
| Heptanal | 111–71–7 | | 9/30/91 | 9/30/01 |
| Heptanal, 2-(phenylmethylene)- | 122–40–7 | | 9/30/91 | 9/30/01 |
| 5-Heptenal, 2,6-dimethyl- | 106–72–9 | | 9/30/91 | 12/19/95 |
| Hexanal, 2-ethyl- | 123–05–7 | | 9/30/91 | 9/30/01 |
| Hexanal, 3,5,5-trimethyl- | 5435–64–3 | | 9/30/91 | 12/19/95 |
| 2-Hexenal | 505–57–7 | | 9/30/91 | 12/19/95 |
| Hexenal, 2-ethyl- | 26266–68–2 | | 9/30/91 | 9/30/01 |
| 1-Naphthalene carboxaldehyde | 66–77–3 | | 9/30/91 | 12/19/95 |
| Nonanal | 124–19–6 | | 9/30/91 | 9/30/01 |
| 2,6-Octadienal, 3,7-dimethyl-, (E) | 141–27–5 | | 9/30/91 | 12/19/95 |
| 2,6-Octadienal, 3,7-dimethyl-, (Z) | 106–26–3 | | 9/30/91 | 12/19/95 |
| Octanal | 124–13–0 | | 9/30/91 | 9/30/01 |
| Octanal, 3,7-dimethyl- | 5988–91–0 | | 9/30/91 | 12/19/95 |
| Octanal, 7-hydroxy-3,7-dimethyl- | 107–75–5 | | 9/30/91 | 9/30/01 |
| Octanal, 7-methoxy-3,7-dimethyl- | 3613–30–7 | | 9/30/91 | 9/30/01 |
| Octanal, 2-(phenylmethylene)- | 101–86–0 | | 9/30/91 | 9/30/01 |
| 6-Octenal, 3,7-dimethyl- | 106–23–0 | | 9/30/91 | 9/30/01 |
| 6-Octenal, 3,7-dimethyl-, (S)- | 5949–05–3 | | 9/30/91 | 12/19/95 |
| Pentanal | 110–62–3 | | 9/30/91 | 9/30/01 |
| Pentanedial | 111–30–8 | | 9/30/91 | 9/30/01 |
| 1-Piperidinecarboxaldehyde | 2591–86–8 | | 9/30/91 | 9/30/01 |
| Propanal | 123–38–6 | | 9/30/91 | 9/30/01 |
| Propanal, 3-hydroxy-2,2-dimethyl- | 597–31–9 | | 9/30/91 | 9/30/01 |
| 2-Propenal, 2-methyl- | 78–85–3 | | 9/30/91 | 12/19/95 |
| Propanal, 3-(methylthio)- | 3268–49–3 | | 9/30/91 | 9/30/01 |
| 2-Propenal | 107–02–8 | | 9/30/91 | 9/30/01 |
| 2-Propenal, 3- 4-(1,1-dimethylethyl)phenyl -2-methyl- | 13586–68–0 | | 9/30/91 | 9/30/01 |
| 2-Propenal, 3-(2-methoxyphenyl)- | 1504–74–1 | | 9/30/91 | 9/30/01 |
| 2-Propenal, 2-methyl- | 78–85–3 | | 9/30/91 | 9/30/01 |
| 2-Propenal, 2-methyl-3-phenyl- | 101–39–3 | | 9/30/91 | 9/30/01 |
| 2-Propenal, 3-phenyl- | 104–55–2 | | 9/30/91 | 9/30/01 |
| 2-Propenal, 3-phenyl-, monopentyl deriv. | 1331–92–6 | | 9/30/91 | 9/30/01 |
| 2-Pyridinecarboxaldehyde | 1121–60–4 | | 9/30/91 | 12/19/95 |
| 2-Thiophene carboxaldehyde | 98–03–3 | | 9/30/91 | 12/19/95 |
| Undecanal | 112–44–7 | | 9/30/91 | 9/30/01 |
| Undecanal, 2-methyl- | 110–41–8 | | 9/30/91 | 9/30/01 |
| 9-Undecenal | 143–14–6 | | 9/30/91 | 12/19/95 |
| 10-Undecenal | 112–45–8 | | 9/30/91 | 9/30/01 |
| Alkyl-, Chloro-, and Hydroxymethyl Diaryl Ethers:. | | | | |
| Benzene, 1-(bromomethyl)-3-phenoxy- | 51632–16–7 | | 04/12/93 | 04/12/03 |
| Benzenemethanol, 3-phenoxy-, | 13826–35–2 | | 04/12/93 | 04/12/03 |
| Benzenemethanol, 3-phenoxy-, acetate | 50789–44–1 | | 4/12/93 | 12/19/95 |
| Benzene, 1-methyl-3-phenoxy- | 3586–14–9 | | 04/12/93 | 04/12/03 |
| Benzene, 1,1'-oxybis[dodecyl- | 69834–19–1 | | 4/12/93 | 12/19/95 |

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|---|---|---|---|---|
| Benzene, 1,1,′-oxybis[methyl- | 28299–41–4 | | 04/12/93 | 04/12/03 |
| Benzene, 1,1'-oxybis[(1,1,3,3-tetramethylbutyl)- | 61702–88–3 | | 4/12/93 | 12/19/95 |
| Benzoic acid, 3-[2-chloro-4-(trifluoromethyl)phenoxy]-, | 63734–62–3 | | 04/12/93 | 04/12/03 |
| Benzoic acid, 3-[2-chloro-4-(trifluoromethyl)phenoxy], potassium salt | 72242–48–3 | | 04/12/93 | 04/12/03 |
| 1,1′-Biphenyl, phenoxy- | 28984–89–6 | | 04/12/93 | 04/12/03 |
| 2-Chloro-1-(3-methylphenoxy)-4-(trifluoromethyl)benzene | 42874–96–4 | | 04/12/93 | 04/12/03 |
| 1,4-Diphenoxybenzene | 3061–36–7 | | 4/12/93 | 12/19/95 |
| Phenol, 3-[2-chloro-4-(trifluoromethyl)phenoxy]-, acetate | 50594–77–9 | | 04/12/93 | 04/12/03 |
| Alkyl Phosphates:. | | | | |
| Ethanol, 2-butoxy-, phosphate (3:1) | 78–51–3 | | 10/29/90 | 12/19/95 |
| Ethanol, 2-(2-butoxyethoxy)-, phosphate (3:1) | 7332–46–9 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, bis(2-ethylhexyl) ester | 298–07–7 | | 10/29/90 | 12/19/95 |
| Phosphoric acid, dibutyl ester | 107–66–4 | | 10/29/90 | 10/29/00 |
| Phosphoric acid, didodecyl ester | 7057–92–3 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, diisooctyl ester | 27215–10–7 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, dodecyl ester | 12751–23–4 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, 2-ethylhexyl ester | 12645–31–7 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, monobutyl ester | 1623–15–0 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, mono(2-ethylhexyl)ester | 1070–03–7 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, monohexyl ester | 3900–04–7 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, monomethyl ester | 812–00–0 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, mono(1-methylethyl)ester | 1623–24–1 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, monooctyl ester | 3991–73–9 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, monooctadecyl ester | 2958–09–0 | | 10/29/90 | 11/09/93 |
| Phosphoric acid, triethyl ester | 78–40–0 | | 10/29/90 | 12/19/95 |
| Phosphoric acid, tris(2-ethylhexyl) ester | 78–42–2 | | 10/29/90 | 12/19/95 |
| Phosphoric acid, tris(2-methylpropyl) ester | 126–71–6 | | 10/29/90 | 11/09/93 |
| Phosphorodichloridic acid, ethyl ester | 1498–51–7 | | 10/29/90 | 11/09/93 |
| Alkylphenols and Alkylphenol Ethoxyates:. | | | | |
| tert-Butylphenol (mixed isomers) | 27178–34–3 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 2-Butylphenol | 3180–09–4 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 2-tert-Butylphenol | 88–18–6 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-n-Butylphenol | 1638–22–8 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-sec-Butylphenol | 99–71–8 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-tert-Butylphenol | 98–54–4 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Decaethylene glycol 4-isoctylphenyl ether | 2315–66–4 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-Dodecylphenol | 104–43–8 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Dodecylphenol (mixed isomers) | 1331–57–3 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Dedecylphenol (mixed isomers) | 27193–86–8 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |

| Category | CAS No. (exemptions for category) | Special Exemptions | Effective Date | Sunset Date |
|---|---|---|---|---|
| Hexaethylene glycol 4-isoctylphenyl ether | 2497–58–7 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Isobutylphenol (mixed isomers) | 31195–95–6 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Isononylphenol (mixed isomers) | 11066–49–2 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-(1-Methylbutyl)phenol | 94–06–4 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| (1-Methylheptyl)phenol (mixed isomers) | 27985–70–2 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-(1-Methyloctyl)phenol | 17404–66–9 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Nonylphenol (mixed isomers) | 1300–16–9 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| | 25154–52–3 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-Nonylphenol | 104–40–5 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Branched 4-nonylphenol (mixed isomers) | 84852–15–3 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 2-Octylphenol | 949–13–3 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-Octylphenol | 1806–26–4 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-Pentylphenol | 14938–35–3 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 4-tert-Pentylphenol | 80–46–6 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Polyethylene glycol mono(octyl)phenyl ether | 9036–19–5 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Polyethylene glycol 4-(tert-octyl)phenyl ether | 9002–93–1 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Poly(oxy-1,2-ethanediyl), α-(octylphenyl)-ω-hydroxy-, branched | 68987–90–6 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| 2-(1,1,3,3-Tetramethylbutyl)phenol | 3884–95–5 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| (1,1,3,3-Tetramethylbutyl)phenol (mixed isomers) | 1322–69–6 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| | 27193–28–8 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| | 29932–96–5 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| | 30105–54–5 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| | 62744–41–6 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |

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| 4-(2,2,3,3-Tetramethylbutyl)phenol | 54932–78–4 | § 716.20(b)(4) applies | 3/29/96 | 3/29/06 |
| Brominated flame retardants:. | | | | |
| Alkanes, C10-18, bromochloro- | 68955–41–9 | | 10/29/90 | 12/19/95 |
| Benzamide, 3,5-dibromo-N-(4-bromophenyl)-2-hydroxy- | 87–10–5 | | 10/29/90 | 12/19/95 |
| Benzene, ethenyl-, homopolymer, brominated | 88497–56–7 | | 10/29/90 | 11/09/93 |
| Benzene, 1,1'-(1-methylethylidene)bis (3,5-dibromo-4-(2-propenyloxy)- | 25327–89–3 | | 10/29/90 | 11/09/93 |
| Benzene, pentabromomethyl- | 87–83–2 | | 10/29/90 | 12/19/95 |
| Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro- | 87–84–3 | | 10/29/90 | 12/19/95 |
| Cyclohexane, tetrabromodichloro- | 30554–72–4 | | 10/29/90 | 12/19/95 |
| Cyclohexane, tribromotrichloro- | 30554–73–5 | | 10/29/90 | 12/19/95 |
| Ethanol, 2,2'-((1-methylethylidene)bis ((2,6-dibromo-4,1-phenylene)oxy)) bis- | 4162–45–2 | | 10/29/90 | 12/19/95 |
| Ethene, bromo- | 593–60–2 | | 10/29/90 | 10/29/00 |
| Phenol, 2,4-dibromo- | 615–58–7 | | 10/29/90 | 12/19/95 |
| Phenol, 2,4(or 2,6)-dibromo-,homopolymer | 69882–11–7 | | 10/29/90 | 12/19/95 |
| 1-Propanol, 2,3-dibromo- | 96–13–9 | | 10/29/90 | 12/19/95 |
| 1-Propanol, 2,2-dimethyl-,tribromo deriv | 36483–57–5 | | 10/29/90 | 12/19/95 |
| 2-Propenoic acid,(1-methylethylidene)bis (2,6-dibromo-4,1-phenylene) ester | 55205–38–4 | | 10/29/90 | 12/19/95 |
| Chloroalkyl phosphates:. | | | | |
| 2,2-Bis(chloromethyl)-1,3-propanediyltetrakis(2-chloroethyl) phosphate | 38051–10–4 | | 6/14/93 | 12/19/95 |
| 2-Chloro-1-methylethylbis(2-chloropropyl) phosphate- | 76649–15–5 | | 6/14/93 | 12/19/95 |
| 1,2-Ethanediyl tetrakis(2-chloro-1-methylethylene) phosphate | 34621–99–3 | | 6/14/93 | 12/19/95 |
| Oxydi-2,1-ethanediyltetrakis(2-choloroethyl) phosphate | 53461–82–8 | | 6/14/93 | 12/19/95 |
| Cyanoacrylates:. | | | | |
| 2-Propenoic acid, 2-cyano-, methyl ester | 137–05–3 | | 1/26/94 | 12/19/95 |
| 2-Propenoic acid, 2-cyano-, isobutyl ester | 1069–55–2 | | 1/26/94 | 12/19/95 |
| 2-Propenoic acid, 2-cyano-3,3-diphenyl-, 2-ethylhexyl ester | 6197–30–4 | | 1/26/94 | 12/19/95 |
| 2-Propenoic acid, 2-cyano-, butyl ester | 6606–65–1 | | 1/26/94 | 12/19/95 |
| 2-Propenoic acid, 2-cyano-, ethyl ester | 7085–85–0 | | 1/26/94 | 12/19/95 |
| 2-Propenoic acid, 2-cyano-, 2-propenyl ester | 7324–02–9 | | 1/26/94 | 12/19/95 |
| 2-Propenoic acid, 2-cyano-, 1-methylethyl ester | 10586–17–1 | | 1/26/94 | 12/19/95 |
| 2-Propenoic acid, 2-cyano-, ethoxy ethyl ester | 21982–43–4 | | 1/26/94 | 12/19/95 |
| 2-Propenoic acid, 2-cyano-, 2,2,2-trifluoromethyl ester | 23023–91–8 | | 1/26/94 | 12/19/95 |
| 2-Propenoic acid, 2-cyano-, 2-methoxyethyl ester | 27816–23–5 | | 1/26/94 | 12/19/95 |
| Ethanaminium, 2-[[2-cyano-3-[4-(diethylamino)phenyl]-1-oxo-2-propenyl]oxy]-N,N,N-trimethyl-, chloride. | 64992–16–1 | | 1/26/94 | 12/19/95 |
| IRIS Chemicals:. | | | | |
| 3,4-Dimethylphenol | 95–65–8 | | 9/30/91 | 12/19/95 |
| 2,4-Dinitrophenol | 51–28–5 | | 9/30/91 | 12/19/95 |
| Isocyanates:. | | | | |
| Acetic acid, isocyanato-, ethyl ester | 2949–22–6 | | 10/29/90 | 11/09/93 |
| Benzene, bis(isocyanatomethyl)- | 25854–16–4 | | 10/29/90 | 11/09/93 |
| Benzene, 1-bromo-4-isocyanato- | 2493–02–9 | | 10/29/90 | 11/09/93 |
| Benzene, 1-chloro-3-isocyanato- | 2909–38–8 | | 10/29/90 | 11/09/93 |
| Benzene, 1-chloro-4-isocyanato- | 104–12–1 | | 10/29/90 | 10/29/00 |
| Benzene, 1,2-dichloro-4-isocyanato- | 102–36–3 | | 10/29/90 | 10/29/00 |
| Benzene, 1,3-dichloro-5-isocyanato- | 34893–92–0 | | 10/29/90 | 11/09/93 |
| Benzene, 1,1'-(diisocyanatomethylene)bis- | 10031–75–1 | | 10/29/90 | 11/09/93 |
| Benzene, isocyanato- | 103–71–9 | | 10/29/90 | 10/29/00 |
| Benzene, 2-isocyanato-1,3-bis(1-methylethyl)- | 28178–42–9 | | 10/29/90 | 11/09/93 |

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|---|---|---|---|---|
| Benzene, 2-isocyanato-1,3-dimethyl-, ester | 28556–81–2 | | 10/29/90 | 11/09/93 |
| Benzene, 1-isocyanato-2-methyl- | 614–68–6 | | 10/29/90 | 11/09/93 |
| Benzene, 1-isocyanato-4-methyl- | 622–58–2 | | 10/29/90 | 11/09/93 |
| Benzene, 1-isocyanato-4-nitro- | 100–28–7 | | 10/29/90 | 11/09/93 |
| Benzene, 1-isocyanato-3-(trifluoromethyl)- | 329–01–1 | | 10/29/90 | 10/29/00 |
| Benzene, 1,1',1''-methylidynetris(4-isocyanato- | 2422–91–5 | | 10/29/90 | 11/09/93 |
| Butane, 1-isocyanato- | 111–36–4 | | 10/29/90 | 10/29/00 |
| Cyclohexane, 2-heptyl-3,4-bis (9-isocyanatononyl)-1-pentyl- | 68239–06–5 | | 10/29/90 | 11/09/93 |
| Cyclohexane, isocyanato- | 3173–53–3 | | 10/29/90 | 11/09/93 |
| 1,3-Diazetidine-2,4-dione, 1,3-bis(3-isocyanato methylphenyl)- | 26747–90–0 | | 10/29/90 | 11/09/93 |
| Ethane, isocyanato- | 109–90–0 | | 10/29/90 | 12/19/95 |
| Imidodicarbonic diamide, N,N'-2-tris(6-isocyanatohexyl)- | 4035–89–6 | | 10/29/90 | 11/09/93 |
| Methane, isocyanato- | 624–83–9 | | 10/29/90 | 12/19/95 |
| Octadecane, 1-isocyanato- | 112–96–9 | | 10/29/90 | 11/09/93 |
| Phenol, 4-isocyanato-, phosphorothioate (3:1) (ester) | 4151–51–3 | | 10/29/90 | 11/09/93 |
| Propane, 1-isocyanato- | 110–78–1 | | 10/29/90 | 11/09/93 |
| 1-Propene, 3-isocyanato- | 1476–23–9 | | 10/29/90 | 11/09/93 |
| 2-Propenoic acid, 2-methyl-, 2- isocyanatoethyl ester | 30674–80–7 | | 10/29/90 | 12/19/95 |
| 2-Propenoic acid, 2-methyl-2-(((((5-isocyanato-1,3,3-trimethylcyclohexyl)methyl)amino) carbonyl)oxy)ethyl ester. | 73597–26–9 | | 10/29/90 | 11/09/93 |
| 1,3,5,-Triazine-2,4,6(1H.3H.5H-trione, 1,3,5- tris(3-isocyanatomethylphenyl)- | 26603–40–7 | | 10/29/90 | 11/09/93 |
| Methyl ethylene glycol ethers and esters:. | | | | |
| Ethylene glycol monomethy ether acrylate | 3121–61–7 | | 1/26/94 | 12/19/95 |
| Tetraethylene glycol monomethyl ether | 23783–42–8 | | 1/26/94 | 12/19/95 |
| OSHA Chemicals in Need of Dermal Absorption Testing:. | | | | |
| Amitrole | 61-82-5 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| *n*-Amyl acetate | 628–63–7 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| o-Anisidine | 90-04-0 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Benzyl chloride | 100-44-7 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| *sec*-Butyl acetate | 105–46–4 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| *tert*-Butyl acetate | 540–88–5 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| *sec*-Butyl alcohol | 78–92–2 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| *tert*-Butyl alcohol | 75–65–0 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| t-Butylcatechol | 98-29-3 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| o-sec-butylphenol | 89–72–5 | | 3/11/94 | 3/11/04 |
| Camphor | 76–22–2 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |

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|---|---|---|---|---|
| Carbon disulfide | 75-15-0 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Catechol | 120-80-9 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| *a*-Chloroacetophenone | 532–27–4 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Chlorobenzene | 108-90-7 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| o-Chlorotoluene | 95-49-8 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Cyclohexene | 110–83–8 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Cyclohexanol | 108-93-0 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| Cyclopentadiene | 542-92-7 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| Cyclopentane | 287–92–3 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Diacetone alcohol | 123-42-2 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| Dibutyl phosphate | 107–66–4 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| 1,2-Dichloroethylene | 540-59-0 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Dicylcopentadiene | 77-73-6 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| Dimethyl acetamide | 127-19-5 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| Dimethylaniline | 121-69-7 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| Dimethyl sulfate | 77-78-1 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| m-Dinitrobenzene | 99-65-0 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| o-Dinitrobenzene | 528-29-0 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| *p*-Dinitrobenzene | 100–25–4 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| 2,4-Dinitrotoluene | 121-14-2 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Diphenylamine | 122-39-4 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Disulfiram | 97–77–8 | § 716.20(b)(3) applies | 1/26/94 | 1/26/94 |
| Ethyl bromide | 74-96-4 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Ethyl ether | 60–29–7 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Heptane (*n*-Heptane) | 142–82–5 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |

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|---|---|---|---|---|
| Indene | 95-13-6 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Isoamyl acetate | 123–92–2 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| N-Isopropylaniline | 768-52-5 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| p-Methoxyphenol | 150-76-5 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Methyl acetate | 79–20–9 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Methylcyclohexane | 108–87–2 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Methyl formate | 107–31–3 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Methyl isoamyl ketone | 110-12-3 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| p-Nitroaniline | 100-01-6 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| p-Nitrochlorobenzene | 100-00-5 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| 1-Nitropropane | 108–03–2 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| 2-Nitropropane | 79-46-9 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| m-Nitrotoluene | 99-08-1 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| o-Nitrotoluene | 88-72-2 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| p-Nitrotoluene | 99-99-0 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| Nonane | 111–84–2 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Pentane | 109–66–0 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Phenylhydrazine | 100-63-0 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Propylene glycol dinitrate | 6423-43-4 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Sodium bisulfite | 7631–90–5 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Sodium metabisulfite | 7681–57–4 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Tetrahydrofuran | 109-99-9 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| m-Toluidine | 108-44-1 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |

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|---|---|---|---|---|
| Vinylidene chloride | 75-35-4 | § 716.20(b)(3) and (b)(4) apply | 8/4/95 | 8/4/05 |
| Vinyl toluene | 25013-15-4 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| *p*-Xylene | 106–42–3 | § 716.20(b)(3) applies | 1/26/94 | 1/26/04 |
| Xylidine | 1300-73-8 | § 716.20(b)(3) applies | 3/11/94 | 3/11/04 |
| Propylene glycol ethers and esters:. | | | | |
| Dipropylene glycol | 110–96–5 | | 1/26/94 | 12/19/95 |
| Dipropylene glycol butyl ether | 29911–28–2 | | 1/26/94 | 12/19/95 |
| Dipropylene glycol monomethyl ether acetate | 88917–22–0 | | 1/26/94 | 12/19/95 |
| 1-(2-Methoxy-1-methylethoxy)-2-propanol | 20324–32–7 | | 1/26/94 | 12/19/95 |
| Methoxy-1-propanol | 28677–93–2 | | 1/26/94 | 12/19/95 |
| 1-Phenoxy-2-propanol | 770–35–4 | | 1/26/94 | 12/19/95 |
| Propylene glycol monobutyl ether | 29387–86–8 | | 1/26/94 | 12/19/95 |
| Propylene glycol monomethyl ether acetate | 108–65–6 | | 1/26/94 | 12/19/95 |
| Propylene glycol mono-tert-butyl ether | 57018–52–7 | | 1/26/94 | 12/19/95 |
| Tripropylene glycol diacrylate | 42978–66–5 | | 1/26/94 | 12/19/95 |
| Tripropylene glycol methyl ether | 20324–33–8 | | 1/26/94 | 12/19/95 |
| Siloxanes:. | | | | |
| Cyclopolydimethylsiloxane | 69430–24–6 | | 10/12/93 | 10/12/03 |
| Decamethylcyclopentasiloxane | 541–02–6 | | 10/12/93 | 10/12/03 |
| Decamethyltetrasiloxane | 141–62–8 | | 10/12/93 | 10/12/03 |
| Dimethyldiphenylsiloxane | 68083–14–7 | | 10/12/93 | 10/12/03 |
| Dimethylhydropolylsiloxane | 68037–59–2 | | 10/12/93 | 10/12/03 |
| Dimethylmethyl 3,3,3-trifluoropropyl siloxane | 115361-68-7 | | 10/12/93 | 10/12/03 |
| Dimethylmethylvinylsiloxane | 67762–94–1 | | 10/12/93 | 10/12/03 |
| Dimethylpolysiloxanes | 68037–74–1 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Dimethyl silicones and siloxanes | 63148–62–9 | | 10/12/93 | 10/12/03 |
| Dimethyl silicones and siloxane, reaction products with silica | 67762–90–7 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Docosamethylcycloundecasiloxane | 18766–38–6 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Docosamethyldecasiloxane | 556–70–7 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Dodecamethylcyclohexasiloxane | 540–97–6 | | 10/12/93 | 10/12/03 |
| Dodecamethylpentasiloxane | 141–63–9 | | 10/12/93 | 10/12/03 |
| Dotetracontamethyleicosasiloxane | 150027-00-2 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Dotriacontamethylcyclohexadecasiloxane | 150026-95-2 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Dotriacontamethylpentadecasiloxane | 2471–11–6 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Eicosamethylcyclodecasiloxane | 18772–36–6 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Eicosamethylnonasiloxane | 2652–13–3 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |

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| Hexacosamethylcyclotridecasiloxane | 23732–94–7 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Hexacosamethyldodecasiloxane | 2471–08–1 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Hexadecamethylcyclooctasiloxane | 556–68–3 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Hexadecamethylheptasiloxane | 541–01–5 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Hexamethylcyclotrisiloxane | 541–05–9 | | 10/12/93 | 10/12/03 |
| Hexamethyldisilazane | 999–97–3 | | 10/12/93 | 10/12/03 |
| Hexamethyldisiloxane | 107–46–0 | | 10/12/93 | 10/12/03 |
| Hexatriacontamethylcyclooctadecasiloxane | 23523–12–8 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Hexatriacontamethylheptadecasiloxane | 18844–04–7 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Methylpolysiloxane | 9004–73–3 | | 10/12/93 | 10/12/03 |
| Methylvinylcyclosiloxane | 2554–06–5 | | 10/12/93 | 10/12/03 |
| Siloxanes and silicones, di-Me, hydroxy-terminated | 70131-67-8 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Octacosamethylcyclotetradecasiloxane | 149050-40-8 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Octacosamethyltridecasiloxane | 2471–09–2 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Octadecamethylcyclononasiloxane | 556–71–8 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Octadecamethyloctasiloxane | 556–69–4 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Octamethyltrisiloxane | 107–51–7 | | 10/12/93 | 10/12/03 |
| Octaphenylcyclotetrasiloxane | 546–56–5 | | 10/12/93 | 10/12/03 |
| Octatriacontamethylcyclononadecasiloxane | 150026-97-4 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Octatriacontamethyloctadecasiloxane | 36938–52–0 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Polymethyloctadecylsiloxane | not available | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Tetracontamethylcycloeicosasiloxane | 150026-98-5 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Tetracontamethylnonadecasiloxane | 150026-99-6 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Tetracosamethylcyclododecasiloxane | 18919–94–3 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Tetracosamethylundecasiloxane | 107–53–9 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Tetradecamethylcycloheptasiloxane | 107–50–6 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Tetradecamethylhexasiloxane | 107–52–8 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |

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|---|---|---|---|---|
| Tetramethylcyclotetrasiloxane | 2370–88–9 | | 10/12/93 | 10/12/03 |
| Tetramethyldivinyldisiloxane | 2627–95–4 | | 10/12/93 | 10/12/03 |
| Tetratriacontamethylcycloheptadecasiloxane | 150026-96-3 | | 10/12/93 | 10/12/03 |
| Tetratriacontamethylhexadecasiloxane | 36938–50–8 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Triacontamethylcyclopentadecasiloxane | 23523–14–0 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Triacontamethyltetradecasiloxane | 2471–10–5 | § 716.20(b)(2) applies | 10/12/93 | 10/12/03 |
| Trifluoropropylmethylcyclotrisiloxane | 2374–14–3 | | 10/12/93 | 10/12/03 |
| Substantially produced chemicals in need of subchronic tests:. | | | | |
| Acetoacetanilide | 102–01–2 | | 9/30/91 | 12/19/95 |
| 4-(Acetylamino)benzenesulfonyl chloride | 121–60–8 | | 9/30/91 | 9/30/01 |
| 2-(2-Aminoethoxy)-ethanol | 929–06–6 | | 6/30/92 | 6/30/02 |
| 7-Amino-4-hydroxy-2-naphthalenesulfonic acid | 87–02–5 | | 9/30/91 | 12/19/95 |
| Ammonium carbamate | 1111–78–0 | | 9/30/91 | 12/19/95 |
| 1,3-Benzenedisulfonic acid | 98–48–6 | | 9/30/91 | 12/19/95 |
| Bis(2-ethylhexyl)-2-butenedioate | 142–16–5 | | 9/30/91 | 12/19/95 |
| Bromamine acid | 116–81–4 | | 9/30/91 | 12/19/95 |
| Butyric anhydride | 106–31–0 | | 9/30/91 | 12/19/95 |
| Ethanol, 2-(2-ethoxyethoxy)-, acetate | 112–15–2 | | 9/30/91 | 9/30/01 |
| 1,2-Dichlorobutane | 616–21–7 | | 9/30/91 | 12/19/95 |
| 3,4-Dichlorobutene | 760–23–6 | | 9/30/91 | 12/19/95 |
| 3,4-Dichloronitrobenzene | 99–54–7 | | 9/30/91 | 9/30/01 |
| 1,3-Dicyanobenzene | 626–17–5 | | 9/30/91 | 9/30/01 |
| Diethylene glycol dimethyl ether | 111–96–6 | | 9/30/91 | 9/30/01 |
| 4-Ethoxynitrobenzene | 100–29–8 | | 9/30/91 | 9/30/01 |
| 2-Ethylanthraquinone | 84–51–5 | | 9/30/91 | 12/19/95 |
| Hexa(methoxymethyl) melamine | 3089–11–0 | | 9/30/91 | 9/30/01 |
| 3-Hydroxy-2-naphthoic acid | 92–70–6 | | 9/30/91 | 12/19/95 |
| Isobutyl acrylate | 106–63–8 | | 9/30/91 | 12/19/95 |
| Isophthaloyl chloride | 9–63–8 | | 9/30/91 | 12/19/95 |
| 4-Methyl-2-nitro-phenol | 119–33–5 | | 9/30/91 | 9/30/01 |
| 2-(4-Morpholinyldithio)-benzothiazole | 95–32–9 | | 9/30/91 | 12/19/95 |
| Naphthalenedicarboxylic anhydride | 81–84–5 | | 9/30/91 | 9/30/01 |
| 1-Naphthol | 90–15–3 | | 9/30/91 | 12/19/95 |
| *p,p*'-Oxybis(benzenesulfonylhydrazide) | 80–51–3 | | 9/30/91 | 9/30/01 |
| 2,4-Pentanedione | 123–54–6 | | 9/30/91 | 12/19/95 |
| Perfluoro-N-hexane | 355–42–0 | | 9/30/91 | 12/19/95 |
| Perfluorotributylamine | 311–89–7 | | 9/30/91 | 12/19/95 |
| Propanoic anhydride | 123–62–6 | | 9/30/91 | 12/19/95 |
| Quinacridone | 1047–16–1 | | 9/30/91 | 12/19/95 |
| Terephthaloyl chloride | 100–20–9 | | 9/30/91 | |
| Trichloromethanesulfenyl chloride | 594–42–3 | | 9/30/91 | 9/30/01 |
| Triethylene glycol bis(2-ethylhexanoate) | 94–28–0 | | 9/30/91 | 12/19/95 |
| Sulphones:. | | | | |
| 2-Amino-4-[(2-hydroxyethyl) sulfonyl]phenol | 17601–96–6 | | 9/30/91 | 12/19/95 |
| 2-Amino-4-(methylsulfonyl)phenol | 98–30–6 | | 9/30/91 | 12/19/95 |
| 2-[(6-Amino-2-naphthalenyl) sulfonyl]ethanol | 52218–35–6 | | 9/30/91 | 12/19/95 |

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|---|---|---|---|---|
| 2-[(3-Aminophenyl)sulfonyl]ethanol | 5246–57–1 | | 9/30/91 | 12/19/95 |
| Bisphenol S | 80–09–1 | | 9/30/91 | 12/19/95 |
| 3-(Decyloxy)tetrahydrothiophene 1,1-dioxide | 18760–44–6 | | 9/30/91 | 12/19/95 |
| 4,4'-Diaminodiphenyl sulfone | 80–08–0 | | 9/30/91 | 12/19/95 |
| 4-[4-[(2,6-Dichloro-4-nitrophenyl)azo]phenyl] thiomorpholine, 11,1-dioxide | 17741–62–7 | | 9/30/91 | 12/19/95 |
| 1-(Diiodomethyl)sulfonyl-4-methyl benzene | 20018–09–1 | | 9/30/91 | 12/19/95 |
| Dimethylsulfone | 67–71–0 | | 9/30/91 | 12/19/95 |
| Diphenylsulfone | 127–63–9 | | 9/30/91 | 12/19/95 |
| 3-[N-Ethyl-4-[[6-(methylsulfonyl)-2-benzothiazolyl]azo]-m-toluidino]propionitrile | 16588–67–3 | | 9/30/91 | 12/19/95 |
| 1,1'-[Methylenebis(sulfonyl)]bis-2-chloroethane | 41123–59–5 | | 9/30/91 | 12/19/95 |
| 2,2'-[Methylenebis(sulfonyl)]bisethanol | 41123–69–7 | | 9/30/91 | 12/19/95 |
| 1,1'-[Methylenebis(sulfonyl)]bisethene | 3278–22–6 | | 9/30/91 | 12/19/95 |
| 6-Methylsulfonyl)-2-benzothiazolamine | 17557–67–4 | | 9/30/91 | 12/19/95 |
| 2-[(3-Nitrophenyl)sulfonyl]ethanol | 41687–30–3 | | 9/30/91 | 12/19/95 |
| 1,1'-[Oxybis(methylenesulfonyl)]bis-2-chloroethane | 53061–10–2 | | 9/30/91 | 12/19/95 |
| 2,2'-[Oxybis(methylenesulfonyl)] bisethanol | 36724–43–3 | | 9/30/91 | 12/19/95 |
| 1,1'-[Oxybis(methylenesulfonyl)] bisethene | 26750–50–5 | | 9/30/91 | 12/19/95 |
| 4-[[4-(Phenylmethoxy)phenyl]sulfonyl] phenol | 63134–33–8 | | 9/30/91 | 12/19/95 |
| 4-Phenylthiomorpholine, 1,1-dioxide | 17688–68–5 | | 9/30/91 | 12/19/95 |
| Sulfolane | 126–33–0 | | 9/30/91 | 12/19/95 |
| 3-Sulfolene | 77–79–2 | | 9/30/91 | 12/19/95 |
| Sulfonyl bis(4-chlorobenzene) | 80–07–9 | | 9/30/91 | 12/19/95 |
| 2,2'-Sulfonyl bisethanol | 2580–77–0 | | 9/30/91 | 12/19/95 |

[53 FR 38645, Sept. 30, 1988; 53 FR 45656, Nov. 10, 1988, as amended at 53 FR 46281, Nov. 16, 1988; 53 FR 49966, Dec. 12, 1988; 54 FR 617, Jan. 9, 1989; 54 FR 8488, Feb. 28, 1989; 54 FR 51134, Dec. 12, 1989; 55 FR 35631, Aug. 31, 1990; 55 FR 36640, Sept. 6, 1990; 55 FR 39774, Sept. 28, 1990; 55 FR 39784, Sept. 28, 1990; 56 FR 42693, Aug. 29, 1991; 56 FR 49146, Sept. 27, 1991; 57 FR 29034, June 30, 1992; 58 FR 13559, Mar. 12, 1993; 58 FR 28515, May 14, 1993; 58 FR 42678, Aug. 11, 1993; 58 FR 47649, Sept. 10, 1993; 58 FR 68315, 68321, Dec. 27, 1993; 59 FR 5960, Feb. 9, 1994; 59 FR 22519, May 2, 1994; 59 FR 60719, Nov. 28, 1994; 60 FR 34884, July 5, 1995; 60 FR 48662, Sept. 20, 1995; 61 FR 7425, Feb. 28, 1996; 61 FR 14596, Apr. 2, 1996]

EDITORIAL NOTE: At 59 FR 14115, Mar. 25, 1994, in §716.120 paragraph (d), the chemical substances under the category ''propylene glycol ethers and esters'' and all related dates, was stayed effective March 25, 1994.

# PART 717—RECORDS AND REPORTS OF ALLEGATIONS THAT CHEMICAL SUBSTANCES CAUSE SIGNIFICANT ADVERSE REACTIONS TO HEALTH OR THE ENVIRONMENT

## Subpart A—General Provisions

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717.7 Persons not subject to this part.
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717.12 Significant adverse reactions that must be recorded.
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717.17 Inspection and reporting requirements.
717.19 Confidentiality.

AUTHORITY: 15 U.S.C. 2607(c).

SOURCE: 48 FR 38187, Aug. 22, 1983, unless otherwise noted.

## Subpart A—General Provisions

### §717.1 Scope and compliance.

Section 8 (c) of the Toxic Substances Control Act (TSCA) requires manufacturers, processors, and distributors of chemical substances and mixtures:

(a) To keep ''records of significant adverse reactions to health or the environment, as determined by the Administrator by rule, alleged to have been caused by the substance or mixture.''

(b) To ''permit inspection and submit copies of such records'', upon request of any designated representative of the Administrator. This rule implements section 8(c) of TSCA. It describes the records to be kept and prescribes the conditions under which certain firms must submit or make the records available to a duly designated representative of the Administrator.

### §717.3 Definitions.

The definitions set forth in section 3 of TSCA and the following definitions apply to this part:

(a) *Allegation* means a statement, made without formal proof or regard for evidence, that a chemical substance or mixture has caused a significant adverse reaction to health or the environment.

(b) *Firm* or *company* means any person, that is subject to this part, as defined in §717.5.

(c)(1) *Known human effects* means a commonly recognized human health effect of a particular substance or mixture as described either in:

(i) Scientific articles or publications abstracted in standard reference sources.

(ii) The firm's product labeling or material safety data sheets (MSDS).

(2) However, an effect is not a ''known human effect'' if it:

(i) Was a significantly more servere toxic effect than previously described.

(ii) Was a manifestation of a toxic effect after a significantly shorter exposure period or lower exposure level than described.

(iii) Was a manifestation of a toxic effect by an exposure route different from that described.

(d) *Manufacture* or *process* means to manufacture or process for commercial purposes.

(e)(1) *Manufacture for commercial purposes* means to import, produce, or manufacture with the purpose of obtaining an immediate or eventual commercial advantage for the manufacturer, and includes, among other things, such ''manufacture'' of any amount of a chemical substance or mixture:

(i) For distribution in commerce, including for test marketing.

(ii) For use by the manufacturer, including use for product research and development, or as an intermediate.

(2) *Manufacture for commercial purposes* also applies to substances that are produced coincidentally during the manufacture, processing, use, or disposal of another substance or mixture, including both byproducts that are separated from that other substances or mixture and impurities that remain in that substance or mixture. Such byproducts and impurities may, or may not, in themselves have commercial value. They are nonetheless produced for the purpose of obtaining a commercial advantage since they are part of the manufacture of a chemical product for a commercial purpose.

(f) *Person* includes any individual, firm, company, corporation, joint venture, partnership, sole proprietorship, association, or any other business entity, any State or political subdivision thereof, and any department, agency, or instrumentally of the Federal Government.

(g) *Process for commercial purposes* means the preparation of a chemical substance or mixture, after its manufacture, for distribution in commerce with the purpose of obtaining an immediate or eventual commercial advantage for the processor. Processing of any amount of a chemical substance or mixture is included. If a chemical substance or mixture containing impurities is processed for commercial purposes, then those impurities are also processed for commercial purposes.

(h) *Retailer* means a person who distributes in commerce a chemical substance, mixture, or article to ultimate purchasers who are not commercial entities.

(i) *Significant adverse reactions* are reactions that may indicate a substantial impairment of normal activities, or long-lasting or irreversible damage to health or the environment.

(j) *Site* means a contiguous property unit. Property divided only by a public right-of-way is considered one site. There may be multiple manufacturing, processing, or distribution activities occurring within a single site.

(k) *Substance* means a chemical substance or mixture unless otherwise indicated.

**§ 717.5 Persons subject to this part.**

(a) *Manufacturers.* (1) All manufacturers of chemical substances are subject to this part except as provided in § 717.7(a). If manufacture of a chemcial substance occurs at any site owned or controlled by a firm then that firm is subject to this part.

(2) A manufacturer must collect:

(i) Any allegation identifying a chemical substance it manufactures and any allegation identifying the operations in the manufacture of any chemical substance it manufactures.

(ii) Any allegation identifying any of its own processing or distribution in commerce activities with respect to any chemical substance it manufactures.

(iii) Any allegation identifying emissions, effluents, or other discharges from activities described in this paragraph.

(iv) Any allegation identifying a substance produced coincidentally during processing, use, storage or disposal of a chemical substance it manufactures.

(3) For the purpose of this part, owned or controlled means ownership of 50 percent or more of a firm's voting stock or other equity rights, or the power to control the management and policies of that firm.

(b) *Processors.* (1) A person who processes chemical substances, who is not also a manufacturer of those chemical substances, is subject to this Part if (i) the person processes chemical substances to produce mixtures, or (ii) the person repackages chemical substances or mixtures.

(2) As a processor subject to this part such person must collect:

(i) Any allegation identifying any mixture it produces and distributes in commerce and any allegation identifying any chemical substance or mixture it repackages and distributes in commerce.

(ii) Any allegation identifying any of its own further processing or distribution in commerce activities of the products described in paragraph (b)(2)(i) of this section.

(iii) Any allegation identifying emissions, effluents, or other discharges from activities described in this paragraph.

(iv) Any allegation identifying a substance produced coincidentally during the processing, use, storage or disposal of the products described in paragraph (b)(2)(i) of this section.

(c) *SIC code.* SIC codes applicable to this part are published in Standard Industrial Classification Manual—1972 and the 1977 Supplement. This manual and supplement may be obtained from the U.S. Government Printing Office, Washington, D.C. 20402—stock number 4101–0006 and stock number 003–005–0170–0 respectively. Where there is a conflict between the SIC code use of a term and the definition of that term in this part, the definition in this part applies.

[48 FR 38187, Aug 22, 1983, as amended at 50 FR 46769, Nov. 13, 1985]

### §717.7 Persons not subject to this part.

(a) *Manufacturers.* (1) Persons or site activities are exempt from this part if the means by which they manufacture a chemical substance solely involves mining or other solely extractive functions, e.g., those companies or sites within a company whose sole function is to mine mineral ores, extract petroleum or natural gas, quarry non-metallic minerals (including extraction of salts from seawater or brines), mine or otherwise extract coal, or separate gases from the atmosphere. This exemption may include, but is not necessarily limited to, firms engaged in activities as described in SIC Division B—Mining and SIC Code 2813—Industrial Gases.

(2) A person is not subject to this part if the chemical substances that person causes to be produced are limited to:

(i) Chemical substances that result from chemical reactions that occur incidental to exposure of another chemical substance, mixture, or article to environmental factors such as air, moisture, microbial organisms, or sunlight.

(ii) Chemical substances that result from chemical reactions that occur incidental to storage or disposal of other chemical substances, mixtures, or articles.

(iii) Chemical substances that result from chemical reactions that occur upon end use of other chemical substances, mixtures, or articles such as adhesives, paints, miscellaneous cleaners or other housekeeping products, fuel additives, water softening and treatment agents, photographic films, batteries, matches, or safety flares, and that are not themselves manufactured or imported for distribution in commerce for use as chemical intermediates.

(iv) Chemical substances that result from chemical reactions that occur upon use of curable plastic or rubber molding compounds, inks, drying oils, metal finishing compounds, adhesives, or paints, or other chemical substance formed during the manufacture of an article destined for the marketplace without further chemical change of the chemical substance.

(v) Chemical substances that result from chemical reactions that occur when (A) a stabilizer, colorant, odorant, antioxidant, filler, solvent, carrier, surfactant, plasticizer, corrosion inhibitor, antifoamer or defoamer, dispersant, precipitation-inhibitor, binder, emulsifier, deemulsifier, dewatering agent, agglomerating agent, adhesion promoter, flow modifier, pH adjuster, sequestrant, coagulant, flocculant, fire retardant, lubricant, chelating agent, or quality control reagent functions as intended, or (B) a chemical substance, which is intended solely to impart a specific physicochemical characteristic, functions as intended.

(b) [Reserved]

(c) *Sole distributors.* A person solely engaged in the distribution of chemical substances is exempt from this part, unless such person is also a manufacturer or processor subject to this part. For example, a ''distributor'' who repackages chemical substances or mixtures is considered to be a processor and, thus, is not a sole distributor. Sole distributors may include, but are not limited to, those firms that distribute chemical substances as described in the wholesale trade SIC codes 5161—Chemicals and Allied Products, 5171—Petroleum Bulk Stations and Terminals, and 5172—Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals.

(d) *Retailers.* A person who is a retailer is exempt from this part unless

such person is also a manufacturer or a processor subject to this part.

[48 FR 38187, Aug 22, 1983, as amended at 50 FR 46770, Nov. 13, 1985]

### § 717.10 Allegations subject to this part.

(a) Allegations subject to this part are those allegations received on or after November 21, 1983 by persons subject to this part.

(b) Allegations subject to this part are those that:

(1) Are submitted either in writing and are signed by the alleger, or are submitted orally. In the case of an oral allegation, the firm must transcribe the allegation into written form, or it must inform the alleger that such allegation may be subject to this part and request that the alleger submit such allegation to the firm in writing and signed.

(2) Implicate a substance that caused the stated significant adverse reaction by one of the following:

(i) Naming the specific substance.

(ii) Naming a mixture that contains a specific substance.

(iii) Naming an article that contains a specific substance.

(iv) Naming a company process or operation in which substances are involved.

(v) Identifying an effluent, emission, or other discharge from a site of manufacturing, processing or distribution of a substance.

(c) Allegations subject to this part may be made to a firm by any person, such as an employee of the firm, individual consumer, a neighbor of the firm's plant, another firm on behalf of its employees or an organization on behalf of its members.

(d) EPA intends that firms should, to the maximum practical extent, provide allegers with information regarding the ultimate disposition of their allegations. For example, firms could provide a brief notice to the alleger stating that a record was created under this part based upon their allegation, or that a record was not created and briefly explain the reasons why not.

### § 717.12 Significant adverse reactions that must be recorded.

(a) Except as provided in paragraph (b) of this section, significant adverse reactions to human health that must be recorded include but are not limited to:

(1) Long-lasting or irreversible damage, such as cancer or birth defects.

(2) Partial or complete impairment of bodily functions, such as reproductive disorders, neurological disorders or blood disorders.

(3) An impairment of normal activities experienced by all or most of the persons exposed at one time.

(4) An impairment of normal activities which is experienced each time an individual is exposed.

(b) Firms are not required to record significant adverse reactions that are known human effects as defined in § 717.3(c).

(c) Except as provided in paragraph (d) of this section, significant adverse reactions to the environment that must be recorded, even if restricted to the environs of a plant or disposal site, include but are not limited to:

(1) Gradual or sudden changes in the composition of animal life or plant life, including fungal or microbial organisms, in an area.

(2) Abnormal number of deaths of organisms (e.g., fish kills).

(3) Reduction of the reproductive success or the vigor of a species.

(4) Reduction in agricultural productivity, whether crops or livestock.

(5) Alterations in the behavior or distribution of a species.

(6) Long lasting or irreversible contamination of components of the physical environment, especially in the case of ground water, and surface water and soil resources that have limited self-cleansing capability.

(d) Firms are not required to record a significant adverse reaction to the environment if the alleged cause of that significant adverse reaction can be directly attributable to an accidental spill or other accidental discharge, emission exceeding permitted limits, or other incident of environmental contamination that has been reported to

the Federal Government under any applicable authority.

[48 FR 38187, Aug. 22, 1983, as amended at 49 FR 23183, June 5, 1984; 58 FR 34204, June 23, 1993]

### § 717.15 Recordkeeping requirements.

(a) *Establishment and location of records.* A firm subject to this part shall establish and maintain records of significant adverse reactions alleged to have been caused by chemical substances or mixtures manufactured or processed by the firm. Such records shall be kept at the firm's headquarters or at any other appropriate location central to the firm's chemical operations.

(b) *Content of records.* The record shall consist of the following:

(1) The original allegation as received.

(2) An abstract of the allegation and other pertinent information as follows:

(i) The name and address of the plant site which received the allegation.

(ii) The date the allegation was received at that site.

(iii) The implicated substance, mixture, article, company process or operation, or site discharge.

(iv) A description of the alleger (e.g., ''company employee,'' ''individual consumer,'' ''plant neighbor''). If the allegation involves a health effect, the sex and year of birth of the individual should be recorded, if ascertainable.

(v) A description of the alleged health effect(s). The description must relate how the effect(s) became known and the route of exposure, if explained in the allegation.

(vi) A description of the nature of the alleged environmental effect(s), identifying the affected plant and/or animal species, or contaminated portion of the physical environment.

(3) The results of any self-initiated investigation with respect to an allegation. (EPA does not require persons subject to this part to investigate allegations received, and no provision of this part shall be construed to imply that EPA recommends, encourages or requires such investigation.)

(4) Copies of any further required records or reports relating to the allegation. For example, if an employee allegation results in a requirement for the firm to record the case on Occupational Safety and Health Form 101 or appropriate substitute (see 29 CFR Part 1904 for requirements under the Occupational Safety and Health Act of 1970), a copy of that OSHA record must be included in the allegation record.

(c) *File structure.* Records must be retrievable by the alleged cause of the significant adverse reaction, which cause may be one of the following:

(1) A specific chemical identity.

(2) A mixture.

(3) An article.

(4) A company process or operation.

(5) A site emission, effluent or other discharge.

(d) *Retention period.* Records of significant adverse reactions to the health of employees shall be retained for a period of 30 years from the date such reactions were first reported to or known by the person maintaining such records. This provision requires persons subject to this part to retain for 30 years an employee health related allegation, arising from any employment related exposure, whether or not such allegation was submitted by or on the behalf of that recordkeeper's own employee. Any other record of significant adverse reactions shall be maintained for a period of five years from the date the information contained in the record was first reported to or known by the person maintaining the record.

(e) *Transfer of records.* (1) If a firm ceases to do business, the successor must receive and keep all the records that must be kept under this part.

(2) If a firm ceases to do business and there is no successor to receive and keep the records for the prescribed period, these records must be transmitted to EPA. See § 717.17(c) for the address to which such records must be sent.

[48 FR 38187, Aug. 22, 1983, as amended at 49 FR 23183, June 5, 1984; 58 FR 34204, June 23, 1993]

### § 717.17 Inspection and reporting requirements.

(a) *Inspection.* Firms must make records of allegations available for inspection by any duly designated representative of the Administrator.

(b) *Reporting.* Each person who is required to keep records under this part must submit copies of those records to

the Agency as required by the EPA Administrator or appropriate designee. EPA will notify those responsible for reporting by letter or will announce any such requirements for submitting copies of records by a notice in the FEDERAL REGISTER. Such letter or notice will be signed by the Administrator or appropriate designee, and will specify which records or portion of records must be submitted. The reporting period will be specified by the letter or notice but in no case will such reporting period be less than 45 days from the date of the letter or the effective date of the notice.

(c) *How to report.* When required to report, firms must submit copies of records (preferably by certified mail) to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATTN: 8(c) Allegations.

[48 FR 38187, Aug. 22, 1983, as amended at 49 FR 23183, June 5, 1984; 52 FR 20084, May 29, 1987; 53 FR 12523, Apr. 15, 1988; 58 FR 34204, June 23, 1993; 60 FR 34464, July 3, 1995]

### § 717.19 Confidentiality.

(a) Any person submitting copies of records may assert a business confidentiality claim covering all or part of the submitted information. Any information covered by a claim will be disclosed by EPA only as provided in procedures set forth at Part 2 of this title.

(b) If no claim accompanies a document at the time it is submitted to EPA, the document will be placed in an open file available to the public without further notice to the respondent.

(c) To asset a claim of confidentiality for information contained in a submitted record, the respondent must submit two copies of the document.

(1) One copy must be complete. In that copy, the respondent must indicate what information, if any, is claimed as confidential by marking the specific information on each page with a label such as ''confidential'', ''proprietary'', or ''trade secret'' and briefly state the basis of the claim.

(2) If some information is claimed as confidential, the respondent must submit a second copy of the record. The second copy must be complete, except that all information claimed as confidential in the first copy must be deleted.

(3) The first copy will be for internal use by EPA. The second copy will be placed in an open file to be available to the public.

(4) Failure to furnish a second copy when information is claimed as confidential in the first copy will be considered a presumptive waiver of the claim of confidentiality. EPA will notify the respondent by certified mail that a finding of a presumptive waiver of the claim of confidentiality has been made. The respondent will be given 30 days from the date of receipt of notification to submit the required second copy. If the respondent fails to submit the second copy within the 30 days, EPA will place the first copy in the public file.

## PART 720—PREMANUFACTURE NOTIFICATION

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Subpart G—Compliance and Inspections

720.120 Compliance.
720.122 Inspections.

AUTHORITY: 15 U.S.C. 2604, 2607, and 2613.

SOURCE: 48 FR 21742, May 13, 1983, unless otherwise noted.

## Subpart A—General Provisions

### §720.1 Scope.

This part establishes procedures for the reporting of new chemical substances by manufacturers and importers under section 5 of the Toxic Substances Control Act, 15 U.S.C. 2604. The rule defines the persons and chemical substances subject to the reporting requirements, prescribes the contents of section 5 notices, and establishes procedures for submitting notices. The rule also establishes EPA policy regarding claims of confidentiality for, and public disclosure of, various categories of information submitted in connection with section 5 notices.

[48 FR 21742, May 13, 1983, as amended at 58 FR 34204, June 23, 1993]

### §720.3 Definitions.

(a)(1) For the purposes of this part, the terms *cosmetic, device, drug, food,* and *food additive* have the meanings contained in the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 321 *et seq.,* and the regulations issued under it. In addition, the term ''food'' includes poultry and poultry products, as defined in the Poultry Products Inspection Act, 21 U.S.C. 453 *et seq.;* meats and meat food products, as defined in the Federal Meat Inspection Act, 21 U.S.C. 60 *et seq.;* and eggs and egg products, as defined in the Egg Products Inspection Act, 21 U.S.C. 1033 *et seq.*

(2) The term *pesticide* has the meaning contained in the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136 *et seq.* and the regulations issued under it.

(3) The terms *byproduct material, source material,* and *special nuclear material* have the meanings contained in the Atomic Energy Act of 1954, 42 U.S.C 2014 *et seq.* and the regulations issued under it.

(b) *Act* means the Toxic Substances Control Act, 15 U.S.C. 2601 *et seq.*

(c) *Article* means a manufactured item (1) which is formed to a specific shape or design during manufacture, (2) which has end use function(s) dependent in whole or in part upon its shape or design during end use, and (3) which has either no change of chemical composition during its end use or only those changes of composition which have no commercial purpose separate from that of the article and that may occur as described in §720.36(g)(5), except that fluids and particles are not considered articles regardless of shape or design.

(d) *Byproduct* means a chemical substance produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance or mixture.

(e) *Chemical substance* means any organic or inorganic substance of a particular molecular identity, including any combination of such substances occurring in whole or in part as a result of a chemical reaction or occurring in nature, and any chemical element or uncombined radical, except that ''chemical substance'' does not include:

(1) Any mixture.

(2) Any pesticide when manufactured, processed, or distributed in commerce for use as a pesticide.

(3) Tobacco or any tobacco product.

(4) Any source material, special nuclear material, or byproduct material.

(5) Any pistol, firearm, revolver, shells, or cartridges.

(6) Any food, food additive, drug, cosmetic, or device, when manufactured, processed, or distributed in commerce for use as a food, food additive, drug, cosmetic, or device.

(f) *Commerce* means trade, traffic, transportation, or other commerce (1) between a place in a State and any place outside of such State, or (2) which affects trade, traffic, transportation, or commerce between a place in a State and any place outside of such State.

(g) *Customs territory of the United States* means the 50 States, Puerto Rico, and the District of Columbia.

(h) *Director* means the Director of the EPA Office of Pollution Prevention and Toxics.

(i) *Distribute in commerce* means to sell in commerce, to introduce or deliver for introduction into commerce, or to hold after introduction into commerce.

(j) *EPA* means the U.S. Environmental Protection Agency.

(k) *Health and safety study* or *study* means any study of any effect of a chemical substance or mixture on health or the environment or on both, including underlying data and epidemiological studies, studies of occupational exposure to a chemical substance or mixture, toxicological, clinical, and ecological, or other studies of a chemical substance or mixture, and any test performed under the Act. Chemical identity is always part of a health and safety study.

(1) Not only is information which arises as a result of a formal, disciplined study included, but other information relating to the effects of a chemical substance or mixture on health or the environment is also included. Any data that bear on the effects of a chemical substance on health or the environment would be included.

(2) Examples include:

(i) Long- and short-term tests of mutagenicity, carcinogenicity, or teratogenicity; data on behavioral disorders; dermatoxicity; pharmacological effects; mammalian absorption, distribution, metabolism, and excretion; cumulative, additive, and synergistic effects; acute, subchronic, and chronic effects; and structure/activity analyses.

(ii) Tests for ecological or other environmental effects on invertebrates, fish, or other animals, and plants, including: Acute toxicity tests, chronic toxicity tests, critical life stage tests, behavioral tests, algal growth tests, seed germination tests, plant growth or damage tests, microbial function tests, bioconcentration or bioaccumulation tests, and model ecosystem (microcosm) studies.

(iii) Assessments of human and environmental exposure, including workplace exposure, and impacts of a particular chemical substance or mixture on the environment, including surveys, tests, and studies of: Biological, photochemical, and chemical degradation; air, water, and soil transport; biomagnification and bioconcentration; and chemical and physical properties, e.g., boiling point, vapor pressure, evaporation rates from soil and water, octanol/water partition coefficient, and water solubility.

(iv) Monitoring data, when they have been aggregated and analyzed to measure the exposure of humans or the environment to a chemical substance or mixture.

(v) Any assessments of risk to health and the environment resulting from the manufacture, processing, distribution in commerce, use, or disposal of the chemical substance.

(l) *Importer* means any person who imports a chemical substance, including a chemical substance as part of a mixture or article, into the customs territory of the United States. ''Importer'' includes the person primarily liable for the payment of any duties on the merchandise or an authorized agent acting on his or her behalf. The term also includes, as appropriate:

(1) The consignee.

(2) The importer of record.

(3) The actual owner if an actual owner's declaration and superseding bond has been filed in accordance with 19 CFR 141.20; or

(4) The transferee, if the right to draw merchandise in a bonded warehouse has been transferred in accordance with Subpart C of 19 CFR Part 144. (See ''principal importer.'')

(m) *Impurity* means a chemical substance which is unintentionally present with another chemical substance.

(n) *Intermediate* means any chemical substance that is consumed, in whole or in part, in chemical reactions used for the intentional manufacture of another chemical substance(s) or mixture(s), or that is intentionally

present for the purpose of altering the rates of such chemical reactions.

(o) *Inventory* means the list of chemical substances manufactured or processed in the United States that EPA compiled and keeps current under section 8(b) of the Act.

(p) *Known to or reasonably ascertainable by* means all information in a person's possession or control, plus all information that a reasonable person similarly situated might be expected to possess, control, or know.

(q) *Manufacture* means to produce or manufacture in the United States or import into the customs territory of the United States.

(r) *Manufacture or import for commercial purposes* means:

(1) To import, produce, or manufacture with the purpose of obtaining an immediate or eventual commercial advantage for the manufacturer or importer, and includes, among other things, ''manufacture'' of any amount of a chemical substance or mixture:

(i) For commercial distribution, including for test marketing.

(ii) For use by the manufacturer, including use for product research and development or as an intermediate.

(2) The term also applies to substances that are produced coincidentally during the manufacture, processing, use, or disposal of another substance or mixture, including byproducts that are separated from that other substance or mixture and impurities that remain in that substance or mixture. Byproducts and impurities without separate commercial value are nonetheless produced for the purpose of obtaining a commercial advantage, since they are part of the manufacture of a chemical substance for commercial purposes.

(s) *Manufacture solely for export* means to manufacture or import for commercial purposes a chemical substance solely for export from the United States under the following restrictions on activities in the United States:

(1) Distribution in commerce is limited to purposes of export or processing solely for export as defined in § 721.3 of this chapter.

(2) The manufacturer or importer, and any person to whom the substance is distributed for purposes of export or processing solely for export (as defined in § 721.3 of this chapter), may not use the substance except in small quantities solely for research and development in accordance with § 720.36.

(t) *Manufacturer* means a person who imports, produces, or manufactures a chemical substance. A person who extracts a component chemical substance from a previously existing chemical substance or a complex combination of substances is a manufacturer of that component chemical substance. A person who contracts with a manufacturer to manufacture or produce a chemical substance is also a manufacturer if (1) the manufacturer manufactures or produces the substance exclusively for that person, and (2) that person specifies the identity of the substance and controls the total amount produced and the basic technology for the plant process.

(u) *Mixture* means any combination of two or more chemical substances if the combination does not occur in nature and is not, in whole or in part, the result of a chemical reaction; except ''mixture'' does include (1) any combination which occurs, in whole or in part, as a result of a chemical reaction if the combination could have been manufactured for commercial purposes without a chemical reaction at the time the chemical substances comprising the combination were combined, and if all of the chemical substances comprising the combination are not new chemical substances, and (2) hydrates of a chemical substance or hydrated ions formed by association of a chemical substance with water, so long as the nonhydrated form is itself not a new chemical substance.

(v) *New chemical substance* means any chemical substance which is not included on the Inventory.

(w) *Nonisolated intermediate* means any intermediate that is not intentionally removed from the equipment in which it is manufactured, including the reaction vessel in which it is manufactured, equipment which is ancillary to the reaction vessel, and any equipment through which the chemical substance passes during a continuous flow process, but not including tanks or

other vessels in which the substance is stored after its manufacture.

(x) *Person* means any natural person, firm, company, corporation, joint-venture, partnership, sole proprietorship, association, or any other business entity, any State or political subdivision thereof, any municipality, any interstate body, and any department, agency or instrumentality of the Federal Government.

(y) *Possession or control* means in possession or control of the submitter, or of any subsidiary, partnership in which the submitter is a general partner, parent company, or any company or partnership which the parent company owns or controls, if the subsidiary, parent company, or other company or partnership is associated with the submitter in the research, development, test marketing, or commercial marketing of the chemical substance in question. (A parent company owns or controls another company if the parent owns or controls 50 percent or more of the other company's voting stock. A parent company owns or controls any partnership in which it is a general partner). Information is included within this definition if it is:

(1) In files maintained by submitter's employees who are:

(i) Associated with research, development, test marketing, or commercial marketing of the chemical substance in question.

(ii) Reasonably likely to have such data.

(2) Maintained in the files of other agents of the submitter who are associated with research, development, test marketing, or commercial marketing of the chemical substance in question in the course of their employment as such agents.

(z) *Principal importer* means the first importer who, knowing that a new chemical substance will be imported rather than manufactured domestically, specifies the identity of the chemical substance and the total amount to be imported. Only persons who are incorporated, licensed, or doing business in the United States may be principal importers.

(aa) *Process* means the preparation of a chemical substance or mixture, after its manufacture, for distribution in commerce (1) in the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such substance or mixture, or (2) as part of a mixture or article containing the chemical substance or mixture.

(bb) *Processor* means any person who processes a chemical substance or mixture.

(cc) *Small quantities solely for research and development* (or ''small quantities solely for purposes of scientific experimentation or analysis or chemical research on, or analysis of, such substance or another substance, including such research or analysis for the development of a product'') means quantities of a chemical substance manufactured, imported, or processed or proposed to be manufactured, imported, or processed solely for research and development that are not greater than reasonably necessary for such purposes.

(dd) *State* means any State of the United States and the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, the Canal Zone, American Samoa, the Northern Mariana Islands, and any other territory or possession of the United States.

(ee) *Technically qualified individual* means a person or persons (1) who, because of education, training, or experience, or a combination of these factors, is capable of understanding the health and environmental risks associated with the chemical substance which is used under his or her supervision, (2) who is responsible for enforcing appropriate methods of conducting scientific experimentation, analysis, or chemical research to minimize such risks, and (3) who is responsible for the safety assessments and clearances related to the procurement, storage, use, and disposal of the chemical substance as may be appropriate or required within the scope of conducting a research and development activity.

(ff) *Test data* means data from a formal or informal test or experiment, including information concerning the objectives, experimental methods and materials, protocols, results, data analyses, recorded observations, monitoring data, measurements, and conclusions from a test or experiment.

(gg) *Test marketing* means the distribution in commerce of no more than a predetermined amount of a chemical substance, mixture, or article containing that chemical substance or mixture, by a manufacturer or processor, to no more than a defined number of potential customers to explore market capability in a competitive situation during a predetermined testing period prior to the broader distribution of that chemical substance, mixture, or article in commerce.

(hh) *United States,* when used in the geographic sense, means all of the States.

[48 FR 21742, May 13, 1983, as amended at 51 FR 15101, Apr. 22, 1986]

## Subpart B—Applicability

### § 720.22 Persons who must report.

(a)(1) Any person who intends to manufacture a new chemical substance in the United States for commercial purposes must submit a notice unless the substance is excluded under § 720.30.

(2) If a person contracts with a manufacturer to manufacture or produce a new chemical substance, and (i) the manufacturer manufactures or produces the substance exclusively for that person, and (ii) that person specifies the identity of the substance, and controls the total amount produced and the basic technology for the plant process, that person must submit the notice. If it is unclear who must report, EPA should be contacted to determine who must submit the notice.

(3) Only manufacturers that are incorporated, licensed, or doing business in the United States may submit a notice.

(b)(1) Any person who intends to import a new chemical substance into the United States for commercial purposes must submit a notice, unless the substance is excluded under § 720.30 or unless the substance is imported as part of an article.

(2) When several persons are involved in an import transaction, the notice must be submitted by the principal importer. If no one person fits the principal importer definition in a particular transaction, the importer should contact EPA to determine who must submit the notice for that transaction.

### § 720.25 Determining whether a chemical substance is on the Inventory.

(a) A new chemical substance is any chemical substance that is not currently listed on the Inventory.

(b)(1) A chemical substance is listed in the public portion of the Inventory by a specific chemical name (either a Chemical Abstracts (CA) Index Name or a CA Preferred Name) and a Chemical Abstracts Service (CAS) Registry Number if its identity is not confidential. If its identity is confidential, it is listed in the public portion of the Inventory by a TSCA Accession Number and a generic chemical name that masks the specific substance identity. The confidential substance is listed by its specific chemical name only in the confidential portion of the Inventory, which is not available to the public. A person who intends to manufacture or import a chemical substance not listed by specific chemical name in the public portion of the Inventory may ask EPA whether the substance is included in the confidential Inventory. EPA will answer such an inquiry only if EPA determines that the person has a *bona fide* intent to manufacture or import the chemical substance for commercial purposes.

(2) To establish a *bona fide* intent to manufacture or import a chemical substance, the person who proposes to manufacture or import the substance must submit to EPA:

(i) Except as provided in paragraphs (b)((3)(i) and (ii) of this section, the specific chemical identity of the substance that the person intends to manufacture or import, using the currently, correct CA name for the substance and the other correct chemical identity information in accordance with §§720.45(a)(1), (2)), and (3).

(ii) A signed statement that the person intends to manufacture or import that chemical substance for commercial purposes.

(iii)(A) A brief description of the research and development activities conducted to date related to the substance, including the year in which the person first started to conduct research

or development activity on the substance, and the general types of research and development activities conducted thus far (e.g., synthesis, substance isolation/purification, formulating, product development, process development, end-use application, toxicity testing, etc.). The person must also indicate whether any pilot plant or production-scale plant evaluations have been conducted involving the manufacture or processing of the substance.

(B) If an importer is unable to provide the information requested in paragraph (b)(2)(iii)(A) of this section from the foreign manufacturer or supplier, the following information shall be submitted:

(*1*) A brief statement indicating how long the substance has been in commercial use outside of the United States.

(*2*) The name of a country in which it has been commercially used.

(*3*) Whether the importer believes that the substance has already been used commercially, in any country, for the same purpose or application that the importer is intending.

(iv) A specific description of the major intended application or use of the substance.

(v) An infrared spectrum of the substance, or alternative spectra or other data which identify the substance if infrared analysis is not suitable for the substance or does not yield a reasonable amount of structural information. When using alternative spectra or instrumental analysis, the person must submit a spectrum or instrumental readout for the substance.

(vi) The estimated date (month/year) in which the person intends to submit a Premanufacture Notice (PMN) for this substance if EPA informs the notice submitter that the substance is not on the Inventory.

(vii) The address of the facility under the control of the submitter at which the manufacture or processing of the substance would most likely occur. For an imported substance, the facility under the control of the importer at which processing of the substance would likely occur, if any.

(viii)(A) For substances intended to be manufactured in the United States, a description of the most probable manufacturing process that would be used by the submitter to produce the substance for non-exempt commercial purposes.

(B) For substances intended to be imported, a brief description of how the submitter is most likely to process or use the substance for a commercial purpose. If the substance is not expected to be processed or used at any facility under the importer's control, a statement to this effect must be included along with a description of how the substance will be processed or used at sites controlled by others, if this information is known or reasonably ascertainable.

(3)(i) If an importer cannot provide the chemical identity information required by paragraph (b)(2)(i) and (v) of this section because it is claimed confidential by its foreign manufacturer or supplier, the foreign manufacturer or supplier must supply the required information directly to EPA in accordance with §720.45(a)(1), (2), and (3) and reference the importer's notice. If the appropriate supporting document from the foreign party is not received within 30 days after EPA receives the importer's notice, the notice will be considered incomplete.

(ii) If a manufacturer cannot provide all of the required information in accordance with §720.45(a)(1), (2), and (3) because the new chemical substance is manufactured using a reactant that has a specific chemical identity claimed as confidential by its supplier, the notice must contain chemical identity information that is as complete as known by the manufacturer. In addition, a letter of support for the notice must then be sent to EPA by the chemical supplier of the confidential reactant, providing the specific chemical identity of the proprietary reactant. The letter of support must reference the manufacturer's notice. If the appropriate supporting document from the supplier is not received within 30 days after EPA receives the manufacturer's notice, the notice will be considered incomplete.

(4) EPA will review the information submitted by the proposed manufacturer or importer under this paragraph to determine whether it has a *bona fide*

intent to manufacture or import the chemical substance. If necessary, EPA will compare this information either to the information requested for the confidential chemical substance under § 710.7(e)(2)(v) of this chapter or the information requested under § 720.85(b)(3)(iii).

(5) If the proposed manufacturer or importer has shown a *bona fide* intent to manufacture or import the substance, and provide sufficient unambiguous chemical identity information so EPA can make a conclusive determination of the chemical substance's Inventory status, EPA will search the confidential Inventory and inform the proposed manufacturer or importer whether the chemical substance is on the confidential Inventory.

(6) If the chemical substance is found on the confidential Inventory, EPA will notify the person(s) who originally reported the chemical substance that another person has demonstrated a *bona fide* intent to manufacture or import the substance and therefore was told that the chemical substance is on the Inventory.

(7) A disclosure of a confidential chemical identity to a person with a *bona fide* intent to manufacture or import the particular chemical substance will not be considered a public disclosure of confidential business information under section 14 of the Act.

(8) EPA will answer an inquiry on whether a particular chemical substance is on the confidential Inventory within 30 days after receipt of a complete submission under paragraph (b)(2) of this section.

(9) If the required chemical identity information has not been reported correctly or completely in the notice (except as provided under paragraph (b)(3)(ii) of this section) or if any other required data or information has been omitted or is incomplete, EPA will consider the whole notice to be incomplete. As soon as an incomplete notice is identified as such by EPA, the Agency will immediately return the notice directly to the submitter. The submitter must then resubmit the whole, completed *bona fide* notice to EPA in order to have the Agency perform the desired Inventory search and respond to the notice.

[48 FR 21742, May 13, 1983, as amended at 58 FR 34204, June 23, 1993; 60 FR 16309, Mar. 29, 1995]

### § 720.30 Chemicals not subject to notification requirements.

The following substances are not subject to the notification requirements of this part:

(a) Any substance which is not a ''chemical substance'' as defined in § 720.3(e).

(b) Any mixture as defined in § 720.3(u).[1]

(c) Any new chemical substance which will be manufactured or imported in small quantities solely for research and development under § 720.36.

(d) Any new chemical substance which will be manufactured or imported solely for test-marketing purposes under an exemption granted under § 720.38.

(e) Any new chemical substance manufactured solely for export if, when the substance is distributed in commerce:

(1) The substance is labeled in accordance with section 12(a)(1)(B) of the Act.

(2) The manufacturer knows that the person to whom the substance is being distributed intends to export it or process it solely for export as defined in § 721.3 of this chapter.

(f) Any new chemical substance which is manufactured or imported under the terms of a rule promulgated under section 5(h)(4) of the Act.

(g) Any byproduct if its only commercial purpose is for use by public or private organizations that (1) burn it as a fuel, (2) dispose of it as a waste, including in a landfill or for enriching soil, or (3) extract component chemical substances from it for commercial purposes. (This exclusion only applies to the byproduct; it does not apply to the component substances extracted from the byproduct.)

[1] A new chemical substance that is manufactured or imported as part of a mixture is subject to the requirements of this part. This exclusion applies only to a mixture as a whole and not to any chemical substances which are part of the mixture.

(h) The chemical substances described below: (Although they are manufactured for commercial purposes under the Act, they are not manufactured for distribution in commerce as chemical substances per se and have no commercial purpose separate from the substance, mixture, or article of which they are a part.)

(1) Any impurity.

(2) Any byproduct which is not used for commercial purposes.

(3) Any chemical substance which results from a chemical reaction that occurs incidental to exposure of another chemical substance, mixture, or article to environmental factors such as air, moisture, microbial organisms, or sunlight.

(4) Any chemical substance which results from a chemical reaction that occurs incidental to storage or disposal of another chemical substance, mixture, or article.

(5) Any chemical substance which results from a chemical reaction that occurs upon end use of another chemical substance, mixture, or article such as an adhesive, paint, miscellaneous cleanser or other housekeeping product, fuel additive, water softening and treatment agent, photographic film, battery, match, or safety flare, and which is not itself manufactured or imported for distribution in commerce or for use as an intermediate.

(6) Any chemical substance which results from a chemical reaction that occurs upon use of curable plastic or rubber molding compounds, inks, drying oils, metal finishing compounds, adhesives, or paints, or any other chemical substance formed during the manufacture of an article destined for the marketplace without further chemical change of the chemical substance except for those chemical changes that occur as described elsewhere in this paragraph.

(7) Any chemical substance which results from a chemical reaction that occurs when (i) a stabilizer, colorant, odorant, antioxidant, filler, solvent, carrier, surfactant, plasticizer, corrosion inhibitor, antifoamer or defoamer, dispersant, precipitation inhibitor, binder, emulsifier, deemulsifier, dewatering agent, agglomerating agent, adhesion promoter, flow modifier, pH neutralizer, sequesterant, coagulant, flocculant, fire retardant, lubricant, chelating agent, or quality control reagent functions as intented, or (ii) a chemical substance, which is intended solely to impart a specific physiochemical characteristic, functions as intended.

(8) Any nonisolated intermediate.

(i) Any chemical substance which is manufactured solely for non-commercial research and development purposes. Non-commercial research and development purposes include scientific experimentation, research, or analysis conducted by academic, government, or independent not-for-profit research organizations (e.g., universities, colleges, teaching hospitals, and research institutes), unless the activity is for eventual commercial purposes.

[48 FR 21742, May 13, 1983, as amended at 51 FR 15101, Apr. 22, 1986]

### § 720.36 Exemption for research and development.

(a) This part does not apply to a chemical substance if the following conditions are met:

(1) The chemical substance is manufactured or imported only in small quantities solely for research and development.

(2) The manufacturer or importer notifies all persons in its employ or to whom it directly distributes the chemical substance, who are engaged in experimentation, research, or analysis on the chemical substance, including the manufacture, processing, use, transport, storage, and disposal of the substance associated with research and development activities, of any risk to health, identified under paragraph (b) of this section, which may be associated with the substance. The notification must be made in accordance with paragraph (c) of this section.

(3) The chemical substance is used by, or directly under the supervision of, a technically qualified individual.

(b)(1) To determine whether notification under paragraph (a)(2) of this section is required, the manufacturer or importer must review and evaluate the following information to determine whether there is reason to believe there is any potential risk to health

which may be associated with the chemical substance:

(i) Information in its possession or control concerning any significant adverse reaction by persons exposed to the chemical substance which may reasonably be associated with such exposure.

(ii) Information provided to the manufacturer or importer by a supplier or any other person concerning a health risk believed to be associated with the substance.

(iii) Health and environmental effects data in its possession or control concerning the substance.

(iv) Information on health effects which accompanies any EPA rule or order issued under sections 4, 5, or 6 of the Act that applies to the substance and of which the manufacturer or importer has knowledge.

(2) When the research and development activity is conducted solely in a laboratory and exposure to the chemical substance is controlled through the implementation of prudent laboratory practices for handling chemical substances of unknown toxicity, and any distribution, except for purposes of disposal, is to other such laboratories for further research and development activity, the information specified in paragraph (b)(1) of this section need not be reviewed and evaluated. (For purposes of this paragraph, a laboratory is a contained research facility where relatively small quantities of chemical substances are used on a nonproduction basis, and where activities involve the use of containers for reactions, transfers, and other handling of substances designed to be easily manipulated by a single individual.)

(c)(1) The manufacturer or importer must notify the persons identified in paragraph (a)(2) of this section by means of a container labeling system, conspicuous placement of notices in areas where exposure may occur, written notification to each person potentially exposed, or any other method of notification which adequately informs persons of health risks which the manufacturer or importer has reason to believe may be associated with the substance, as determined under paragraph (b)(1) of this section.

(2) If the manufacturer or importer distributes a chemical substance manufactured or imported under this section to persons not in its employ, the manufacturer or importer must in written form:

(i) Notify those persons that the substance is to be used only for research and development purposes.

(ii) Provide the notice of health risks specified in paragraph (c)(1) of this section.

(3) The adequacy of any notification under this section is the responsibility of the manufacturer or importer.

(d) A chemical substance is not exempt from reporting under this part if any amount of the substance, including as part of a mixture, is processed, distributed in commerce, or used, for any commercial purpose other than research and development, except where the chemical substance is processed, distributed in commerce, or used only as an impurity or as part of an article.

(e) Quantities of the chemical substance, or of mixtures or articles containing the chemical substance, remaining after completion of research and development activities may be:

(1) Disposed of as a waste in accordance with applicable Federal, state, and local regulations, or

(2) Used for the following commercial purposes:

(i) Burning it as a fuel.

(ii) Reacting or otherwise processing it to form other chemical substances for commercial purposes, including extracting component chemical substances.

(f) Quantities of research and development substances existing solely as impurities in a product or incorporated into an article, in accordance with paragraph (d) of this section, and quantities of research and development substances used solely for commercial purposes listed in paragraph (e) of this section, are not subject to the requirements of paragraphs (a), (b), and (c) of this section, once research and development activities have been completed.

(g) A person who manufactures or imports a chemical substance in small quantities solely for research and development is not required to comply with the requirements of this section if the person's exclusive intention is to

perform research and development activities solely for the purpose of determining whether the substance can be used as a pesticide.

[51 FR 15102, Apr. 22, 1986]

### § 720.38 Exemptions for test marketing.

(a) Any person may apply for an exemption to manufacture or import a new chemical substance for test marketing. EPA may grant the exemption if the person demonstrates that the chemical substance will not present an unreasonable risk to injury to health or the environment as a result of the test marketing.

(b) Persons applying for a test-marketing exemption should provide the following information:

(1) All existing data regarding health and environmental effects of the chemical substance, including physical/chemical properties or, in the absence of such data, a discussion of toxicity based on structure-activity relationships (SAR) and relevant data on chemical analogues.

(2) The maximum quantity of the chemical substance which the applicant will manufacture or import for test marketing.

(3) The maximum number of persons who may be provided the chemical substance during test marketing.

(4) The maximum number of persons who may be exposed to the chemical substance as a result of test marketing, including information regarding duration and route of such exposures.

(5) A description of the test-marketing activity, including its length and how it can be distinguished from full-scale commercial production and research and development.

(c) In accordance with section 5(h)(6) of the Act, after EPA receives an application for exemption under this section, the Agency will file with the Office of the Federal Register a notice containing a summary of the information provided in the application, to the extent it has not been claimed confidential.

(d) No later than 45 days after EPA receives an application, the Agency will either approve or deny the application. Thereafter, EPA will publish a notice in the FEDERAL REGISTER explaining the reasons for approval or denial.

(e) In approving an application for exemption, EPA may impose any restrictions necessary to ensure that the substance will not present an unreasonable risk of injury to health and the environment as a result of test marketing.

[48 FR 21742, May 13, 1983, as amended at 58 FR 34204, June 23, 1993]

## Subpart C—Notice Form

### § 720.40 General.

(a) *Use of the notice form; electronic submissions.* (1) Each person who is required by subpart B of this part to submit a notice must complete, sign, and submit a notice containing the information in the form and manner specified in this paragraph. The information submitted and all attachments (unless the attachment appears in the open scientific literature) must be in English. All information submitted must be true and correct.

(2) Information may be submitted on paper, or electronically, as follows:

(i) Information submitted on paper must be submitted in the form and manner set forth in EPA Form No. 7710–25, which is available from the Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Information which is not submitted on the EPA Form No. 7710-25 or a photocopy thereof (e.g., on a form created by commercial form-making software) must be in a format pre-approved by the Agency.

(ii) Information may be submitted electronically (on magnetic or other media) pursuant to an EPA published format for electronic submissions. Such submissions must comply with this format and all other media specifications published by EPA. Persons submitting electronically must still complete and submit on paper the Certification and Submitter Identification sections of Form 7710–25.

(b) *When to submit a notice.* Each person who is required to submit a notice

must submit the notice at least 90 calendar days before manufacture or import of the new chemical substance for commercial purposes begins.

(c) *Where to submit a notice.* Each person who submits a notice must submit it to the address listed on the notice form.

(d) *General notice requirements.* (1) Each person who submits a notice must provide the information described in §720.45 and specified on the notice form, to the extent such information is known to or reasonably ascertainable by the person. In accordance with §720.50, the notice must also include any test data in the person's possession or control, and descriptions of other data which are known to or reasonably ascertainable by the person and which concern the health and environmental effects of the new chemical substance.

(2) A person who submits a notice to EPA under this part must provide EPA with an original and two complete copies of the notice, including all test data and any other information attached to the notice form. If information is claimed as confidential pursuant to §720.80, a sanitized copy must also be provided.

(e) *Agency or joint submissions.* (1) A manufacturer or importer may designate an agent to submit the notice. Both the manufacturer or importer and the agent must sign the certification on the form.

(2) A manufacturer or importer may authorize another person, (e.g., a foreign manufacturer or supplier, or a toll manufacturer) to report some of the information required in the notice to EPA on its behalf. If separate portions of a joint notice are not submitted together, the submitter should indicate which information will be supplied by another person and identify that person. The other person must submit the information on the appropriate part of the notice form. The manufacturer or importer and any other person supplying the information must sign the certification provided on their respective notice forms.

(3) If EPA receives a submission which does not include information required by this rule, which the submitter indicates that it has authorized another person to provide, the notice review period will not begin until EPA receives that information.

(f) *New information.* During the notice review period, if the submitter possesses, controls, or knows of new information that materially adds to, changes, or otherwise makes significantly more complete the information included in the notice, the submitter must that information to the address listed on the notice form within ten days of receiving the new information, but no later than five days before the end of the notice review period. The new submission must clearly identify the submitter and the notice to which the new information is related. If the new information becomes available during the last five days of the notice review period, the submitter must immediately inform its EPA contract for that notice by telephone.

(g) *Chemical substances subject to a section 4 test rule.* (1) Except as provided in paragraph (g)(3) of this section, if (i) A person intends to manufacture or import a new chemical substance which is subject to the notification requirements of this part, and (ii) The chemical substance is subject to a test rule promulgated under section 4 of the Act before the notice is submitted, section 5(b)(1) of the Act requires the person to submit the test data required by the testing rule with the notice. The person must submit the data in the form and manner specified in the test rule and in accordance with § 720.50. If the person does not submit the test data, the submission is incomplete and EPA will follow the procedures in § 720.65.

(2) If EPA has granted the submitter an exemption under section 4(c) of the Act from the requirement to conduct tests and submit data, the submitter may not submit a notice until EPA receives the test data.

(3) If EPA has granted the submitter an exemption under section 4(c) of the Act and if another person previously has submitted the test data to EPA, the exempted person may either submit the test data or provide the following information as part of the notice:

(i) The name, title, and address of the person who submitted the test data to EPA.

(ii) The date the test data were submitted to EPA.

(iii) A citation for the test rule.

(iv) A description of the exemption and a reference identifying it.

(h) *Chemical substances subject to a section 5(b)(4) rule.* (1) If a person (i) intends to manufacture or import a new chemical substance which is subject to the notification requirements of this part and which is subject to a rule issued under section 5(b)(4) of the Act; and (ii) is not required by a rule issued under section 4 of the Act to submit test data for the substance before the submission of a notice, the person must submit to EPA data described in paragraph (h)(2) of this section at the time the notice is submitted.

(2) Data submitted under paragraph (h)(1) of this section must be data which the person submitting the notice believes show that the manufacture, processing, distribution in commerce, use and disposal of the substance, or any combination of such activities, will not present an unreasonable risk of injury to health or the environment.

[48 FR 21742, May 13, 1983, as amended at 58 FR 34204, June 23, 1993; 60 FR 16309, Mar. 29, 1995]

### § 720.45 Information that must be included in the notice form.

Each person who submits a notice must include the information specified in the notice form to the extent it is known to or reasonably ascertainable by the submitter. However, no person is required to include information which relates solely to exposure of human or ecological populations outside of the United States. The notice form requires the following information relating to the manufacture, processing, distribution in commerce, use, and disposal of the new chemical substance:

(a)(1) The specific chemical identity of the substance that the person intends to manufacture or import, which includes the following:

(i) The currently correct Chemical Abstracts (CA) name for the substance, based on the Ninth Collective Index (9CI) of CA nomenclature rules and conventions, and consistent with listings for similar substances in the Inventory. For each substance having a chemical composition that can be represented by a specific, complete chemical structure diagram (a Class 1 substance), a CA Index Name must be provided. For each chemical substance that cannot be fully represented by a complete, specific chemical structure diagram (a Class 2 substance), or if the substance is a polymer, a CA Index Name or CA Preferred Name must be provided (whichever is appropriate based on CA 9CI nomenclature rules and conventions). In addition, for a Class 2 substance, the notice must identify the immediate chemical precursors and reactants by specific chemical name and Chemical Abstracts Service Registry Number (CASRN), if the number is available. Tradenames or generic names of chemical precursors or reactants are not acceptable as substitutes for specific chemical names.

(ii) The currently correct CASRN for the substance if a CASRN already exists for the substance.

(iii) For a Class 1 substance and for any Class 2 substance for which a definite molecular formula is known or reasonably ascertainable, the correct molecular formula.

(iv) For a Class 1 substance, a complete, correct chemical structure diagram; for a Class 2 substance or polymer, a correct representative or partial chemical structure diagram, as complete as can be known, if one can be reasonably ascertained.

(2) For a polymer, the submitter must also report the following:

(i) The specific chemical name and CASRN, if the number is available, of each monomer and other reactant used, at any weight percent, to manufacture the polymer. Tradenames or generic names of chemical reactants or monomers are not acceptable as substitutes for specific chemical names.

(ii) The typical percent by weight of each monomer and other reactant in the polymer (weight of the monomer or other reactant expressed as a percentage of the weight of the polymeric chemical substance manufactured), and the maximum residual amount of each monomer present in the polymer.

(iii) For monomers and other reactants used at 2 weight percent or less (based on the dry weight of the polymer manufactured), indicate on the PMN form any such monomers and other reactants that should be included

as part of the polymer description on the Inventory, where the weight percent is based on either (A) the weight of monomer or other reactant actually charged to the reaction vessel, or (B) the minimum weight of monomer or other reactant required in theory to account for the actual weight of monomer or other reactant molecules or fragments chemically incorporated (chemically combined) in the polymeric substance manufactured.

(iv) For a determination that 2 weight percent or less of a monomer or other reactant is incorporated (chemically combined) in a polymeric substance manufactured, as specified in paragraphs (a)(2)(iii)(B) of this section, analytical data or appropriate theoretical calculations (if it can be documented that analytical measurement is not feasible or not necessary) to support this determination must be maintained at the site of manufacture or import of the polymer.

(v) Measured or estimated values of the minimum number-average molecular weight of the polymer and the amount of low molecular weight species below 500 and below 1,000 molecular weight, with a description of how the measured or estimated values were obtained.

(3) The person must use one of the following two methods to develop or obtain the specified chemical identity information reported under paragraphs (a)(1) and (2) of this section and must identify the method used in the notice:

(i) *Method 1.* Obtain the correct chemical identity information required by paragraphs (a)(1) and (2) of this section directly from the Chemical Abstracts Service (CAS), specifically from the CAS Registry Services Inventory Expert Service, prior to submitting a notice to EPA. A copy of the chemical identification report obtained from CAS must be submitted with the notice.

(ii) *Method 2.* Obtain the correct chemical identity information required by paragraphs (a)(1) and (2) from any source. The notice will be incomplete according to §720.65(c)(1)(vi) if the person uses Method 2 and any chemical identity information is determined to be incorrect by EPA.

(4) If an importer submitting the notice cannot provide all the information specified in paragraphs (a)(1) and (2) of this section because it is claimed as confidential by the foreign supplier of the substance, the importer must have the foreign supplier follow the procedures in paragraph (a)(3) of this section and provide the correct chemical identity information specified in paragraphs (a)(1) and (2) of this section directly to EPA in a joint submission or as a letter of support to the notice, which clearly references the importer's notice and PMN User Fee Identification Number. The statutory review process will commence upon receipt of both the notice and the complete, correct information.

(5) If a manufacturer cannot provide all the information specified in paragraphs (a)(1) and (2) of this section because the new chemical substance is manufactured using a reactant having a specific chemical identity claimed as confidential by its supplier, the manufacturer must submit a notice directly to EPA containing all the information known by the manufacturer about the chemical identity of the reported substance and its proprietary reactant. In addition, the manufacturer must ensure that the supplier of the confidential reactant submit a letter of support directly to EPA providing the specific chemical identity of the confidential reactant, including the CAS number, if available, and the appropriate PMN or exemption number, if applicable. The letter of support must reference the manufacturer's name and PMN User Fee Identification Number under §700.45(c)(3) of this chapter. The statutory review period will commence upon receipt of both the notice and the letter of support.

(b) The impurities anticipated to be present in the substance by name, CAS Registry number, and weight percent of the total substance.

(c) Known synonyms or trade names of the new chemical substance.

(d) A description of the byproducts resulting from the manufacture, processing, use, and disposal of the new chemical substance.

(e) The estimated maximum amount to be manufactured or imported during

the first year of production and the estimated maximum amount to be manufactured or imported during any 12-month period during the first three years of production.

(f) A description of intended categories of use by function and application, the estimated percent of production volume devoted to each category of use, and the percent of the new substance in the formulation for each commercial or consumer use.

(g) For sites controlled by the submitter:

(1) The identity of sites where the new substance will be manufactured, processed, or used.

(2) A process description of each manufacture, processing, and use operation which includes a diagram of the major unit operations and chemical conversions, the identity and entry point of all feedstocks, and the points of release of the new chemical substance.

(3) Worker exposure information, including worker activities, physical form of the new substance to which workers may be exposed, the number of workers, and the duration of activities.

(4) Information on release of the new substance to the environment, including the quantity and media of release and type of control technology used.

(h) For sites not controlled by the submitter, a description of each type of processing and use operation involving the new chemical substance, including identification of the estimated number of processing or use sites, situations in which worker exposure to and/or environmental release of the new chemical substance will occur, the number of workers exposed and the duration of exposure, and controls which limit worker exposure and environmental release.

[48 FR 21742, May 13, 1983, as ameneded at 60 FR 16310, Mar. 29, 1995]

### § 720.50 Submission of test data and other data concerning the health and environmental effects of a substance.

(a) *Test data on the new chemical substance in the possession or control of the submitter.* (1) Except as provided in paragraph (d) of this section, each notice must contain all test data in the submitter's possession or control which are related to the effects on health or the environment of any manufacture, processing, distribution in commerce, use, or disposal of the new chemical substance or any mixture or article containing the new chemical substance, or any combination of such activities. This includes test data concerning the new chemical substance in a pure, technical grade, or formulated form.

(2) A full report or standard literature citation must be submitted for the following types of test data:

(i) Health effects data.

(ii) Ecological effects data.

(iii) Physical and chemical properties data.

(iv) Environmental fate characteristics.

(v) Monitoring data and other test data related to human exposure to or environmental release of the chemical substance.

(3)(i) If the data do not appear in the open scientific literature, the submitter must provide a full report. A full report includes the experimental methods and materials, results, discussion and data analysis, conclusions, references, and the name and address of the laboratory that developed the data.

(ii) If the data appear in the open scientific literature, the submitter need only provide a standard literature citation. A standard literature citation includes author, title, periodical name, date of publication, volume, and page numbers.

(4)(i) If a study, report, or test is incomplete when a person submits a notice, the submitter must identify the nature and purpose of the study; name and address of the laboratory developing the data; progress to date; types of data collected; significant preliminary results; and anticipated completion date.

(ii) If a test or experiment is completed before the notice review period ends, the person must submit the study, report, or test to the address listed on the notice form, as specified in paragraph (a)(3)(i) of this section, within ten days of receiving it, but no later than five days before the end of the review period. If the test or experiment is completed during the last five

days of the review period, the submitter must immediately inform its EPA contact for that notice by telephone.

(5) For test data in the submitter's possession or control which are not listed in paragraph (a)(2) of this section, a person is not required to submit a complete report. The person must submit a summary of the data. If EPA so requests, the person must submit a full report within ten days of the request, but no later than five days before the end of the review period.

(6) All test data described by paragraph (a) are subject to these requirements, regardless of their age, quality, or results.

(b) *Other data concerning the health and environmental effects of the new chemical substance that are known to or reasonably ascertainable by the submitter.* (1) Except as provided in paragraph (d) of this section, any person who submits a notice must describe the following data, including any data from a health and safety study, if the data are related to the effects on health or the environment of any manufacture, processing, distribution in commerce, use, or disposal of the new chemical substance, of any mixture or article containing the new chemical substance, or of any combination of such activities:

(i) Any data, other than test data, in the submitter's possession or control.

(ii) Any data, including test data, which are not in the submitter's possession or control, but which are known to or reasonably ascertainable by the submitter. For the purposes of this section, data are known to or reasonably ascertainable by the submitter if the data are known to any of its employees or other agents who are associated with the research and development, test marketing, or commercial marketing of the substance.

(2) Data that must be described include data concerning the new chemical substance in a pure, technical grade, or formulated form.

(3) The description of data reported under this paragraph must include:

(i) If the data appear in the open scientific literature, a standard literature citation, which includes the author, title, periodical name, date of publication, volume, and pages.

(ii) If the data are not contained in the open scientific literature, a description of the type of data and summary of the results, if available, and the names and addresses of persons the submitter believes may have possession or control of the data.

(4) All data described by this paragraph are subject to these requirements, regardless of their age, quality, or results; and regardless of whether they are complete at the time the notice is submitted.

(c) [Reserved]

(d) *Data that need not be submitted*—(1) *Data previously submitted to EPA.* (i) A person need not submit any data previously submitted to EPA with no claims of confidentiality if the notice includes the office or person to whom the data were submitted, the date of submission, and, if appropriate, a standard literature citation as specified in paragraph (a)(3)(ii) of this section.

(ii) For data previously submitted to EPA with a claim of confidentiality, the person must resubmit the data with the notice and any claim of confidentiality, under § 720.80.

(2) *Efficacy data.* This part does not require submission of any data related solely to product efficacy. This does not exempt a person from submitting any of the data specified in paragraph (a), (b), or (c) of this section.

(3) *Non-U.S. exposure data.* This part does not require submission of any data which relates only to exposure of humans or the environment outside the United States. This does not exclude nonexposure data such as data on health effects (including epidemiological studies), ecological effects, physical and chemical properties, or environmental fate characteristics.

[48 FR 21742, May 13, 1983, as amended at 51 FR 15102, Apr. 22, 1986]

### § 720.57 Imports.

(a) Except as otherwise provided in this section, the provisions of this Subpart C apply to each person who submits a notice for a new chemcial substance which he or she intends to import for a commercial purpose. In addition, each importer must comply with this section.

(b) EPA will hold the principal importer, or the importer that EPA determines must submit the notice when there is no principal importer under § 720.22(b)(2), liable for complying with this part, for completing the notice form and for the completeness and truthfulness of all information which it submits.

## Subpart D—Disposition of Notices

### § 720.60 General.

This subpart establishes procedures that EPA will follow in reviewing notices.

### § 720.62 Notice that notification is not required.

When EPA receives a notice, EPA will review it to determine whether the chemical substance is subject to the requirements of this part. If EPA determines that the chemical substance is not subject to these requirements, EPA will notify the submitter that section 5 of the Act does not prevent the manufacture or import of the substance and that the submission is not a notice under this part.

[48 FR 21742, May 13, 1983, as amended at 58 FR 34204, June 23, 1993]

### § 720.65 Acknowledgment of receipt of a notice; errors in the notice; incomplete submissions; false and misleading statements.

(a) *Notification to submitter.* EPA will acknowledge receipt of each notice by sending the submitter a letter that identifies the premanufacture notice number assigned to the new chemical substance and the date on which the review period begins. The review period will begin on the date the notice is received by the Office of Pollution Prevention and Toxics Document Control Officer. The acknowledgment does not constitute a finding by EPA that the notice, as submitted, is in compliance with this part.

(b) *Errors in the notice.* (1) Within 30 days of receipt of the notice, EPA may request that the submitter remedy errors in the notice. The following are examples of such errors:

(i) Failure to date the notice form.

(ii) Typographical errors that cause data to be misleading or answers to any questions to be unclear.

(iii) Contradictory information.

(iv) Ambiguous statements or information.

(2) In the request to correct the notice, EPA will explain the action which the submitter must take to correct the notice.

(3) If the submitter fails to correct the notice within 15 days of receipt of the request, EPA may extend the notice period under section (5)(c) of the Act, in accordance with § 720.75(c).

(c) *Incomplete submissions.* (1) A submission is not complete, and the notification period does not begin, if:

(i) The wrong person submits the notice form.

(ii) The submitter does not sign the notice form.

(iii) Some or all of the information in the notice or the attachments are not in English, except for published scientific literature.

(iv) The submitter does not use the notice form.

(v) The submitter does not provide information that is required by section 5(d)(1)(B) and (C) of the Act and § 720.50.

(vi) The submitter does not provide information required on the notice form and by § 720.45 or indicate that it is not known to or reasonably ascertainable by the submitter.

(vii) The submitter does not submit a second copy of the submission with all confidential information deleted for the public file, as required by § 720.80(b)(2).

(viii) The submitter does not include any information required by section 5(b)(1) of the Act and pursuant to a rule promulgated under section 4 of the Act, as required by § 720.40(g).

(ix) The submitter does not submit data which the submitter believes show that the chemical substance will not present an unreasonable risk of injury to health or the environment, if EPA has listed the chemical substance under section 5(b)(4) of the Act, as required in § 720.40(h).

(2)(i) If EPA receives an incomplete submission, the Director, or his or her delegate, will notify the submitter

within 30 days of receipt that the submission is incomplete and that the notice review period will not begin until EPA receives a complete notice.

(ii) If EPA obtains additional information during the notice review period that indicates the original submission was incomplete, the Director, or his or her delegate, may declare the submission incomplete within 30 days after EPA obtains the additional information and so notify the submitter.

(3) The notification that a submission is incomplete under paragraph (c)(2) (i) or (ii) of this section will include:

(i) A statement of the basis of EPA's determination that the submission is incomplete.

(ii) The requirements for correcting the incomplete submission.

(iii) Information on procedures under paragraph (c)(4) of this section for filing objections to the determination or requesting modification of the requirements for completing the submission.

(4) Within ten days after receipt of notification by EPA that a submission is incomplete, the submitter may file written objections requesting that EPA accept the submission as a complete notice or modify the requirements necessary to complete the submission.

(5)(i) EPA will consider the objections filed by the submitter. The Director, or his or her delegate, will determine whether the submission was complete or incomplete, or whether to modify the requirements for completing the submission. EPA will notify the submitter in writing of EPA's response within ten days of receiving the objections.

(ii) If the Director, or his or her delegate, determines, in response to the objection, that the submission was complete, the notice review period will be deemed suspended on the date EPA declared the notice incomplete, and will resume on the date that the notice is declared complete. The submitter need not correct the notice as EPA originally requested. If EPA can complete its review within 90 days from the date of the original submission, the Director, or his or her delegate, may inform the submitter that the running of the review period will resume on the date EPA originally declared it incomplete.

(iii) If the Director, or his or her delegate, modifies the requirements for completing the submission or concurs with EPA's original determination, the notice review period will begin when EPA receives a complete notice.

(d) *Materially false or misleading statements.* If EPA discovers at any time that person submitted materially false or misleading statements in the notice, EPA may find that the notice was incomplete from the date it was submitted, and take any other appropriate action.

### § 720.70 Notice in the Federal Register.

(a) *Filing of* FEDERAL REGISTER *notice.* In accordance with section 5(d)(2) of the Act, after EPA receives a notice, EPA will file with the Office of the Federal Register a notice including the information specified in paragraph (b) of this section.

(b) *Contents of notice.* (1) In the public interest, the specific chemical identity listed in the notice will be published in the FEDERAL REGISTER unless the submitter has claimed chemical identity confidential. If the submitter claims confidentiality, a generic name will be published in accordance with § 720.85(a)(3).

(2) The categories of use of the new chemical substance will be published as reported in the notice unless this information is claimed confidential. If confidentiality is claimed, the generic information which is submitted under § 720.87(b) will be published.

(3) A list of data submitted in accordance with § 720.50(a) will be published. In addition, for test data submitted in accordance with § 720.40(g), a summary of the data will be published.

(4) The submitter's identity will be published, unless the submitter has claimed it confidential.

### § 720.75 Notice review period.

(a) *Length of notice review period.* The notice review period specified in section 5(a) of the Act runs for 90 days from the date the Document Control Officer for the Office of Pollution Prevention and Toxics receives a complete notice, or the date EPA determines the notice is complete under § 720.65(c), unless the Agency extends the period

under section 5(c) of TSCA and paragraph (c) of this section.

(b) *Suspension of the running of the notice review period.* (1) A submitter may voluntarily suspend the running of the notice review period if the Director or his or her delegate agrees. If the Director does not agree, the review period will continue to run, and EPA will notify the submitter. A submitter may request a suspension at any time during the notice review period. The suspension must be for a specified period of time.

(2) A request for suspension may be made in writing to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460. The suspension also may be made orally, including by telephone, to the submitter's EPA contact for that notice. EPA will send the submitter a written confirmation that the suspension has been granted.

(i) An oral request may be granted for 15 days only. To obtain a longer suspension, the Document Control Officer for the Office of Pollution Prevention and Toxics must receive written confirmation of the oral request. The notice review period is suspended as of the date of the oral request.

(ii) If the submitter has not made a previous oral request, the running of the notice review period is suspended as of the date of receipt of the written request by the Document Control Officer for the Office of Pollution Prevention and Toxics.

(c) *Extension of notice review period.* (1) At any time during the notice review period, EPA may determine that good cause exists to extend the notice review period specified in paragraph (a) of this section.

(2) If EPA makes such a determination, EPA will:

(i) Notify the submitter that EPA is extending the notice review period for a specified length of time, and state the reasons for the extension.

(ii) Issue a notice for publication in the FEDERAL REGISTER which states that EPA is extending the notice review period and gives the reasons for the extension.

(3) The initial extension may be for a period of up to 90 days. If the initial extension is for less than 90 days, EPA may make additional extensions. However, the total period of extensions may not exceed 90 days for any notice.

(4) The following are examples of situations in which EPA may find that good cause exists for extending the notice review period:

(i) EPA has reviewed the notice and determined that there is a significant possibility that the chemical substance will be regulated under section 5(e) or section 5(f) of the Act, but EPA is unable to initiate regulatory action within the initial 90-day period.

(ii) EPA has reviewed the submission and is seeking additional information.

(iii) EPA has received significant additional information during the notice review period.

(iv) The submitter has failed to correct a notice after receiving EPA's request under § 720.65(b).

(d) *Notice of expiration of notice review period.* EPA will notify the submitter that the notice review period has expired or that EPA has completed its review of the notice. Expiration of the review period does not constitute EPA approval or certification of the new chemical substance, and does not mean that EPA may not take regulatory action against the substance in the future. After expiration of the statutory notice review period, in the absence of regulatory action by EPA under section 5(e), 5(f), or 6(a) of the Act, the submitter may manufacture or import the chemical substance even if the submitter has not received notice of expiration.

(e) *Withdrawal of a notice by the submitter.* (1) A submitter may withdraw a notice during the notice review period. A statement of withdrawal must be made in writing to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460. The withdrawal is effective upon receipt of the statement by the Document Control Officer.

(2) If a manufacturer or importer which withdrew a notice later resubmits a notice for the same chemical

substance, a new notice review period begins.

[48 FR 21742, May 13, 1983, as amended at 53 FR 12523, Apr. 15, 1988; 58 FR 34204, June 23, 1993; 60 FR 34464, July 3, 1995]

### § 720.78 Recordkeeping.

(a) Any person who submits a notice under this part must retain documentation of information in the notice, including (1) other data, as defined in § 720.50(b), in the submitter's possession or control; and (2) records of production volume for the first three years of production or import, the date of commencement of manufacture or import, and documentation of this information. This information must be retained for five years from the date of commencement of manufacture of import.

(b)(1) Persons who manufacture or import a chemical substance under § 720.36 must retain the following records:

(i) Copies of, or citations to, information reviewed and evaluated under § 720.36(b)(1) to determine the need to make any notification of risk.

(ii) Documentation of the nature and method of notification under § 720.36(c)(1) including copies of any labels or written notices used.

(iii) Documentation of prudent laboratory practices used instead of notification and evaluation under § 720.36(b)(2).

(iv) The names and addresses of any persons other than the manfacturer or importer to whom the substance is distributed, the identity of the substance to the extent known, the amount distributed, and copies of the notifications required under § 720.36(c)(2). These records are not required when substances are distributed as impurities or incorporated into an article, in accordance with paragraph (d) of this section.

(2) A person who manufactures or imports a chemical substance under § 720.36 and who manufactures or imports the substance in quantities greater than 100 kilograms per year must retain records of the identity of the substance to the extent known, the production volume of the substance, and the person's disposition of the substance. The person is not required to maintain records of the disposition of products containing the substance as an impurity or of articles incorporating the substances.

(3) Records under this paragraph must be retained for 5 years after they are developed.

(c) Any person who obtains a test-marketing exemption under this part must retain documentation of information in the application and documentation of compliance with any restrictions imposed by EPA when it granted the application. This information must be retained for five years from the final date of manufacture or import under the exemption.

[48 FR 21742, May 13, 1983; 48 FR 33872, July 26, 1983, as amended at 51 FR 15102, Apr. 22, 1986; 58 FR 34204, June 23, 1993]

## Subpart E—Confidentiality and Public Access to Information

### § 720.80 General provisions.

(a) A person may assert a claim of confidentiality for any information which he or she submits to EPA under this part.

(b) Any claim of confidentiality must accompany the information when it is submitted to EPA.

(1)(i) For information submitted on the notice form, the claim(s) must be asserted on the form in the manner prescribed on the notice form.

(ii) When a person submits information in an attachment, the claim(s) must be asserted in the attachment as described on the notice form.

(2) If any information is claimed as confidential, the person must submit, in addition to the copies specified by §720.40, a sanitized copy of the notice form (or electronic submission) and any attachments.

(i) The original and two copies of the notice, specified at §720.40 (or electronic submission) and attachments must be complete. The submitter must designate that information which is claimed as confidential in the manner prescribed on the notice form (or in EPA's electronic submission instructions).

(ii) The sanitized copy must be complete except that all information claimed as confidential in the original must be deleted. EPA will place this sanitized copy in the public file.

(iii) If the person does not provide the sanitized copy, or information in a health and safety study (except information claimed as confidential in accordance with §720.90), the submission will be deemed incomplete and the notice review period will not begin until EPA receives the sanitized copy or the health and safety study information is included, in accordance with §720.65(c)(1)(vii).

(c) EPA will disclose information that is subject to a claim of confidentiality asserted under this section only to the extent permitted by the Act, this subpart, and Part 2 of this title.

(d) If a notice submitter does not assert a claim of confidentiality for information at the time it is submitted to EPA, EPA may make the information public and place it in the public file without further notice to the submitter.

[48 FR 21742, May 13, 1983, as amended at 58 FR 34204, June 23, 1993; 60 FR 16311, Mar. 29, 1995]

### § 720.85 Chemical identity.

(a) *Claims applicable to the period prior to commencement of manufacture or import.* (1)(i) A person who submits information to EPA under this part may assert a claim of confidentiality for the chemical identity of the new chemical substance. This claim will apply only to the period prior to the commencement of manufacture or import for commercial purposes. A submitter may assert this claim only if the submitter believes that public disclosure prior to commencement of manufacture or import of the fact that anyone intends to manufacture or import the specific chemical substance for commercial purposes would reveal confidential business information.

(ii) If the notice includes a health and safety study concerning the new chemical substance and if the claim for confidentiality with respect to the chemical identity is denied in accordance with §720.90(c), EPA will deny a claim asserted under this paragraph.

(2) Any person who asserts a claim of confidentiality for chemical identity under this paragraph must provide one of the following items at the time the notice is submitted:

(i) The generic name which was accepted by EPA in the prenotice consultation conducted under paragraph (a)(3) of this section.

(ii) One generic name that is only as generic as necessary to protect the confidential chemical identity of the particular chemical substance. The name should reveal the specific chemical identity to the maximum extent possible. The generic name will be subject to EPA review and approval at the time a notice of commencement is submitted.

(3)(i) Any person who intends to assert a claim of confidentiality for the chemical identity of a new chemical substance may seek a determination by EPA of an appropriate generic name for the substance before submitting a notice. For this purpose, the person should submit to EPA:

(A) The chemical identity of the substance.

(B) A proposed generic name(s) which in only as generic as necessary to protect the confidential chemical identity of the new chemical substance. The name(s) should reveal the chemical identity of the substance to the maximum extent possible.

(ii) Within 30 days, EPA will inform the submitter either that one of the proposed generic names is adequate or that none is adequate and further consultation is necessary.

(4) If a submitter claims chemical identity to be confidential under this paragraph, and if the submitter complies with paragraph (a)(2) of this section, EPA will issue for publication in the FEDERAL REGISTER notice described in §720.70 the generic name proposed by the submitter or one agreed upon by EPA and the submitter.

(b) *Claims applicable to the period after commencement of manufacture or import.* (1) Any claim of confidentiality under paragraph (a) of this section is applicable only until the substance is manufactured or imported for commercial purposes and becomes eligible for inclusion on the Inventory. To maintain the confidential status of the chemical identity when the substance is added to the Inventory, a submitter must reassert the confidentiality claim and substantiate the claim in the notice of

commencement of manufacture required uner § 720.102. A submitter may not claim the chemical indentity confidential for the period after commencement of manufacture or import unless the submitter claimed the chemical identity confidential for the period prior to commencement of manufacture or import under paragraph (a) of this section.

(2)(i) A person who believes that public disclosure of the fact that anyone manfactures or imports the new chemical substance for commercial purposes would reveal confidential business information may assert a claim of confidentiality under this paragraph.

(ii) If the notice includes a health and safety study concerning the new chemical substance, and if the claim for confidentiality with respect to the chemical identity is denied in accordance with § 720.90(c), EPA will deny a claim asserted under this paragraph.

(3) Any person who asserts a confidentiality claim for chemical identity must:

(i) Comply with the requirements of paragraph (a)(3) of this section regarding submission of a generic name.

(ii) Agree that EPA may disclose to a person with a *bona fide* intent to manufacture or import the chemical substance the fact that the particular chemical substance is included on the confidential Inventory for purposes of notification under section 5(a)(1)(A) of the Act.

(iii) Have available for the particular chemical substance, and agree to furnish to EPA upon request:

(A) An elemental analysis.

(B) Either an X-ray diffraction pattern (for inorganic substances), a mass spectrum (for most other substances), or an infrared spectrum of the particular chemical substance, or if such data do not resolve uncertainties with respect to the identity of the chemical substance, additional or alternative spectra or other data to identify the chemical substance.

(iv) Provide a detailed written substantiation of the claim, by answering the following questions:

(A) What harmful effects to your competitive position, if any, do you think would result if EPA publishes on the Inventory the identity of the chemical substance? How could a competitor use such information given the fact that the identity of the substance otherwise would appear on the Inventory of chemical substances with no link between the substance and your company or industry? How substantial would the harmful effects of disclosure be? What is the casual relationship between the disclosure and the harmful effects?

(B) For what period of time should confidential treatment be given? Until a specific date, the occurrence of a specific event, or permanently? Why?

(C) Has the chemical substance been patented? If so, have you granted licenses to others with respect to the patent as it applies to the chemical substance? If the chemical substance has been patented and therefore disclosed through the patent, why should it be treated as confidential for purposes of the Inventory?

(D) Has the identity of the chemical substance been kept confidential to the extent that your competitors do not know it is being manufactured on imported for a commercial purpose by anyone?

(E) Is the fact that someone is manufacturing or importing this chemical substance for commercial purposes available to the public, e.g., in technical journals or other publications; in libraries; or in State, local, or Federal agency public files?

(F) What measures have you taken to prevent undesired disclosure of the fact that you are manufacturing or importing this substance for a commercial purpose?

(G) To what extent has the fact that you are manufacturing or importing this chemical substance for a commercial purpose been disclosed to others? What precautions have you taken in regard to these disclosures? Has this information been disclosed to the public or to competitors?

(H) In what form does this particular chemical substance leave the site of manufacture, e.g., as part of a product; in an effluent or emission stream? If so, what measures have you taken to guard against discovery of its identity?

(I) If the chemical substance leaves the site of manufacture in a product that is available to either the public or

your competitors, can they identify the substance by analyzing the product?

(J) For what purpose do you manufacture or import the substance?

(K) Has EPA, another Federal agency, or any Federal court made any pertinent confidentiality determinations regarding this chemical substance? If so, copies of such determinations must be included in the substantiation.

(L) If the notice includes a health and safety study concerning the new chemical substance, the submitter must also answer the questions in § 720.90(b)(2).

(4) If the submitter does not meet the requirements of this paragraph, EPA will deny the claim of confidentiality.

(5)(i) EPA will publish a generic name on the public Inventory if:

(A) The submitter asserts a claim of confidentiality in accordance with this paragraph.

(B) No claim for confidentiality of the specific chemical identity as part of a health and safety study has been denied in accordance with Part 2 of this Title or § 720.90.

(ii) Publication of a generic name on the public Inventory does not create a category for purposes of the Inventory. Any person who has a *bona fide* intent to manufacture or import a chemical substance which is described by a generic name on the public Inventory may submit an inquiry to EPA under § 720.25(b) to determine whether the particular chemical substance is included on the confidential Inventory.

(iii) Upon receipt of a request described in § 720.25(b), EPA may require the submitter which originally asserted confidentiality for a chemical substance to submit to EPA the information listed in paragraph (b)(3)(iii) of this section.

(iv) Failure to submit any of the information required under paragraph (b)(3)(iii) of this section within ten days of a request by EPA under this paragraph is a waiver of the original submitter's confidentiality claim. In this event, EPA may place the specific chemical identity on the public Inventory without further notice to the original submitter.

(6) If a submitter asserts a claim of confidentiality under this paragraph, EPA will examine the generic chemical name proposed by the submitter.

(i) If EPA determines that the generic name proposed by the submitter is only as generic as necessary to protect the confidential identity of the particular chemical substance, EPA will place that generic name on the public Inventory.

(ii) If EPA determines that the generic name proposed by the submitter is more generic than necessary to protect the confidential identity, EPA will propose in writing, for review by the submitter, an alternative generic name that will reveal the chemical identity of the chemical substance to the maximum extent possible.

(iii) If the generic name proposed by EPA is acceptable to the submitter, EPA will place that generic name on the public Inventory.

(iv) If the generic name proposed by EPA is not acceptable to the submitter, the submitter must explain in detail why disclosure of that generic name would reveal confidential business information and propose another generic name which is only as generic as necessary to protect the confidential identity. If EPA does not receive a response from the submitter within 30 days after the submitter receives the proposed name, EPA will place EPA's chosen generic name on the public Inventory. If the submitter does provide the information requested, EPA will review the response. If the submitter's proposed generic name is acceptable, EPA will publish that generic name on the public Inventory. If the submitter's proposed generic name is not acceptable, EPA will notify the submitter of EPA's choice of a generic name. Thirty days after this notification, EPA will place the chosen generic name on the public Inventory.

### § 720.87 Categories or proposed categories of uses of a new chemical substance.

(a) A person who submits information to EPA under this Part on the categories or proposed categories of use of a new chemical substance may assert a claim of confidentiality for this information.

(b) A submitter that asserts such a claim must:

(1) Report the categories or proposed categories of use of the chemical substance.

(2) Provide, in nonconfidential form, a description of the uses that is only as generic as necessary to protect the confidential business information. The generic use description will be included in the FEDERAL REGISTER notice described in §720.70.

(c) The person must submit the information required by paragraph (b) of this section in the manner specified in the notice form.

**§720.90 Data from health and safety studies.**

(a) *Information other than specific chemical identity*. Except as provided in paragraph (b) of this section, EPA will deny any claim of confidentiality with respect to information included in a health and safety study, unless the information would disclose confidential business information concerning:

(1) Processes used in the manufacture or processing of a chemical substance or mixture.

(2) In the case of a mixture, the portion of the mixture comprised by any of the chemical substances in the mixture.

(3) Informaton which is not in any way related to the effects of a substance on human health or the environment, such as the name of the submitting company, cost or other financial data, product development or marketing plans, and advertising plans, for which the person submits a claim of confidentiality in accordance with §720.80.

(b) *Specific chemical identity*—(1) *Claims applicable to period prior to commencement of manufacture*. A claim of confidentiality for the period prior to commencement of manufacture or import for the chemical identity of a chemical substance for which a health and safety study was submitted must be asserted in conjunction with a claim asserted under §720.85(a).

(2) *Claims applicable to period after commencement of manufacture or import for commercial purposes*. To maintain the confidential status of the chemical identity of a chemical substance for which a health and safety study was submitted after commencement of manufacture or import, the claim must be reasserted and substantiated in conjunction with a claim under §720.85(b). In addition to the questions set forth in §720.85(b)(3)(iv) of this part, the submitter must answer the following questions:

(i) Would disclosure of the chemical identity disclose processes used in the manufacture or processing of a chemical substance or mixture? Describe how this would occur. In responding to the question in §720.85(b)(3)(iv)(A), explain what harmful competitive effects would occur from disclosure of this process information.

(ii) Would disclosure of the chemical identity disclose the portion of a mixture comprised by any of the substances in the mixture? Describe how this would occur. In responding to the question in §720.85(b)(3)(iv)(A), explain what harmful competitive effects would occur from disclosure of this information.

(iii) Do you assert that disclosure of the chemical identity is not necessary to interpret any of the health and safety studies you have submitted? If so, explain how a less specific identity would be sufficient to interpret the studies.

(c) *Denial of confidentiality claim*. EPA will deny a claim of confidentiality for chemical identity under paragraph (b) of this section, unless:

(1) The information would disclose processes used in the manufacture or processing of a chemical substance or mixture.

(2) In the case of a mixture, the information would disclose the portion of the mixture comprised by any of the substances in the mixture.

(3) The specific chemical identity is not necessary to interpret a health and safety study.

(d) *Use of generic names*. When EPA discloses a health and safety study containing a specific chemical identity, which the submitter has claimed confidential, and if the Agency has not denied the claim under paragraph (c) of this section, EPA will identify the chemical substance by the generic name selected under §720.85.

[48 FR 21742, May 13, 1983, as amended at 58 FR 34204, June 23, 1993]

### § 720.95 Public file.

All information submitted with a notice, including any health and safety study and other supporting documentation, will become part of the public file for that notice, unless such materials are claimed confidential. In addition, EPA may add materials to the public file, subject to subpart E of this part. Any of the nonconfidential material described in this subpart will be available for public inspection in the Non-Confidential Information Center (NCIC) (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room B–607 NEM, 401 M Street, SW., Washington, DC, 20460, between the hours of 12 p.m. and 4 p.m. weekdays excluding legal holidays.

[48 FR 21742, May 13, 1983, as amended at 53 FR 12523, Apr. 15, 1988; 60 FR 16311, Mar. 29, 1995; 60 FR 34464, July 3, 1995]

## Subpart F—Commencement of Manufacture or Import

### § 720.102 Notice of commencement of manufacture or import.

(a) *Applicability*. Any person who commences the manufacture or import of a new chemical substance for a non-exempt commercial purpose for which that person previously submitted a section 5(a) notice under this part must submit a notice of commencement of manufacture or import.

(b) *When to report*. (1) If manufacture or import for commercial purposes begins on or after the effective date of this rule, the submitter must submit the notice to EPA on, or no later than 30 calendar days, after the first day of such manufacture or import.

(2) If manufacture or import for commercial purposes began or will begin before the effective date of this rule, the submitter must submit the notice by the effective date of this rule.

(c) *Information to be reported on form*. (1) The notice must be submitted on EPA (Form 7710–56), which is available from the Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. The form must be signed and dated by an authorized official. All information specified on the form must be provided. The notice must contain the following information:

(i) The specific chemical identity of the PMN substance.

(ii) A generic chemical name (if the chemical identity is claimed as confidential by the submitter).

(iii) The premanufacture notice (PMN) number assigned by EPA.

(iv) The date of commencement for the submitter's manufacture or import for a non-exempt commercial purpose (indicating whether the substance was initially manufactured in the United States or imported). The date of commencement is the date of completion of non-exempt manufacture of the first amount (batch, drum, etc.) of new chemical substance identified in the submitter's PMN. For importers, the date of commencement is the date the new chemical substance clears United States customs.

(v) The name and address of the submitter.

(vi) The name of the authorized official.

(vii) The name and telephone number of a technical contact in the United States.

(viii) The address of the site where commencement of manufacture occurred.

(ix) Clear indications of whether the chemical identity, submitter identity, and/or other information are claimed as confidential by the submitter.

(2) If the submitter claims the chemical identity confidential, and wants the identity to be listed on the confidential portion of the Inventory, the claim must be reasserted and substantiated in accordance with §720.85(b). Otherwise, EPA will list the specific chemical identity on the public Inventory. Submitters who did not claim the chemical identity, submitter identity, or other information to be confidential in the PMN cannot claim this information as confidential in the notice of commencement.

(d) *Where to submit*. Notices of commencement of manufacture or import should be submitted to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room

G–099, 401 M St., SW., Washington, DC., 20460.

(Approved by the Office of Management and Budget under control number 2070–0012)

[48 FR 21742, May 13, 1983, as amended at 48 FR 41140, Sept. 13, 1983; 51 FR 15103, Apr. 22, 1986; 53 FR 12523, Apr. 15, 1988; 60 FR 16311, Mar. 29, 1995; 60 FR 34464, July 3, 1995]

## Subpart G—Compliance and Inspections

### § 720.120 Compliance.

(a) Failure to comply with any provision of this part is a violation of section 15 of the Act (15 U.S.C 2614).

(b) A person who manufactures or imports a new chemical substance before a notice is submitted and the notice review period expires is in violation of section 15 of the Act even if that person was not requied to submit the notice under § 720.22.

(c) Using for commercial purposes a chemical substance or mixture which a person knew or had reason to know was manufactured, processed, or distributed in commerce in violation of section 5 of this rule is a violation of section 15 of the Act (15 U.S.C. 2614).

(d) Failure or refusal to establish and maintain records or to permit access to or copying of records, as required by the Act, is a violation of section 15 of the Act (15 U.S.C. 2614).

(e) Failure or refusal to permit entry or inspection as required by section 11 is a violation of section 15 of the Act (15 U.S.C. 2614).

(f) Violators may be subject to the civil and criminal penalties in section 16 of the Act (15 U.S.C. 2615) for each violation. Persons who submit materially misleading or false information in connection with the requirements of any provision of this rule may be subject to penalties calculated as if they never filed their notices.

(g) EPA may seek to enjoin the manufacture or processing of a chemical substance in violation of this rule or act to seize any chemical substance manufactured or processed in violation of this rule or take other actions under the authority of section 7 of this Act (15 U.S.C. 2606) or section 17 or this Act (15 U.S.C. 2616).

### § 720.122 Inspections.

EPA will conduct inspections under section 11 of the Act to assure compliance with section 5 of the Act and this rule, to verify that information submitted to EPA under this rule is true and correct, and to audit data submitted to EPA under this rule.

# PART 721—SIGNIFICANT NEW USES OF CHEMICAL SUBSTANCES

## Subpart A—General Provisions

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721.50 Applicability.
721.63 Protection in the workplace.
721.72 Hazard communication program.
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721.160 Notification requirements for new chemical substances subject to section 5(e) orders.
721.170 Notification requirements for selected new chemical substances that have completed premanufacture review.
721.185 Limitation or revocation of certain notification requirements.

## Subpart E—Significant New Uses for Specific Chemical Substances

721.225 2-Chloro-N-methyl-N-substituted acetamide (generic name).
721.275 Halogenated-N-(2-propenyl)-N-(substituted phenyl) acetamide.
721.285 Acetamide, *N*-[4-(pentyloxy)phenyl]-, acetamide, *N*-[2-nitro-4-(pentyloxy)phenyl]-, and acetamide, *N*-[2-amino-4-(pentyloxy)phenyl]-.
721.320 Acrylamide-substituted epoxy.
721.323 Substituted acrylamide.
721.325 Certain acrylates.
721.370 Substituted diacrylate.
721.390 Monoacrylate.
721.400 Polyalkylpolysilazane, bis (substituted acrylate).
721.415 Aliphatic diurethane acrylate ester.
721.430 Oxo-substituted aminoalkanoic acid derivative.
721.445 Substituted ethyl alkenamide.
721.460 Amino acrylate monomer.
721.470 Aliphatic difunctional acrylic acid ester.
721.490 Modified acrylic ester (generic name).
721.505 Halogenated acrylonitrile.
721.520 Alanine, N-(2-carboxyethyl)-N-alkyl-, salt.
721.530 Substituted aliphatic acid halide (generic name).
721.536 Halogenated phenyl alkane.
721.540 Alkylphenoxypolyalkoxyamine (generic name).
721.550 Alkyl alkenoate, azobis-.
721.562 Substituted alkylamine salt.
721.575 Substituted alkyl halide.
721.600 3-Alkyl-2-(2-anilino)vinyl thiazolinium salt (generic name).
721.625 Alkylated diarylamine, sulfurized (generic name).
721.639 Amine aldehyde condensate.
721.642 Amines, *N*-($C_{14–18}$ and $C_{16–18}$ unsaturated alkyl)] dipropylene-tri-, tripropylenetetra-, and tetrapropylenepenta-.
721.650 11-Aminoundecanoic acid.
721.700 Methylenebistrisubstituted aniline (generic name).
721.715 Trisubstituted anthracene.
721.750 Aromatic amine compound.
721.757 Polyoxyalkylene substituted aromatic azo colorant.
721.775 Brominated aromatic compound (generic name).
721.805 Benzenamine, 4,4′-[1,3-phenylenebis(1-methylethyl idene)]bis[2,6-dimethyl-.
721.825 Certain aromatic ether diamines.
721.840 Alkyl substituted diaromatic hydrocarbons.
721.875 Aromatic nitro compound.
721.925 Substituted aromatic (generic).
721.950 Sodium salt of an alkylated, sulfonated aromatic (generic name).
721.982 Calcium, bis(2,4-pentanedionato-*O*,*O*′).
721.1000 Benzenamine, 3-chloro-2,6-dinitro-N,N-dipropyl-4-(trifluoromethyl)-.
721.1025 Benzenamine, 4-chloro-2-methyl-; benzenamine, 4-chloro-2-methyl-, hydrochloride; and benzenamine, 2-chloro-6-methyl-.
721.1050 Benzenamine, 2,5-dibutoxy-4-(4-morpholinyl)-, sulfate
721.1068 Benzenamine, 4-isocyanato-*N*,*N*-bis(4-isocyanatophenyl)-2,5-dimethoxy-.
721.1075 Benzenamine, 4-(1-methylbutoxy)-, hydrochloride.
721.1120 Benzenamine, 4,4′-[1,4-phenylenebis(1-methylethylidene)]bis[2,6-dimethyl-.
721.1150 Substituted polyglycidyl benzenamine.
721.1175 Benzene, substituted, alkyl acrylate derivative (generic name).
721.1187 Bis(imidoethylene) benzene.
721.1193 Benzene, 2-bromo-1,4-dimethoxy-.
721.1210 Benzene, (2-chloroethoxy)-.
721.1225 Benzene, 1,2-dimethyl-, polypropene derivatives, sulfonated, potassium salts.
721.1300 [(Dinitrophenyl)azo]-[2,4-diamino-5-methoxybenzene] derivatives.
721.1325 Benzene, 1-(1-methylbutoxy)-4-nitro-.
721.1350 Benzene, (1-methylethyl)(2-phenylethyl)-.
721.1372 Substituted nitrobenzene.
721.1375 Disubstituted nitrobenzene (generic name).
721.1425 Pentabromoethylbenzene.
721.1430 Pentachlorobenzene.
721.1435 1,2,4,5-Tetrachlorobenzene.
721.1440 1,3,5-Trinitrobenzene.
721.1450 1,3-Benzenediamine, 4-(1,1-dimethylethyl)-ar-methyl.
721.1500 1,2-Benzenediamine, 4-ethoxy, sulfate.
721.1525 Mixture of: 1,3–benzenediamine, 2–methyl–4,6–bis(methylthio)– (CAS NO. 104983–85–9) and 1,3–benzenediamine, 4–methyl–2,6–bis(methylthio)– (CAS NO. 102093–68–5).
721.1550 Benzenediazonium, 4-(dimethylamino)-, salt with 2-hydroxy-5-sulfobenzoic acid (1:1).
721.1555 Substituted phenyl azo substituted benzenediazonium salt.
721.1568 Substituted benzenediazonium.
721.1575 Substituted benzenedicarboxylic acid, poly(alkyl acrylate) derivative.
721.1612 Substituted 2-nitro- and 2-aminobenzesulfonamide.
721.1625 Alkylbenzene sulfonate, amine salt.

721.1630 1,2-Ethanediol bis(4-methylbenzenesulfonate); 2,2-oxybis-ethane bis(4-methylbenzenesulfonate); ethanol, 2,2′-[oxybis(2,1-ethanediyl oxy)]bis-, bis(4-methylbenzenesulfonate); ethanol, 2,2′-[oxybis (2,1-ethane diyloxy)] bis-, bis(4-methylbenzenesulfonate); ethanol, 2,2′-[[1-[(2-propenyloxy) methyl]-1,2-ethanediyl] bis(oxy)]bis-, bis(4-methylbenzene sulfonate); and ethanol, 2-[1-[[2-[2-[[(4-methylphenyl)sulfonyl] oxy]ethoxy] ethoxy]methyl]-2-(2-propenyloxy)ethoxy]-, 4-methylbenzenesulfonate.

721.1637 1,2-Propanediol, 3-(2-propenyloxy)-, bis(4-methylbenzene sulfonate); 2-propanol, 1-[2-[[(4-methylphenyl)sulfonyl] oxy]ethoxy]-3-(2-propenyloxy)-4-methylbenzenesulfonate; and 2-propanol, 1-[2-[2-[[(4-methylphenyl)sulfonyl]oxy] ethoxy]ethoxy]-3-(2-propenyloxy)-, 4-methylbenzenesulfonate.

721.1640 3,6,9,12,-Tetraoxatetradecane-1,14-diol, bis(4-methylbenzenesulfonate; 3,6,9,13-tetraoxahexadec-15-ene-1,11-diol, bis(4-methylbenzenesulfonate); 3,6,9,12,16-pentaoxanonadec-18-ene-1,14-diol, bis(4-methyl benzenesulfonate); and 3,6,9,12-tetraoxatetradecane-1,14-diol, 7-[(2-propenyloxy)methyl]-, bis(4-methylbenzenesulfonate).

721.1643 Benzenesulfonic acid, amino substituted phenylazo-.

721.1645 Benzenesulfonic acid, 4-methyl-, reaction products with oxirane mono[($C_{10-16}$-alkyloxy)methyl] derivatives and 2,2,4(or 2,4,4)-trimethyl-1,6–hexanediamine.

721.1650 Alkylbenzenesulfonic acid and sodium salts.

721.1675 Disulfonic acid rosin amine salt of a benzidine derivative (generic name).

721.1700 Halonitrobenzoic acid, substituted (generic name).

721.1725 Benzoic acid, 3,3′-methylenebis [6 amino-, di-2-propenyl ester.

721.1728 Benzoic acid, 2-(3-phenylbutylidene)amino-, methyl ester.

721.1732 Nitrobenzoic acid octyl ester.

721.1735 Alkylbisoxyalkyl (substituted-1,1-dimethylethylphenyl) benzotriazole (generic name).

721.1740 Substituted dichlorobenzothiazoles.

721.1745 Ethoxybenzothiazole disulfide.

721.1750 1*H*-Benzotriazole, 5-(pentyloxy)- and 1*H*-benzotriazole, 5-(pentyloxy)-, sodium and potassium salts.

721.1755 Methylenebisbenzotriazole.

721.1760 Substituted benzotriazole derivatives.

721.1765 2-Substituted benzotriazole.

721.1775 6-Nitro-2(3H)-benzoxazolone.

721.1790 Polybrominated biphenyls.

721.1800 3,3’,5,5’-Tetramethylbiphenyl-4,4’-diol.

721.1820 Bisphenol derivative.

721.1825 Bisphenol A, epichlorohydrin, polyalkylenepolyol and polyisocyanato derivative.

721.1850 Toluene sulfonamide bisphenol A epoxy adduct.

721.1875 Boric acid, alkyl and substituted alkyl esters (generic name).

721.1900 Substituted bromothiophene.

721.1907 Butanamide, 2,2′-[3,3′-dichloro [1,1′-biphenyl]-4,4′-diyl)bisazobis[*N*-2,3-dihydro-2-oxo-1*H*-benzimidazol-5-yl)-3-oxo-.

721.1920 1,4-Bis(3–hydroxy-4-benzoylphenoxy)butane.

721.1925 Substituted carboheterocyclic butane tetracarboxylate.

721.1950 2-Butenedioic acid (Z), mono(2-((1-oxopropenyloxy)ethyl) ester .

721.2025 Substituted phenylimino carbamate derivative.

721.2050 Carbamic acid, (trialkyloxy silyalkyl)-substituted acrylate ester.

721.2075 Carbamodithioic acid, methyl-, compound with methanamine (1:1).

721.2084 Carbon oxyfluoride (Carbonic difluoride).

721.2085 Hydroxyalkylquinoline dioxoindandialkylcarboxamide.

721.2086 Coco acid triamine condensate, polycarboxylic acid salts.

721.2088 Carboxylic acids, (C6–C9) branched and linear.

721.2089 Tetrasubstituted aminocarboxylic acid.

721.2092 3-Methylcholanthrene.

721.2120 Cyclic amide.

721.2140 Carbopolycyclicol azoalkylaminoalkylcarbomonocyclic ester, halogen acid salt.

721.2170 Cyclic phosphazene, methacrylate derivative.

721.2175 Salt of cyclodiamine and mineral acid.

721.2225 Cyclohexanecarbonitrile, 1,3,3-trimethyl-5-oxo-.

721.2250 1,4-Cyclohexanediamine, cis- and trans-.

721.2260 1,2-Cyclohexanedicarboxylic acid, 2,2-bis[[[[2-[(oxiranylmethoxy) carbonyl]cyclohexy]carbonyl]oxy]methyl]-1,3-propanediyl bis(oxiranylmethyl) ester.

721.2270 Aliphatic dicarboxylic acid salt.

721.2275 N,N,N’,N’-Tetrakis(oxiranyl methyl)-1,3-cyclohexane dimethanamine.

721.2287 DDT (Dichlorodiphenyltrichloroethane).

721.2340 Dialkenylamide (generic name).

721.2355 Diethylstilbestrol.

721.2380 Disubstituted diamino anisole.

721.2410 Alkoxylated alkyldiethylenetriamine, alkyl sulfate salts.

721.2420 Alkoxylated dialkyldiethylenetriamine, alkyl sulfate salt.

721.2475 Dimetridazole.

721.2520 Alkylated diphenyls.

721.2540 Diphenylmethane diisocyanate (MDI) modified.
721.2560 Alkylated diphenyl oxide (generic name).
721.2565 Alkylated sulfonated diphenyl oxide, alkali and amine salts.
721.2575 Disubstituted diphenylsulfone.
721.2600 Epibromohydrin.
721.2625 Reaction product of alkanediol and epichlorohydrin.
721.2650 Acid modified acrylated epoxide.
721.2675 Perfluoroalkyl epoxide (generic name).
721.2725 Trichlorobutylene oxide.
721.2750 Epoxy resin.
721.2800 Erionite fiber.
721.2815 Aliphatic ester.
721.2825 Alkyl ester (generic name).
721.2840 Alkylcarbamic acid, alkynyl ester.
721.2860 Unsaturated amino ester salt (generic name).
721.2880 Unsaturated amino alkyl ester salt (generic name).
721.2900 Substituted aminobenzoic acid ester (generic name).
721.2920 tert-Amyl peroxy alkylene ester (generic name).
721.2930 Substituted benzenedicarboxylic acid ester.
721.2940 Benzoate ester.
721.2950 Carboxylic acid glycidyl esters.
721.2980 Substituted cyclohexyldiamino ethyl esters.
721.3000 Dicarboxylic acid monoester.
721.3020 1,1-Dimethylpropyl peroxyester (generic name).
721.3028 Methacrylic ester.
721.3034 Methylamine esters.
721.3040 Alkenoic acid, trisubstituted-benzyl-disubstituted-phenyl ester.
721.3060 Alkenoic acid, trisubstituted-phenylalkyl-disubstituted-phenyl ester.
721.3080 Substituted phosphate ester (generic).
721.3100 Oligomeric silicic acid ester compound with a hydroxylalkylamine.
721.3120 Propenoate-terminated alkyl substituted silyl ester.
721.3140 Vinyl epoxy ester.
721.3152 Ethanaminium, *N*-ethyl-2-hydroxy-*N*,*N*-bis(2-hydroxyethyl)-, diester with $C_{12-18}$ fatty acids, ethyl sulfates (salts).
721.3160 1-Chloro-2-bromoethane.
721.3180 Ethane, 2-chloro-1,1,1,2-tetrafluoro-.
721.3200 Ethane, 1,1-dichloro-1-fluoro-.
721.3220 Pentachloroethane.
721.3240 Ethane, 1,1,1,2,2-pentafluoro-.
721.3248 Ethane, 1,2,2-trichlorodifluoro-.
721.3254 Ethane, 1,1,1 trifluoro-.
721.3260 Ethanediimidic acids.
721.3320 Ethanol, 2-amino-, compound with N-hydroxy-N-nitrosobenzenamine (1:1).
721.3340 Ethanol, 2,2'-(hexylamino)bis-.
721.3350 N-Nitrosodiethanolamine.
721.3360 Substituted ethanolamine.
721.3364 Aliphatic ether.
721.3374 Alkylenediolalkyl ether.
721.3380 Anilino ether.
721.3420 Brominated arylalkyl ether.
721.3430 4-Bromophenyl phenyl ether.
721.3435 Butoxy-substituted ether alkane.
721.3437 Dialkyl ether.
721.3440 Haloalkyl substituted cyclic ethers.
721.3460 Diglycidyl ether of disubstituted carbopolycyle (generic name).
721.3480 Halogenated biphenyl glycidyl ethers.
721.3486 Polyglycerin mono(4-nonylphenyl) ether.
721.3500 Perhalo alkoxy ether.
721.3520 Aliphatic polyglycidyl ether.
721.3560 Derivative of tetrachloroethylene.
721.3620 Fatty acid amine condensate, polycarboxylic acid salts.
721.3625 Fatty acid amine salt (generic name).
721.3627 Branched synthetic fatty acid.
721.3629 Triethanolamine salts of fatty acids.
721.3640 Trimethylolpropane fatty acid diacrylate.
721.3680 Ethylene oxide adduct of fatty acid ester with pentaerythritol.
721.3700 Fatty acid, ester with styrenated phenol, ethylene oxide adduct.
721.3720 Fatty amide.
721.3740 Bisalkylated fatty alkyl amine oxide
721.3760 Fluorene-containing diaromatic amines.
721.3764 Fluorene substituted aromatic amine.
721.3790 Polyfluorocarboxylates.
721.3800 Formaldehyde, condensated polyoxyethylene fatty acid, ester with styrenated phenol, ethylene oxide adduct.
721.3815 Furan, 2-(ethoxymethyl)-tetrahydro-.
721.3840 Tetraglycidalamines (generic name).
721.3860 Glycol monobenzoate.
721.3870 Monomethoxy neopentyl glycol propoxylate monoacrylate.
721.3880 Polyalkylene glycol substituted acetate.
721.3900 Alkyl polyethylene glycol phosphate, potassium salt.
721.4000 Polyoxy alkylene glycol amine.
721.4020 Polyalkylene glycol alkyl ether acrylate.
721.4040 Glycols, polyethylene-, 3-sulfo-2-hydroxypropyl-p-(1,1,3,3-tetramethylbutyl)phenyl ether, sodium salt.
721.4060 Alkylene glycol terephthalate and substituted benzoate esters (generic name).
721.4080 MNNG (N-methyl-N'-nitro-N-nitrosoguanidine).
721.4100 Tris(disubstituted alkyl) heterocycle.
721.4110 Allyloxysubstituted heterocycle.
721.4128 Dimethyl-3-substituted heteromonocycle.

721.4133 Dimethyl-3-substituted heteromonocyclic amine.
721.4140 Hexachloronorbornadiene.
721.4155 Hexachloropropene.
721.4160 Hexafluoropropylene oxide.
721.4180 Hexamethylphosphoramide.
721.4200 Substituted alkyl peroxyhexane carboxylate (mixed isomers) (generic name).
721.4215 Hexanedioic acid, diethenyl ester.
721.4220 Hexanedioic acid, polymer with 1,2-ethanediol and 1,6-diisocyanato-2,2,4(or 2,4,4)-trimethylhexane, 2-hydroxyethyl-acrylate-blocked.
721.4240 Alkyl peroxy-2-ethyl hexanoate.
721.4250 Hexanoic acid, 2-ethyl-, ethenyl ester.
721.4255 1,4,7,10,13,16-Hexaoxacyclooctadecane, 2-[(2-propenyl oxy)methyl]-.
721.4260 Hydrazine, [4-(1-methylbutoxy)phenyl]-, monohydrochloride.
721.4270 Nitrophenoxylalkanoic acid substituted thiazino hydrazide (generic name).
721.4280 Substituted hydrazine.
721.4300 Hydrazinecarboxamide, N,N'-1,6–hexanediylbis [2,2-dimethyl-].
721.4320 Hydrazinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis [2,2-dimethyl-.
721.4340 Substituted thiazino hydrazine salt (generic name).
721.4360 Certain hydrogen containing chlorofluorocarbons.
721.4380 Modified hydrocarbon resin.
721.4390 Trisubstituted hydroquinone diester.
721.4400 Substituted hydroxyalkyl alkenoate, [(1-oxo-2-propenyl)oxy] alkoxy] carbonylamino] substituted] aminocarbonyl]oxy-.
721.4420 Substituted hydroxylamine.
721.4460 Amidinothiopropionic acid hydrochloride.
721.4463 Hydrochlorofluorocarbon.
721.4466 3-Hydroxy-1,1-dimethylbutyl derivative.
721.4470 2,4-Imidazolidinedione, bromochloro-5,5-dimethyl-.
721.4473 Dialkylamidoimidazoline.
721.4480 2-Imino-1,3-thiazin-4-one-5,6-dihydromonohydrochloride.
721.4490 Capped aliphatic isocyanate.
721.4500 Isopropylamine distillation residues and ethylamine distillation residues.
721.4520 Isopropylidene, bis(1,1-dimethylpropyl) derivative.
721.4550 Diperoxy ketal.
721.4568 Methylpolychloro aliphatic ketone.
721.4585 Lecithins, phospholipase A2-hydrolyzed.
721.4590 Mannich-based adduct.
721.4594 Substituted azo metal complex dye.
721.4596 Diazo substituted carbomonocyclic metal complex.
721.4600 Recovered metal hydroxide.
721.4620 Dialkylamino alkanoate metal salt.
721.4640 Substituted benzenesulfonic acid, alkali metal salt.
721.4660 Alcohol, alkali metal salt.
721.4680 Metal salts of complex inorganic oxyacids (generic name).
721.4700 Metalated alkylphenol copolymer (generic name).
721.4720 Disubstituted phenoxazine, chlorometalate salt.
721.4740 Alkali metal nitrites.
721.4780 Hydroxyalkyl methacrylate, alkyl ester.
721.4790 2-(2-Hydroxy-3-tert-butyl-5-methylbenzyl)-4-methyl-6-tert-butylphenyl methacrylate.
721.4794 Polypiperidinol-acrylate methacrylate.
721.4800 Methacrylic ester.
721.4820 Methane, bromodifluoro-.
721.4840 Substituted triphenylmethane.
721.4880 Methanol, trichloro-, carbonate (2:1).
721.4925 Methyl n-butyl ketone.
721.5050 2,2′-[(1-Methylethylidene)bis[4,1-phenyloxy[1-(butoxymethyl)-(2,1-ethanediyl]oxymethylene]]bisoxirane, reaction product with a diamine.
721.5075 Mixed methyltin mercaptoester sulfides.
721.5175 Mitomycin C.
721.5192 Substituted 1,6-dihydroxy naphthalene.
721.5200 Disubstituted phenylazo trisubstituted naphthalene.
721.5225 Naphthalene,1,2,3,4-tetrahydro(1-phenylethyl) (specific name).
721.5250 Trimethyl spiropolyheterocyclic naphthalene compound.
721.5275 2-Napthalenecarboxamide-N-aryl-3-hydroxy-4-arylazo (generic name).
721.5278 Substituted naphthalenesulfonic acid, alkali salt.
721.5282 Trisodium chloro [(trisubstituted heteromonocycle amino) propylamino]triazinylamino hydroxyazo naphthalenetrisulfonate.
721.5285 Ethoxylated substituted naphthol.
721.5300 Neodecaneperoxoic acid, 1,1,3,3-tetramethylbutyl ester.
721.5310 Neononanoic acid, ethenyl ester.
721.5325 Nickel acrylate complex.
721.5330 Nickel salt of an organo compound containing nitrogen.
721.5350 Substituted nitrile (generic name).
721.5375 Nitrothiophenecarboxylic acid, ethyl ester, bis[[[[(substituted)] amino]alkylphenyl]azo] (generic name).
721.5385 Octanoic acid, hydrazide.
721.5400 3,6,9,12,15,18,21-Heptaoxatetratriaoctanoic acid, sodium salt.
721.5425 α-Olefin sulfonate, potassium salts.
721.5450 α-Olefin sulfonate, sodium salt.
721.5475 1-Oxa-4-azaspiro[4.5]decane, 4-dichloroacetyl-.

721.5500 7-Oxabicyclo[4.1.0]heptane, 3-ethenyl, homopolymer, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), epoxidized.
721.5525 Substituted spiro oxazine.
721.5540 1*H*,3*H*,5*H*-oxazolo [3,4-c] oxazole, dihydro-7a-methyl-.
721.5550 Substituted dialkyl oxazolone (generic name).
721.5575 Oxirane, 2,2'-(1,6-hexanediylbis (oxymethylene)) bis-.
721.5600 Substituted oxirane.
721.5625 Oxiranemethanamine, N,N′-[methylenebis(2-ethyl-4,1-phenylene)]bis[N-(oxiranylmethyl)]-.
721.5700 Pentanenitrile, 3-amino-.
721.5705 2,5,8,10,13-Pentaoxahexadec-15-enoic acid, 9,14-dioxo-2-[(1-oxo-2-propenyl)oxy]ethyl ester.
721.5710 Phenacetin.
721.5740 Phenol, 4,4'-methylenebis (2,6-dimethyl-.
721.5760 Phenol, 4,4'-[methylenebis (oxy-2,1-ethanediylthio)]bis-.
721.5763 Methylenebisbenzotriazolyl phenols.
721.5769 Mixture of nitrated alkylated phenols.
721.5780 Phenol, 4,4'-(oxybis(2,1-ethanediylthio)bis-.
721.5800 Sulfurized alkylphenol.
721.5820 Aminophenol.
721.5840 Ethylated aminophenol.
721.5860 Methylphenol, bis(substituted)alkyl.
721.5867 Substituted phenol.
721.5880 Sulfur bridged substituted phenols (generic name).
721.5900 Trisubstituted phenol (generic name).
721.5910 Acrylated epoxy phenolic resin.
721.5915 Polysubstituted phenylazopolysubstitutedphenyl dye.
721.5920 Phenyl(disubstitutedpolycyclic).
721.5960 N,N'-Bis(2-(2-(3-alkyl)thiazoline) vinyl)-1,4-phenylenediamine methyl sulfate double salt (generic name).
721.5970 Phosphated polyarylphenol ethoxylate, potassium salt.
721.5980 Dialkyl phosphorodithioate phosphate compounds.
721.5990 Halogenated phosphate ester.
721.6000 Tris (2,3-dibromopropyl) phosphate.
721.6020 Phosphine, dialkylyphenyl.
721.6060 Alkylaryl substituted phosphite.
721.6070 Alkyl phosphonate ammonium salts.
721.6080 Phosphonium salt (generic name).
721.6085 Phosphonocarboxylate salts.
721.6090 Phosphoramide.
721.6100 Phosphoric acid, $C_{6-12}$-alkyl esters, compounds with 2-(dibutylamino) ethanol.
721.6110 Alkyldi(alkyloxyhydroxypropyl) derivative, phosphoric acid esters, potassium salts.
721.6120 Phosphoric acid, 1,2-ethanediyl tetrakis(2-chloro-1-methylethyl) ester.
721.6140 Dialkyldithiophosphoric acid, aliphatic amine salt.
721.6160 Piperazinone, 1,1′,1″-[1,3,5-triazine-2,4,6-triyltris[(cyclohexylimino)-2,1-ethanediyl]]tris-[3,3,4,5,5-pentamethyl]-.
721.6186 Polyamine dithiocarbamate.
721.6200 Fatty acid polyamine condensate, phosphoric acid ester salts.
721.6220 Aryl sulfonate of a fatty acid mixture, polyamine condensate.
721.6440 Polyamine ureaformaldehyde condensate (specific name).
721.6470 Polyaminopolyacid.
721.6500 Polymer.
721.6520 Acrylamide, polymer with substituted alkylacrylamide salt (generic name).
721.6540 Acrylamide, polymers with tetraalkyl ammonium salt and polyalkyl, aminoalkyl methacrylamide salt.
721.6560 Acrylic acid, polymer with substituted ethene.
721.6580 Polymer of adipic acid, alkanepolyol, alkyldiisocyanatocarbomonocycle, hydroxyalkyl acrylate ester.
721.6620 Alkanaminium, polyalkyl-[(2-methyl-1-oxo-2-propenyl)oxy] salt, polymer with acrylamide and substituted alkyl methacrylate.
721.6640 Polymer of alkanedioic acid, methylenebiscarbomonocyclic diisocyanate, and alkylene glycols, hydroxyalkyl acrylate ester.
721.6660 Polymer of alkanepolyol and polyalkylpolyisocyanatocarbomonocycle, acetone oxime-blocked (generic name).
721.6680 Alkanoic acid, butanediol and cyclohexanealkanol polymer (generic name).
721.6700 Polymer of alkenoic acid, substituted alkylacrylate sodium salt (generic name).
721.6720 Alkyldicarboxylic acids, polymers with alkanepolyol and TDI, alkanol blocked, acrylate.
721.6740 Polymer of alkyl carbomonocycle diisocyanate with alkanepolyol polyacrylate.
721.6760 Alkylenebis (substituted carbomonocycle), epichlorohydrin, disubstituted heteromonocycle, acrylate polymer.
721.6780 Polymer of substituted alkylphenol formaldehyde and phthalic anhydride, acrylate (generic name).
721.6820 Polymer of substituted aryl olefin.
721.6840 Substituted bis(hydroxyalkane) polymer with epichlorohydrin, acrylate.
721.6880 Bisphenol A, epichlorohydrin, meth-yl-ene-bis (sub-sti-tut-ed carbomonocycle), poly-al-ky-lene gly-col, al-ka-nol, meth-a-cry-late poly-mer.
721.6900 Polymer of bisphenol A diglycidal ether, substituted alkenes, and butadiene.

721.6920 Butyl acrylate, polymer with substituted methyl styrene, methyl methacrylate, and substituted silane.

721.6940 Caprolactone, polymer with hexamethylene diisocyanate, hydroxyalkyl acrylate ester, reaction products with substituted alkanoic acid and metal heteromonocycle.

721.6960 E-Caprolactone modified 2-hydroxyethyl acrylate monomer.

721.6980 Dimer acids, polymer with polyalkylene glycol, bisphenol A-diglycidyl ether, and alkylenepolyols polyglycidyl ethers (generic name).

721.7000 Polymer of disodium maleate, allyl ether, and ethylene oxide.

721.7020 Distillates (petroleum), C(3-6), polymers with styrene and mixed terpenes (generic name).

721.7040 Formaldehyde, polymer with (chloromethyl)oxirane, 4,4'-(1-methyl ethylidene)bis[2,6-dibromophenol] and phenol, 2-methyl-2-propenoate.

721.7046 Formaldehyde, polymer with substituted phenols, glycidyl ether.

721.7080 Polymer of hydroxyethyl acrylate and polyisocyanate.

721.7100 Polymer of isophorone diisocyanate, trimethylolpropane, polyalkylenepolyol, disubstituted alkanes and hydroxyethyl acrylate.

721.7140 Methylenebis(4-isocyanato benzene), polymer with polycaprolactone triol and alkoxylated alkanepolyol, hydroxyalkyl methacrylate ester.

721.7160 2-Oxepanone, polymer with 4,4'-(1-methylethylidene)bisphenol and 2,2-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, graft.

721.7180 Substituted oxide-alkylene polymer, methacrylate.

721.7200 Perfluoroalkyl aromatic carbamate modified alkyl methacrylate copolymer.

721.7210 Epoxidized copolymer of phenol and substituted phenol.

721.7220 Polymer of substituted phenol, formaldehyde, epichlorohydrin, and disubstituted benzene.

721.7240 Polymer of disubstituted phthalate, dioxoheteropolycycle, and methacrylic acid.

721.7260 Polymer of polyethylenepolyamine and alkanediol diglycidyl ether.

721.7280 1,3-Propanediamine, N,N'-1,2-ethanediylbis-, polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products with N-butyl-2,2,6,6-tetramethyl-4-piperidinamine.

721.7300 2-Propenenitrile, polymer with 1,3-butadiene, 3-carboxy-1-cyano-1-methylpropyl-terminated, polymers with bisphenol A, epichlorohydrin, and 4,4'-(1-methylethylidene)bis[2,6-dibromophenol], dimethacrylate.

721.7320 2-Propenenitrile, polymer with 1,3-butadiene, 3-carboxy-1-cyano-1-methylpropyl-terminated, polymers with epichlorohydrin, formaldehyde, 4,4'-(1-methylethylidene)bis[2,6-dibromophenol], and phenol, 2-methyl-2-propenoate.

721.7340 Polymer of styrene, substituted alkyl methacrylates, 2-ethylhexyl acrylate, methacrylic acid and substituted bis(benzene).

721.7360 Terpenes and terpenoids, limonene fraction, polymer with substituted carbopolycycles (generic name).

721.7370 Acrylates of aliphatic polyol.

721.7400 Di(alkanepolyol) ether, polyacrylate.

721.7420 Oxyalkanepolyol polyacrylate.

721.7440 Polyalkylenepolyol alkylamine. (generic name).

721.7450 Aromatic amine polyols.

721.7460 Polyol carboxylate ester.

721.7480 Isocyanate terminated polyols.

721.7500 Nitrate polyether polyol (generic name).

721.7540 Polysubstituted polyol.

721.7560 Alkoxylated alkane polyol, polyacrylate ester.

721.7580 Substituted acrylated alkoxylated aliphatic polyol.

721.7600 Alkyl(heterocyclicyl) phenylazohetero monocyclic polyone (generic name).

721.7620 Alkyl(heterocyclicyl) phenylazohetero monocyclic polyone, ((alkylimidazolyl) methyl) derivative (generic name).

721.7655 Alkylsulfonium salt.

721.7660 Poly(oxy-1,4-butanediyl), α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy].

721.7680 Poly(oxy-1,2-ethanediyl), .α.-hydro-.ω.hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) di-2-propenoate, methyl ether

721.7700 Poly(oxy-1,2-ethanediyl), α-hydro-ω-(oxiranylmethoxy)-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1).

721.7710 Polyepoxy polyol.

721.7720 Poly(oxy-1,2-ethanediyl), α,α'-[(1-methylethylidene) di-4,1-phenylene] bis [ω-(oxiranylmethoxy)-.

721.7740 Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxy-, $C_{10-16}$-alkyl ethers.

721.7760 Poly(oxy-1,2-ethanediyl), α-(1-oxo-2-propenyl)-ω-hydroxy-, $C_{10-16}$-alkyl ethers.

721.7770 Alkylphenoxypoly(oxyethylene) sulfuric acid ester, substituted amine salt.

721.7780 Poly[oxy(methyl-1,2-ethanediyl)], α,α'-(2,2-dimethyl-1,3-propanediyl)bis[ω-(oxiranymethoxy)-.

721.8075 Polyurethane.

721.8082 Polyester polyurethane acrylate.

721.8090 Polyurethane polymer.

721.8100 Potassium N,N-bis (hydroxyethyl) cocoamine oxide phosphate, and potassium N,N-bis (hydroxyethyl) tallowamine oxide phosphate.
721.8125 Propane, 1,1,1,2,3,3,3-heptafluoro- .
721.8155 Propanenitrile, 3-[amino, *N*-tallowalkyl] dipropylenetri- and tripropylenetri- and propanenitrile, 3-[amino, ($C_{14-18}$ and $C_{16-18}$ unsaturated alkyl)] trimethylenedi-, dipropylenetri-, and tripropylenetetra-.
721.8160 Propanoic acid, 2,2-dimethyl-,ethenyl ester.
721.8170 Propanol, [2-(1,1-dimethylethoxy)methylethoxy]-.
721.8225 2-Propenamide, N-[3-dimethylamino)propyl]-.
721.8250 1-Propanol, 3,3′-oxybis[2,2-bis(bromomethyl)-.
721.8265 2-Propenoic acid, $C_{18-26}$ and $C_{>20}$ alkyl esters.
721.8275 2-Propenoic acid, 3-(dimethylamino)-2,2-dimethylpropyl ester.
721.8290 2-Propenoic acid, docosyl ester.
721.8300 2-Propenoic acid, 2-hydroxybutyl ester.
721.8325 2-Propenoic acid, 1-(hydroxymethyl) propyl ester.
721.8335 2-Propenoic acid, 2-[[(1-methylethoxy)carbonyl]amino]ethyl ester.
721.8350 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester.
721.8375 2-Propenoic acid, 2-(2-oxo-3-oxazolidinyl)ethyl ester.
721.8400 2-Propenoic acid, 3,3,5-trimethylcyclohexyl ester.
721.8425 2-Propenoic acid, 2-[[[[[1,3,3- trimethyl-5- [[[2- [(1-oxo- 2-propenyl)oxy] ethoxy]carbonyl] amino]cyclohexyl] methyl] amino] carbonyl]oxy] ethyl ester.
721.8450 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester.
721.8475 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester.
721.8500 2-Propenoic acid, 2-methyl-, 7-oxabicyclo [4.1.0]hept-3-ylmethyl ester.
721.8525 2-Propenoic acid, 2-methyl-, 3,3,5-trimethylcyclohexyl ester.
721.8550 2-Propenoic acid, 2-methyl-, 7,7,9-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane, 1,16-diyl ester.
721.8575 2-Propenoic acid [octahydro-4,7-methano-1H-indene-1, 5(1,6 or 2,5)-diyl]bis(methylene) ester.
721.8600 2-Propenoic acid, octahydro-4, 7-methano-1H-indenyl ester.
721.8650 2-Propenoic acid, reaction product with 2-oxepanone and alkyltriol.
721.8654 2-Propenoic acid 3-(trimethoxy silyl)propyl ester.
721.8670 Alkylcyano substituted pyridazo benzoate.
721.8675 Halogenated pyridines.
721.8700 Halogenated alkyl pyridine.
721.8750 Halogenated substituted pyridine.
721.8775 Substituted pyridines.
721.8825 Substituted methylpyridine and substituted 2-phenoxypyridine.
721.8850 Disubstituted halogenated pyridinol.
721.8875 Substituted halogenated pyridinol.
721.8900 Substituted halogenated pyridinol, alkali salt.
721.8965 1*H*-Pyrole-2, 5-dione, 1-(2,4,6-tribromophenyl)-.
721.9000 N-Nitrosopyrrolidine.
721.9075 Quaternary ammonium salt of fluorinated alkylaryl amide.
721.9100 Substituted quinoline.
721.9220 Reaction products of secondary alkyl amines with a substituted benzenesulfonic acid and sulfuric acid (generic name).
721.9240 Reaction product of alkyl carboxylic acids, alkane polyols, alkyl acrylate, and isophorone diisocyanate.
721.9260 Reaction product of alkylphenol, tetraalkyl titanate and tin complex.
721.9280 Reaction product of ethoxylated fatty acid oils and a phenolic pentaerythritol tetraester.
721.9300 Reaction products of substituted hydroxyalkanes and polyalkylpolyisocyanatocarbomonocycle.
721.9320 Reaction product of hydroxyethyl acrylate and methyl oxirane.
721.9360 Reaction product of a monoalkyl succinic anhydride with an ω-hydroxy methacrylate.
721.9400 Reaction product of phenolic pentaerythritol tetraesters with fatty acid esters and oils, and glyceride triesters.
721.9420 Polymethylcarbomonocycle, reaction product with 2-hydroxyethyl acrylate.
721.9460 Tall oil fatty acids, reaction products with polyamines, alkyl substituted.
721.9470 Reserpine.
721.9480 Resorcinol, formaldehyde substituted carbomonocycle resin.
721.9500 Silane, (1,1-dimethylethoxy) dimethoxy(2-methyl propyl)-.
721.9505 Silanes substituted macrocycle polyethyl.
721.9510 Silicone ester polyacrylate.
721.9525 Acrylate substituted siloxanes and silicones.
721.9526 Sodium perthiocarbonate.
721.9527 Bis(1,2,2,6,6-pentamethyl-4-piperidin-4-ol) ester of cycloaliphatic spiroketal.
721.9530 Bis(2,2,6,6-tetramethylpiperidinyl) ester of cycloalkyl spiroketal.
721.9540 Polysulfide mixture.
721.9550 Sulfonamide.
721.9570 Halophenyl sulfonamide salt.
721.9580 Ethyl methanesulfonate.
721.9620 Aromatic sulfonic acid compound with amine.
721.9630 Polyfluorosulfonic acid salt.

721.9650 Tetramethylammonium salts of alkylbenzenesulfonic acid.
721.9656 Thiaalkanethiol.
721.9658 Thiadiazole derivative.
721.9660 Methylthiouracil.
721.9665 Organotin catalysts.
721.9675 Titanate [$Ti_6O_{13}$ (2-)], dipotassium.
721.9700 Monosubstituted alkoxyaminotrazines (generic name).
721.9720 Disubstituted alkyl triazines (generic name).
721.9730 1,3,5-Triazin-2-amine, 4-dimethylamino-6-substituted-.
721.9740 Brominated triazine derivative.
721.9750 2-Chloro-4,6-bis(substituted)-1,3,5-triazine, dihydrochloride.
721.9780 1,3,5-Triazine-2,4,6-triamine, hydrobromide.
721.9800 Poly(substituted triazinyl) piperazine (generic name).
721.9820 Substituted triazole.
721.9850 2,4,8,10-Tetraoxa-3,9-diphosphaspiro[5.5]undecane, 3,9-bis[2,4,6-tris(1,1-dimethylethyl)phenoxy]-.
721.9870 Unsaturated organic compound.
721.9892 Alkylated urea.
721.9900 Urea, condensate with poly[oxy(methyl-1,2ethanediyl)]-α- (2-aminomethylethyl)-μ-(2-amino-ethylethoxy) (generic name).
721.9920 Urea, (hexahydro-6-methyl-2-oxopyrimidinyl)-.
721.9925 Aminoethylethylene urea methacrylamide.
721.9930 Urethane.
721.9940 Urethane acrylate.
721.9957 N-Nitroso-N-methylurethane.
721.9962 Trifunctional aliphatic blocked urethane cross-linker.
721.9975 Zirconium(IV), [2,2-bis[(2-propenyloxy)methyl]-1-butanolato-01,02]tris(2-propenoato-O-)-.

AUTHORITY: 15 U.S.C. 2604, 2607, and 2625(c).

## Subpart A—General Provisions

### § 721.1 Scope and applicability.

(a) This part identifies uses of chemical substances which EPA has determined are significant new uses under the authority of section 5(a)(2) of the Toxic Substances Control Act. In addition, it specifies procedures for manufacturers, importers, and processors to report on those significant new uses. This subpart A contains general provisions applicable to this part. subpart B of this part identifies generic requirements for certain significant new uses cross referenced in specific provisions of subpart E of this part. subpart C of this part identifies generic reporting requirements for certain significant new uses cross referenced in specific provisions of subpart E of this part. subpart E of this part identifies chemical substances and their significant new uses.

(b) This subpart A contains provisions governing submission and review of notices for the chemical substances and significant new uses identified in subpart E of this part. The provisions of this subpart A apply to the chemical substances and significant new uses identified in subpart E of this part, except to the extent that they are specifically modified or supplanted by specific requirements in subpart E of this part. In the event of a conflict between the provisions of this subpart A and the provisions of subpart E of this part, the provisions of subpart E of this part shall govern.

(c) The provisions of part 720 of this chapter apply to this part 721. For purposes of this part 721, wherever the phrase ''new chemical substance'' appears in part 720 of this chapter, it shall mean the chemical substance subject to this part 721. In the event of a conflict between the provisions of part 720 of this chapter and the provisions of this part 721, the provisions of this part 721 shall govern.

[53 FR 28358, July 27, 1988]

### § 721.3 Definitions.

The definitions in section 3 of the Act, 15 U.S.C. 2602, and § 720.3 of this chapter apply to this part. In addition, the following definitions apply to this part:

*Acutely toxic effects* A chemical substance produces acutely toxic effects if it kills within a short time period (usually 14 days):

(1) At least 50 percent of the exposed mammalian test animals following oral administration of a single dose of the test substance at 25 milligrams or less per kilogram of body weight ($LD_{50}$).

(2) At least 50 percent of the exposed mammalian test animals following dermal administration of a single dose of the test substance at 50 milligrams or less per kilogram of body weight ($LD_{50}$).

(3) At least 50 percent of the exposed mammalian test animals following administration of the test substance for 8 hours or less by continuous inhalation

at a steady concentration in air at 0.5 milligrams or less per liter of air ($LC_{50}$).

*CAS Number* means Chemical Abstracts Service Registry Number assigned to a chemical substance on the Inventory.

*Chemical name* means the scientific designation of a chemical substance in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry or the Chemical Abstracts Service's rules of nomenclature, or a name which will clearly identify a chemical substance for the purpose of conducting a hazard evaluation.

*Chemical protective clothing* means items of clothing that provide a protective barrier to prevent dermal contact with chemical substances of concern. Examples can include, but are not limited to: full body protective clothing, boots, coveralls, gloves, jackets, and pants.

*Commercial use* means the use of a chemical substance or any mixture containing the chemical substance in a commercial enterprise providing saleable goods or a service to consumers (e.g., a commercial dry cleaning establishment or painting contractor).

*Common name* means any designation or identification such as code name, code number, trade name, brand name, or generic chemical name used to identify a chemical substance other than by its chemical name.

*Consumer* means a private individual who uses a chemical substance or any product containing the chemical substance in or around a permanent or temporary household or residence, during recreation, or for any personal use or enjoyment.

*Consumer product* means a chemical substance that is directly, or as part of a mixture, sold or made available to consumers for their use in or around a permanent or temporary household or residence, in or around a school, or in recreation.

*Customer* means any person to whom a manufacturer, importer, or processor distributes any quantity of a chemical substance, or of a mixture containing the chemical substance, whether or not a sale is involved.

*Director of the Office of Pollution Prevention and Toxics* means the Director of the EPA Office of Pollution Prevention and Toxics or any EPA employee delegated by the Office Director to carry out the Office Director's functions under this part.

*Employer* means any manufacturer, importer, processor, or user of chemical substances or mixtures.

*Environmentally transformed* A chemical substance is ''environmentally transformed'' when its chemical structure changes as a result of the action of environmental processes on it.

*Facility* means all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with such person).

*Identity* means any chemical or common name used to identify a chemical substance or a mixture containing that substance.

*Immediate use* A chemical substance is for the ''immediate use'' of a person if it is under the control of, and used only by, the person who transferred it from a labeled container and will only be used by that person within the work shift in which it is transferred from the labeled container.

*Impervious* Chemical protective clothing is ''impervious'' to a chemical substance if the substance causes no chemical or mechanical degradation, permeation, or penetration of the chemical protective clothing under the conditions of, and the duration of, exposure.

*Manufacturing stream* means all reasonably anticipated transfer, flow, or disposal of a chemical substance, regardless of physical state or concentration, through all intended operations of manufacture, including the cleaning of equipment.

*Metalworking fluid* means a liquid of any viscosity or color containing intentionally added water and used in metal machining operations for the purpose of cooling, lubricating, or rust inhibition.

*MSDS* means material safety data sheet, the written listing of data for the chemical substance as required under § 721.72(c).

*NIOSH* means the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services.

*Non-enclosed process* means any equipment system (such as an open-top reactor, storage tank, or mixing vessel) in which a chemical substance is manufactured, processed, or otherwise used where significant direct contact of the bulk chemical substance and the workplace air may occur.

*Non-industrial use* means use other than at a facility where chemical substances or mixtures are manufactured, imported, or processed.

*Personal protective equipment* means any chemical protective clothing or device placed on the body to prevent contact with, and exposure to, an identified chemical substance or substances in the work area. Examples include, but are not limited to, chemical protective clothing, aprons, hoods, chemical goggles, face splash shields, or equivalent eye protection, and various types of respirators. Barrier creams are not included in this definition.

*Powder or dry solid form* means a state where all or part of the substance would have the potential to become fine, loose, solid particles.

*Principal importer* means the first importer who, knowing that a chemical substance will be imported for a significant new use rather than manufactured in the United States, specifies the chemical substance and the amount to be imported. Only persons who are incorporated, licensed, or doing business in the United States may be principal importers.

*Process for commercial purposes* means the preparation of a chemical substance or mixture containing the chemical substance, after manufacture of the substance, for distribution in commerce with the purpose of obtaining an immediate or eventual commercial advantage for the processor. Processing of any amount of a chemical substance or mixture containing the chemical substance is included in this definition. If a chemical substance or mixture containing impurities is processed for commercial purposes, the impurities also are processed for commercial purposes.

*Process solely for export* means to process for commercial purposes solely for export from the United States under the following restrictions on activity in the United States: Processing must be performed at sites under the control of the processor; distribution in commerce is limited to purposes of export; and the processor may not use the chemical substance except in small quantities solely for research and development.

*Process stream* means all reasonably anticipated transfer, flow, or disposal of a chemical substance, regardless of physical state or concentration, through all intended operations of processing, including the cleaning of equipment.

*Recipient* means any person who purchases or otherwise obtains a chemical substance directly from a person who manufacturers, imports, or processes the substance.

*Serious acute effects* means human injury or human disease processes that have a short latency period for development, result from short-term exposure to a chemical substance, or are a combination of these factors and which are likely to result in death or severe or prolonged incapacitation.

*Serious chronic effects* means human injury or human disease processes that have a long latency period for development, result from long-term exposure to a chemical substance, or are a combination of these factors and which are likely to result in death or severe or prolonged incapacitation.

*Short-term test indicative of carcinogenic potential* means either any limited bioassay that measures tumor or preneoplastic induction, or any test indicative of interaction of a chemical substance with DNA (i.e., positive response in assays for gene mutation, chromosomal aberrations, DNA damage and repair, or cellular transformation).

*Short-term test indicative of the potential to cause a developmentally toxic effect* means either any *in vivo* preliminary development toxicity screen conducted in a mammalian species, or any *in vitro* developmental toxicity screen, including any test system other than the intact pregnant mammal, that has been

extensively evaluated and judged reliable for its ability to predict the potential to cause developmentally toxic effects in intact systems across a broad range of chemicals or within a class of chemicals that includes the substance of concern.

*Significant adverse environmental effects* means injury to the environment by a chemical substance which reduces or adversely affects the productivity, utility, value, or function of biological, commercial, or agricultural resources, or which may adversely affect a threatened or endangered species. A substance will be considered to have the potential for significant adverse environmental effects if it has one of the following:

(1) An acute aquatic $EC_{50}$ of 1 mg/L or less.

(2) An acute aquatic $EC_{50}$ of 20 mg/L or less where the ratio of aquatic vertebrate 24-hour to 48-hour $EC_{50}$ is greater than or equal to 2.0.

(3) A Maximum Acceptable Toxicant Concentration (MATC) of less than or equal to 100 parts per billion (100 ppb).

(4) An acute aquatic $EC_{50}$ of 20 mg/L or less coupled with either a measured bioconcentration factor (BCF) equal to or greater than 1,000x or in the absence of bioconcentration data a log P value equal to or greater than 4.3.

*Site* means a contiguous property unit. Property divided only by a public right-of-way is one site. There may be more than one manufacturing plant on a single site.

*Site-limited intermediate* means an intermediate manufactured, processed, and used only within a site and not distributed in commerce other than as an impurity or for disposal. Imported intermediates cannot be ''site-limited.''

*Spray application* means any method of projecting a jet of vapor of finely divided liquid onto a surface to be coated; whether by compressed air, hydraulic pressure, electrostatic forces, or other methods of generating a spray.

*Use stream* means all reasonably anticipated transfer, flow, or disposal of a chemical substance, regardless of physical state or concentration, through all intended operations of industrial, commercial, or consumer use.

*Waters of the United States* has the meaning set forth in 40 CFR 122.2.

*Work area* means a room or defined space in a workplace where a chemical substance is manufactured, processed, or used and where employees are present.

*Workplace* means an establishment at one geographic location containing one or more work areas.

[53 FR 28358, July 27, 1988, as amended at 54 FR 31306, July 27, 1989; 58 FR 63516, Dec. 1, 1993]

### § 721.5 Persons who must report.

(a) The following persons must submit a significant new use notice as specified under the provisions of section 5(a)(1)(B) of the Act, part 720 of this chapter, and § 721.25:

(1) A person who intends to manufacture, import, or process for commercial purposes a chemical substance identified in a specific section in subpart E of this part, and intends to engage in a significant new use of the substance identified in that section.

(2) A person who intends to manufacture, import, or process for commercial purposes a chemical substance identified in a specific section in subpart E of this part, and intends to distribute the substance in commerce. A person described in this paragraph is not required to submit a significant new use notice if that person can document one or more of the following as to each recipient of the substance from that person:

(i) That the person has notified the recipient, in writing, of the specific section in subpart E of this part which identifies the substance and its designated significant new uses.

(ii) That the recipient has knowledge of the specific section in subpart E of this part which identifies the substance and its designated significant new uses.

(iii) That the recipient cannot undertake any significant new use described in the specific section in subpart E of this part.

(b) A person described in paragraph (a)(2) of this section must submit a significant new use notice if that person has knowledge at the time of commercial distribution of the substance identified in the specific section in subpart

E of this part that a recipient intends to engage in a designated significant new use of that substance without submitting a notice under this part.

(c) A person who processes a chemical substance identified in a specific section in subpart E of this part for a significant new use of that substance is not required to submit a significant new use notice if that person can document each of the following:

(1) That the person does not know the specific chemical identity of the chemical substance being processed.

(2) That the person is processing the chemical substance without knowledge that the substance is identified in subpart E of this part.

(d)(1) If at any time after commencing distribution in commerce of a chemical substance identified in a specific section in subpart E of this part a person described in paragraph (a)(2) of this section has knowledge that a recipient of the substance is engaging in a significant new use of that substance designated in that section without submitting a notice under this part, the person is required to cease supplying the chemical substance to that recipient and to submit a significant new use notice for that chemical substance and significant new use, unless the person is able to document each of the following:

(i) That the person has notified the recipient and EPA enforcement authorities (at the address in paragraph (d)(1)(iii) of this section), in writing within 15 working days of the time the person develops knowledge that the recipient is engaging in a significant new use, that the recipient is engaging in a significant new use without submitting a significant new use notice.

(ii) That, within 15 working days of notifying the recipient as described in paragraph (d)(1)(i) of this section, the person received from the recipient, in writing, a statement of assurance that the recipient is aware of the terms of the applicable section in subpart E of this part and will not engage in the significant new use.

(iii) That the person has promptly provided EPA enforcement authorities with a copy of the recepient's statement of assurance described in paragraph (d)(1)(ii) of this section. The copy must be sent to the Office of Enforcement and Compliance Assurance, Office of Compliance (2224A), U.S. Environmental Protection Agency, Ariel Rios, 1200 Pennsylvania Ave., N.W., Washington, DC, 20044.

(2) If EPA notifies the manufacturer, importer, or processor that the recipient is engaging in a significant new use after providing the statement of assurance described in paragraph (d)(1)(ii) of this section and without submitting a notice under this part, the manufacturer, importer, or processor shall immediately cease distribution to that recipient until the manufacturer, importer, or processor or the recipient has submitted a significant new use notice under this part and the notice review period has ended.

(3) If, after receiving a statement of assurance from a recipient under paragraph (d)(1)(ii) of this section, a manufacturer, importer, or processor has knowledge that the recipient is engaging in a significant new use without submitting a notice under this part, the manufacturer, importer, or processor must immediately cease distributing the substance to that recipient and notify EPA enforcement authorities at the address identified in paragraph (d)(1)(iii) of this section. The manufacturer, importer, or processor may not resume distribution to that recipient until any one of the following has occurred:

(i) The manufacturer, importer, or processor has submitted a significant new use notice under this part and the notice review period has ended.

(ii) The recipient has submitted a significant new use notice under this part and the notice review period has ended.

(iii) The manufacturer, importer, or processor has received notice from EPA enforcement authorities that it may resume distribution to that recipient.

(e) Any significant new use notice relating to import of a substance must be submitted by the principal importer.

[53 FR 28359, July 27, 1988, as amended at 60 FR 34464, July 3, 1995]

### § 721.11 Applicability determination when the specific chemical identity is confidential.

(a) A person who intends to manufacture, import, or process a chemical

substance which is described by a generic chemical name is subpart E of this part may ask EPA whether the substance is subject to the requirements of this part. EPA will answer such an inquiry only if EPA determines that the person has a *bona fide* intent to manufacture, import, or process the chemical substance for commercial purposes.

(b) To establish a *bona fide* intent to manufacture, import, or process a chemical substance, the person who intends to manufacture, import, or process the chemical substance must submit the following information in writing to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATTN: SNUR Bonafide submissions.

(1) The specific chemical identity of the chemical substance that the person intends to manufacture, import, or process.

(2) A signed statement that the person intends to manufacture, import, or process the chemical substance for commercial purposes.

(3) A description of the research and development activities conducted to date, and the purpose for which the person will manufacture, import, or process the chemical substance.

(4) An elemental analysis.

(5) Either an X-ray diffraction pattern (for inorganic substances), a mass spectrum (for most other substances), or an infrared spectrum of the particular chemical substance, or, if such data do not resolve uncertainties with respect to the identity of the chemical substance, additional or alternative spectra or other data to identify the substance.

(c) If an importer or processor cannot provide all the information required in paragraph (b) of this section because it is claimed as confidential business information by the importer's or processor's manufacturer or supplier, the manufacturer or supplier may supply the information directly to EPA.

(d) EPA will review the information submitted by the manufacturer, importer, or processor under paragraph (b) of this section to determine whether than person has shown a *bona fide* intent to manufacture, import, or process the chemical substance. If necessary, EPA will compare this information either to the information requested for the confidential chemical substance under § 710.7(e)(2)(v) of this chapter or the information requested under § 720.85(b)(3)(iii) of this chapter.

(e) If the manufacturer, importer, or processor has shown a *bona fide* intent to manufacture, import, or process the substance and has provided sufficient unambiguous chemical identity information to enable EPA to make a conclusive determination as to the identity of the substance, EPA will inform the manufacturer, importer, or processor whether the chemical substance is subject to this part and, if so, which section in subpart E of this part applies.

(f) A disclosure to a person with a *bona fide* intent to manufacture, import, or process a particular chemical substance that the substance is subject to this part will not be considered public disclosure of confidential business information under section 14 of the Act.

(g) EPA will answer an inquiry on whether a particular chemical substance is subject to this part within 30 days after receipt of a complete submission under paragraph (b) of this section.

[53 FR 28359, July 27, 1988, as amended at 60 FR 34464, July 3, 1995]

### § 721.20 Exports and imports.

Persons who intend to export a chemical substance identified in subpart E of this part, or in any proposed rule which would amend subpart E of this part, are subject to the export notification provisions of section 12(b) of the Act. The regulations that interpret section 12(b) appear at 40 CFR part 707. Persons who import a substance identified in a specific section in subpart E of this part are subject to the import certification requirements under section 13 of the Act, which are codified at 19 CFR 12.118 through 12.127 and 127.28. The EPA policy in support of the import certification requirements appears at 40 CFR part 707.

[53 FR 28360, July 27, 1988]

### § 721.25 Notice requirements and procedures.

(a) Each person who is required to submit a significant new use notice under this part must submit the notice at least 90 calendar days before commencing manufacture, import, or processing of a chemical substance identified in subpart E of this part for a significant new use. The submitter must comply with any applicable requirement of section 5(b) of the Act, and the notice must include the information and test data specified in section 5(d)(1) of the Act. The notice must be submitted on EPA Form 7710–25, and must comply with the requirements of part 720 of this chapter, except to the extent that they are inconsistent with this part 721.

(b) If two or more persons are required to submit a significant new use notice for the same chemical substance and significant new use identified in subpart E of this part, they may submit a joint notice to EPA. Persons submitting a joint notice must individually complete the certification section of part I of the required notification form. Persons who are required to submit individually, but elect to submit jointly, remain individually liable for the failure to submit required information which is known to or reasonably ascertainable by them and test data in their possession or control.

(c) EPA will process the notice in accordance with the procedures of part 720 of this chapter, expect to the extent they are inconsistent with this part 721.

(d) Any person submitting a significant new use notice in response to the requirements of this part 721 shall not manufacture, import, or process a chemical substance identified in subpart E of this part for a significant new use until the notice review period, including all extensions and suspensions, has expired.

[53 FR 28360, July 27, 1988, as amended at 60 FR 16311, Mar. 29, 1995]

### § 721.30 EPA approval of alternative control measures.

(a) In certain sections of subpart E of this part, significant new uses for the identified substances are described as the failure to establish and implement programs providing for the use of either: specific measures to control worker exposure to or release of substances which are identified in such sections, or alternative measures to control worker exposure or environmental release which EPA has determined provide substantially the same degree of protection as the specified control measures. Persons who manufacture, import, or process a chemical substance identified in such sections and who intend to employ alternative measures to control worker exposure or environmental release must submit a request to EPA for a determination of equivalency before commencing manufacture, import, or processing involving the alternative control measures.

(b) A request for a determination of equivalency must be submitted in writing to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460; ATTN: SNUR Equivalency Determination, and must contain:

(1) The name of the submitter.

(2) The specific chemical identity of the substance.

(3) The citation for the specific section in subpart E of this part which pertains to the substance for which the request is being submitted.

(4) A detailed description of the activities involved.

(5) The specifications of the alternative worker exposure control measures or environmental release control measures.

(6) An analysis justifying why such alternative control measures provide substantially the same degree of protection as the specific control measures identified in the specific section in subpart E of this part which pertains to the substance for which the request is being submitted.

(7) The data and information described in §§ 720.50 (a) and (b) of this chapter unless such data and information have already been submitted to the Office of Pollution Prevention and Toxics, EPA.

(c) Requests for determinations of equivalency will be reviewed by EPA within 45 days. Determinations under

this paragraph will be made by the Director, Office of Pollution Prevention and Toxics, or designee. Notice of the results of such determinations will be mailed to the submitter.

(d) If EPA notifies the submitter under paragraph (c) of this section that EPA has determined that the alternative control measures provide substantially the same degree of protection as the specified control measures identified in the specified section of subpart E of this part which pertains to the substance for which the request is being submitted, the submitter may commence manufacture, import, or processing in accordance with the specifications for alternative worker exposure control measures or environmental release control measures identified in the submitter's request, and may alter any corresponding notification to workers to reflect such alternative controls. Deviations from the activities described in the EPA notification constitute a significant new use and are subject to the requirements of this part.

[53 FR 28360, July 27, 1988, as amended at 60 FR 34464, July 3, 1995]

### § 721.35 Compliance and enforcement.

(a) Failure to comply with any provision of this part is a violation of section 15(1) of the Act (15 U.S.C. 2614).

(b) Using for commercial purposes a chemical substance which a person knew or had reason to know was manufactured, imported, or processed in violation of this part is a violation of section 15(2) of the Act (15 U.S.C. 2614).

(c) Failure or refusal to permit access to or copying of records, as required by section 11 of the Act, is a violation of section 15(3) of the Act (15 U.S.C. 2614).

(d) Failure or refusal to permit entry or inspection, as required by section 11 of the Act, is a violation of section 15(4) of the Act.

(e) Violators of the Act or of this part may be subject to the civil and criminal penalties in section 16 of the Act (15 U.S.C. 2615) for each violation. The submission of false or misleading information in connection with the requirement of any provision of this part may subject persons to penalties calculated as if they never filed a notice.

(f) Under the authority of sections 7 and 17 of the Act, EPA may:

(1) Seek to enjoin the manufacture, import, or processing of a chemical substance in violation of this part.

(2) Act to seize any chemical substance which is being manufactured, imported, or processed in violation of this part.

(3) Take any other appropriate action.

[53 FR 28361, July 27, 1988]

### § 721.40 Recordkeeping.

Any person subject to the requirements of this part must retain documentation of information contained in that person's significant new use notice. This documentation must be maintained for a period of 5 years from the date of the submission of the significant new use notice.

[53 FR 28361, July 27, 1988]

### § 721.45 Exemptions.

The persons identified in § 721.5 are not subject to the notification requirements of § 721.25 for a chemical substance identified in subpart E of this part, unless otherwise specified in a specific section in subpart E, if:

(a) The person has applied for and has been granted an exemption for test marketing the substance for a significant new use identified in subpart E of this part in accordance with section 5(h)(1) of the Act and § 720.38 of this chapter.

(b) The person manufactures, imports, or processes the substance for a significant new use identified in subpart E of this part in small quantities solely for research and development in accordance with § 721.47.

(c) The person has applied for and been granted an exemption under section 5(h)(5) of the Act.

(d) The person manufactures, imports, or processes the substance only as an impurity.

(e) The person manufactures, imports, or processes the substance only as a byproduct which is used only by public or private organizations that (1) burn it as a fuel, (2) dispose of it as a waste, including in a landfill or for enriching soil, or (3) extract component

chemical substances from it for commercial purposes.

(f) The person imports or processes the substance as part of an article.

(g) The person manufactures or processes the substance solely for export and, when distributing the substance in commerce, labels the substance in accordance with section 12(a)(1)(B) of the Act.

(h) The person submits a significant new use notice for the substance prior to the promulgation date of the section in subpart E of this part which identifies the substance, and the person receives written notification of compliance from EPA prior to the effective date of such section. The notice submitter must comply with any applicable requirement of section 5(b) of the Act. The notice must include the information and test data specified in section 5(d)(1) of the Act and must be submitted on the notice form in Appendix A to part 720 of this chapter. For purposes of this exemption, the specific section in subpart E of this part which identifies the substance and §§721.1, 721.3, 721.11, 721.35, and 721.40 apply; after the effective date of the section in subpart E of this part which identifies the substance, §721.5 applies and §721.20 continues to apply. EPA will provide the notice submitter with written notification of compliance only if one of the following occurs:

(1) EPA is unable to make the finding that the activities described in the significant new use notice will or may present an unreasonable risk of injury to health or the environment under reasonably foreseeable circumstances.

(2) EPA and the person negotiate a consent order under section 5(e) of the Act, such order to take effect on the effective date of the section in subpart E of this part which identifies the substance.

(i) The person is operating under the terms of a consent order issued under section 5(e) of the Act applicable to that person. If a provision of such section 5(e) order is inconsistent with a specific significant new use identified in subpart E of this part, abiding by the provision of the section 5(e) order exempts the person from submitting a significant new use notice for that specific significant new use.

[53 FR 28361, July 27, 1988]

### § 721.47 Conditions for research and development exemption.

(a) A person who manufactures, imports, or processes a chemical substance identifies in subpart E of this part for a significant new use identified in subpart E of this part is not subject to the notification requirements of §721.25 if the following conditions are met:

(1) The person manufactures, imports, or processes the substance for the significant new use in small quantities solely for research and development.

(2) The manufacturer, importer, or processor notifies all persons in its employ or to whom it directly distributes the chemical substance, who are engaged in experimentation, research, or analysis on the chemical substance, including the manufacture, processing, use, transport, storage, and disposal of the substance associated with research and development activities, of any risk to health, identified under paragraph (b) of this section, which may be associated with the substance. The notification must be made in accordance with paragraph (c) of this section.

(3) The chemical substance is used by, or directly under the supervision of, a technically qualified individual.

(b)(1) To determine whether notification under paragraph (a)(2) of this section is required, the manufacturer, importer, or processor must review and evaluate the following information to determine whether there is reason to believe there is any risk to health which may be associated with the chemicals substance:

(i) Information in its possession or control concerning any significant adverse reaction by persons exposed to the chemical substance which may reasonably be associated with such exposure.

(ii) Information provided to the manufacturer, importer, or processor by a supplier or any other person concerning a health risk believed to be associated with the substance.

(iii) Health and environmental effects data in its possession or control concerning the substance.

(iv) Information on health effects which accompanies any EPA rule or order issued under section 4, 5, or 6 of the Act that applies to the substance and of which the manufacturer, importer, or processor has knowledge.

(2) When the research and development activity is conducted solely in a laboratory and exposure to the chemical substance is controlled through the implementation of prudent laboratory practices for handling chemical substances of unknown toxicity, and any distribution, except for purposes of disposal, is to other such laboratories for further research and development activity, the information specified in paragraph (b)(1) of this section need not be reviewed and evaluated. (For purposes of this paragraph (b)(2), a laboratory is defined as a contained research facility where relatively small quantities of chemical substances are used on a pro-production basis, and where activities involve the use of containers for reactions, transfers, and other handling of substances designed to be easily manipulated by a single individual).

(c)(1) The manufacturer, importer, or processor must notify the persons identified in paragraph (a)(2) of this section by means of a container labeling system, conspicuous placement of notices in areas where exposure may occur, written notification to each person potentially exposed, or any other method of notification which adequately informs persons of health risks which the manufacturer, importer, or processor has reason to believe may be associated with the substance, as determined under paragraph (b)(1) of this section.

(2) If the manufacturer, importer, or processor distributes a chemical substance manufactured, imported, or processed under this section to persons not in its employ, the manufacturer, importer, or processor must in written form:

(i) Notify those persons that the substance is to be used only for research and development purposes.

(ii) Provide the notice of health risks specified in paragraph (c)(1) of this section.

(3) The adequacy of any notification under this section is the responsibility of the manufacturer, importer, or processor.

(d) Quantities of the chemical substance, or of mixtures or articles containing the chemical substance, remaining after completion of research and development activities may be:

(1) Disposed of as a waste in accordance with applicable Federal, State, and local regulations, to the extent the disposal activity is not identified as a significant new use for the substance in subpart E of this part, or

(2) Used for a commercial purpose, to the extent the use is not identified as a significant new use of the substance in subpart E of this part.

(e)(1) Persons who manufacture, import, or process a chemical substance under this section must retain the following records:

(i) Copies of or citations to information reviewed and evaluated under paragraph (b)(1) of this section to determine the need to make any notification of risk.

(ii) Documentation of the nature and method of notification under paragraph (c)(1) of this section including copies of any labels or written notices used.

(iii) Documentation of prudent laboratory practices used instead of notification and evaluation under paragraph (b)(2) of this section.

(iv) The names and addresses of any persons other than the manufacturer, importer, or processor to whom the substance is distributed, the identity of the substance, the amount distributed, and copies of the notifications required under paragraph (c)(2) of this section.

(2) [Reserved]

[53 FR 28361, July 27, 1988, as amended at 58 FR 34204, June 23, 1993]

## Subpart B—Certain Significant New Uses

SOURCE: 54 FR 31308, July 27, 1989, unless otherwise noted.

### § 721.50 Applicability.

This subpart B identifies certain significant new uses of chemical substances identified in subpart E of this part. The provisions of this subpart B

apply only when referenced as applying to a chemical substance identified in subpart E of this part.

**§ 721.63 Protection in the workplace.**

(a) Whenever a substance is identified in subpart E of this part as being subject to this section, a significant new use of the substance is any manner or method of manufacturing, importing, or processing associated with any use of the substance without establishing a program whereby:

(1) Each person who is reasonably likely to be dermally exposed in the work area to the chemical substance through direct handling of the substance or through contact with equipment on which the substance may exist, or because the substance becomes airborne in the form listed in paragraph (a)(6) of this section, and cited in subpart E of this part for the chemical substance, is provided with, and is required to wear, personal protective equipment that provides a barrier to prevent dermal exposure to the substance in the specific work area where it is selected for use. Each such item of personal protective equipment must be selected and used in accordance with 29 CFR 1910.132 and 1910.133.

(2) In addition to any other personal protective equipment selected in paragraph (a)(1) of this section, the following items are required:

(i) Gloves.

(ii) Full body chemical protective clothing.

(iii) Chemical goggles or equivalent eye protection.

(iv) Clothing which covers any other exposed areas of the arms, legs, and torso. Clothing provided under this paragraph need not be tested or evaluated under the requirements of paragraph (a)(3) of this section.

(3) The employer is able to demonstrate that each item of chemical protective clothing, including gloves, selected provides an impervious barrier to prevent dermal exposure during normal and expected duration and conditions of exposure within the work area by any one or a combination of the following:

(i) Testing the material used to make the chemical protective clothing and the construction of the clothing to establish that the protective clothing will be impervious for the expected duration and conditions of exposure. The testing must subject the chemical protective clothing to the expected conditions of exposure, including the likely combinations of chemical substances to which the clothing may be exposed in the work area.

(ii) Evaluating the specifications from the manufacturer or supplier of the chemical protective clothing, or of the material used in construction of the clothing, to establish that the chemical protective clothing will be impervious to the chemical substance alone and in likely combination with other chemical substances in the work area.

(4) Each person who is reasonably likely to be exposed to the chemical substance by inhalation in the work area in one or more of the forms listed in paragraph (a)(6) of this section and cited in subpart E of this part for the chemical substance, is provided with, and is required to wear, at a minimum, a NIOSH- approved respirator from one of the categories listed in paragraph (a)(5) of this section, and the respirator is used in accordance with 29 CFR 1910.134 and 30 CFR Part 11.

(5) The following NIOSH approved respirators meet the minimum requirements for paragraph (a)(4) of this section:

(i) Category 19C Type C supplied-air respirator operated in pressure demand or other positive pressure mode and equipped with a full facepiece.

(ii) Category 19C Type C supplied-air respirator operated in pressure demand or continuous flow mode and equipped with a tight-fitting facepiece.

(iii) Category 19C Type C supplied-air respirator operated in pressure demand or continuous flow mode and equipped with a hood or helmet or tight-fitting facepiece.

(iv) Category 21C air-purifying respirator equipped with a full facepiece and high efficiency particulate filters.

(v) Category 21C powered air-purifying respirator equipped with a tight-fitting facepiece and high efficiency particulate filters.

(vi) Category 21C powered air-purifying respirator equipped with a loose-

fitting hood or helmet and high efficiency particulate filters.

(vii) Category 21C air-purifying respirator equipped with a high efficiency particulate filter including disposable respirators.

(viii) Category 23C air-purifying respirator equipped with a full facepiece and combination cartridges approved for paints, lacquers, and enamels. (Approval label may preclude use for some paints, lacquers, or enamels.)

(ix) Category 23C powered air-purifying respirator equipped with a tight-fitting facepiece and combination cartridges approved for paints, lacquers, and enamels. (Approval label may preclude use for some paints, lacquers, or enamels.)

(x) Category 23C powered air-purifying respirator equipped with a loose-fitting hood or helmet and combination cartridges approved for paints, lacquers, and enamels. (Approval label may preclude use for some paints, lacquers, or enamels.)

(xi) Category 23C air-purifying respirator equipped with combination cartridges approved for paints, lacquers, and enamels, including disposable respirators. (Approval label may preclude use for some paints, lacquers, or enamels.)

(xii) Category 23C air-purifying respirator equipped with a full facepiece and organic gas/vapor cartridges.

(xiii) Category 23C powered air-purifying respirator equipped with a tight-fitting facepiece and organic gas/vapor cartridges.

(xiv) Category 23C powered air-purifying respirator equipped with a loose-fitting hood or helmet and organic gas/vapor cartridges.

(xv) Category 23C air-purifying respirator equipped with organic gas/vapor cartridges, including disposable respirators.

(6) When cited in subpart E of this part for a substance, the following airborne form(s) of the substance apply to paragraphs (a)(1) and (4) of this section:

(i) Dust.

(ii) Mist.

(iii) Fume.

(iv) Smoke.

(v) Vapor.

(vi) Gas.

(b) If a substance identified in subpart E of this part is present in the work area only as a mixture, an employer is exempt from the provisions of this section if the concentration of the substance in the mixture does not exceed a concentration set in subpart E of this part. The exemption does not apply if the employer has reason to believe that during intended use or processing in the work area, the substance in the mixture may be concentrated above the level set in subpart E of this part.

(c)(1) If at any time after commencing distribution in commerce of a chemical substance that is identified in subpart E of this part as subject to this section, the person has knowledge that a recipient of the substance is engaging in an activity that is not consistent with the implementation of a program specified in paragraph (a) of this section, the person is considered to have knowledge that the recipient is engaging in a significant new use and is required to follow the procedures in § 721.5(d) unless the person is able to document the following:

(i) That the person has notified the recipient in writing within 15 working days of the time the person first has knowledge that the recipient is engaging in an activity that is not consistent with the implementation of a program specified in paragraph (a) of this section, and that the person has knowledge of the failure of implementation.

(ii) That within 15 working days of notifying the recipient that the recipient is engaging in an activity that is not consistent with the implementation of a program specified in paragraph (a) of this section the person has received from the recipient, in writing, a statement of assurance that the recipient has established the program required under paragraph (a) of this section, and will take appropriate measures to avoid activities that are inconsistent with implementation of the program required under paragraph (a) of this section.

(2) If, after receiving a statement of assurance from a recipient under paragraph (c)(1)(ii) of this section, a manufacturer, importer, or processor has

knowledge that the recipient is engaging in an activity that is not consistent with the implementation of the program specified in paragraph (a) of this section, that person is considered to have knowledge that the person is engaging in a significant new use and is required to follow the procedures in § 721.5(d).

**§ 721.72 Hazard communication program.**

Whenever a substance is identified in subpart E of this part as being subject to this section, a significant new use of that substance is any manner or method of manufacture, import, or processing associated with any use of that substance without establishing a hazard communication program as described in this section.

(a) *Written hazard communication program.* Each employer shall develop and implement a written hazard communication program for the substance in each workplace. The written program will, at a minimum, describe how the requirements of this section for labels, MSDSs, and other forms of warning material will be satisfied. The employer must make the written hazard communication program available, upon request, to all employees, contractor employees, and their designated representatives. The employer may rely on an existing hazard communication program, including an existing program established under the Occupational Health and Safety Administration (OSHA) Hazard Communication Standard (29 CFR 1900.1200), to comply with this paragraph provided that the existing hazard communication program satisfies the requirements of this paragraph. The written program shall include the following:

(1) A list of each substance identified in subpart E of this part as subject to this section known to be present in the work area. The list must be maintained in the work area and must use the identity provided on the appropriate MSDS for each substance required under paragraph (c) of this section. The list may be compiled for the workplace or for individual work areas.

(2) The methods the employer will use to inform employees of the hazards of non-routine tasks involving the substance, for example, the cleaning of reactor vessels, and the hazards associated with the substance contained in unlabeled pipes in their work area.

(3) The methods the employer will use to inform contractors of the presence of the substance in the employer's workplace and of the provisions of this part applicable to the substance if employees of the contractor work in the employer's workplace and are reasonably likely to be exposed to the substance while in the employer's workplace.

(b) *Labeling.* (1) Each employer shall ensure that each container of the substance in the workplace is labeled in accordance with this paragraph (b)(1).

(i) The label shall, at a minimum, contain the following information:

(A) A statement of health hazard(s) and precautionary measure(s) for the substance, if any, identified in subpart E of this part or by the employer.

(B) The identity by which the substance may be commonly recognized.

(C) A statement of environmental hazard(s) and precautionary measure(s) for the substance, if any, identified in subpart E of this part or by the employer.

(D) A statement of exposure and precautionary measure(s), if any, identified in subpart E of this part or by the employer.

(ii) The employer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys information specified by paragraph (b)(1)(i) of this section. Any written materials must be readily accessible to the employees in their work areas throughout each work shift.

(iii) The employer need not label portable containers into which the substance is transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer.

(iv) The employer shall not remove or deface an existing label on incoming containers of the substance unless the container is immediately relabeled

with the information specified in paragraph (b)(1)(i) of this section.

(2) Each employer shall ensure that each container of the substance leaving its workplace for distribution in commerce is labeled in accordance with this paragraph.

(i) The label shall, at a minimum, contain the following information:

(A) The information required under paragraph (b)(1)(i) of this section.

(B) The name and address of the manufacturer or a responsible party who can provide additional information on the substance for hazard evaluation and any appropriate emergency procedures.

(ii) The label shall not conflict with the requirements of the Hazardous Materials Transportation Act (18 U.S.C. 1801 et. seq.) and regulations issued under that Act by the Department of Transportation.

(3) The label, or alternative forms of warning, shall be legible and prominently displayed.

(4) The label, or alternative forms of warning, shall be in English; however, the information may be repeated in other languages.

(5) If the label or alternative form of warning is to be applied to a mixture containing a substance identified in subpart E of this part as subject to this section in combination with another substance identified in subpart E of this part and/or a substance defined as a ''hazardous chemical'' under the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1900.1200), the employer may prescribe on the label, MSDS, or alternative form of warning, the measures to control worker exposure or environmental release which the employer determines provide the greatest degree of protection. However, should these control measures differ from the applicable measures required under subpart E of this part, the employer must seek a determination of equivalency for such alternative control measures pursuant to § 721.30 before prescribing them under this paragraph.

(c) *Material safety data sheets.* (1) Each employer must obtain or develop a MSDS for the substance.

(2) Each MSDS shall contain, at a minimum, the following information:

(i) The identity used on the container label of the substance under this section, and, if not claimed confidential, the chemical and common name of the substance. If the chemical and common name are claimed confidential, a generic chemical name must be used.

(ii) Physical and chemical characteristics of the substance known to the employer (such as vapor pressure, flash point).

(iii) The physical hazards of the substance known to the employer, including the potential for fire, explosion, and reactivity.

(iv) The potential human and environmental hazards as specified in subpart E of this part for the substance.

(v) Signs and symptoms of exposure, and any medical conditions which are expected to be aggravated by exposure to the substance known to the employer.

(vi) The primary routes of exposure to the substance.

(vii) Precautionary measures to control worker exposure and/or environmental release identified in subpart E of this part for the substance, or alternative control measures which EPA has determined under § 721.30 provide substantially the same degree of protection as the identified control measures.

(viii) Any generally applicable precautions for safe handling and use of the substance which are known to the employer, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for response to spills and leaks.

(ix) Any generally applicable control measures which are known to the employer, such as appropriate engineering controls, work practices, or personal protective equipment.

(x) Emergency first aid procedures known to the employer.

(xi) The date of preparation of the MSDS or of its last revision.

(xii) The name, address, and telephone number of the individual preparing or distributing the MSDS, or a responsible party who can provide additional information on the substance for

hazard evaluation and any appropriate emergency procedures.

(3) If no relevant information is found or known for any given category on the MSDS, the employer must mark the MSDS to indicate that no applicable information was found.

(4) Where multiple mixtures containing the substance have similar compositions (i.e., the chemical ingredients are essentially the same, but the specific composition varies from mixture to mixture) and similar hazards, the employer may prepare one MSDS to apply to all of these multiple mixtures.

(5) If the employer becomes aware of any significant new information regarding the hazards of the substance or ways to protect against the hazards, this new information must be added to the MSDS within 3 months from the time the employer becomes aware of the new information. If the substance is not currently being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to the MSDS before the substance is reintroduced into the workplace.

(6) The employer must ensure that persons receiving the substance from the employer are provided an appropriate MSDS with their initial shipment and with the first shipment after an MSDS is revised. The employer may either provide the MSDS with the shipped containers or send it to the person prior to or at the time of shipment.

(7) The employer must maintain a copy of the MSDS in its workplace, and must ensure that it is readily accessible during each work shift to employees when they are in their work areas.

(8) The MSDS may be kept in any form, including as operating procedures, and may be designed to cover groups of substances in a work area where it may be more appropriate to address the potential hazards of a process rather than individual substances. However, in all cases, the required information must be provided for each substance and must be readily accessible during each work shift to employees when they are in their work areas.

(9) The MSDS must be printed in English; however, the information may be repeated in other languages.

(d) *Employee information and training.* Each employer must ensure that employees are provided with information and training on the substance identified in subpart E of this part. This information and training must be provided at the time of each employee's initial assignment to a work area containing the substance and whenever the substance subject to this section is introduced into the employee's work area for the first time.

(1) Information provided to employees under this paragraph shall include:

(i) The requirements of this section.

(ii) Any operations in the work area where the substance is present.

(iii) The location and availability of the written hazard communication program required under paragraph (a) of this section, including the list of substances identified in subpart E of this part as subject to this section, and MSDSs required by paragraph (c) of this section.

(2) Training provided to employees shall include:

(i) Methods and observations that may be used to detect the presence or release of the substance in or from an employee's work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance, or odor of the substance when being released).

(ii) The potential human health and environmental hazards of the substance as specified in subpart E of this part.

(iii) The measures employees can take to protect themselves and the environment from the substance, including specific procedures the employer has implemented to protect employees and the environment from exposure to the substance, including appropriate work practices, emergency procedures, personal protective equipment, engineering controls, and other measures to control worker exposure and/or environmental release required under subpart E of the part, or alternative control measures which EPA has determined under § 721.30 provide substantially the same degree of protection as the specified control measures.

(iv) The requirements of the hazard communication program developed by

the employer under this section, including an explanation of the labeling system and the MSDS required by this section and guidance on obtaining and using appropriate hazard information.

(e) *Low concentrations in mixtures.* If a substance identified in subpart E of this part is present in the work area only as a mixture, an employer is exempt from the provisions of this section if the concentration of the substance in the mixture does not exceed a concentration set in subpart E of this part. The exemption does not apply if the employer has reason to believe that during intended use or processing in the work area, the substance in the mixture may be concentrated above the level set in subpart E of this part.

(f) *Existing hazard communication program.* The employer need not take additional actions if existing programs and procedures satisfy the requirements of this section.

(g) *Human health, environmental hazard, exposure, and precautionary statements.* Whenever referenced in subpart E of this part for a substance, the following human health and environmental hazard, exposure, and precautionary statements shall appear on each label as specified in paragraph (b) of this section and the MSDS as specified in paragraph (c) of this section. Additional statements may be included as long as they are true and do not alter the meaning of the required statements.

(1) Human health hazard statements: This substance may cause:

(i) Skin irritation.

(ii) Respiratory complications.

(iii) Central nervous system effects.

(iv) Internal organ effects.

(v) Birth defects.

(vi) Reproductive effects.

(vii) Cancer.

(viii) Immune system effects.

(ix) Developmental effects.

(2) Human health hazard precautionary statements: When using this substance:

(i) Avoid skin contact.

(ii) Avoid breathing substance.

(iii) Avoid ingestion.

(iv) Use respiratory protection.

(v) Use skin protection.

(3) Environmental hazard statements: This substance may be:

(i) Toxic to fish.

(ii) Toxic to aquatic organisms.

(4) Environmental hazard precautionary statements: Notice to users:

(i) Disposal restrictions apply.

(ii) Spill clean-up restrictions apply.

(iii) Do not release to water.

(5) Each human health or environmental hazard precautionary statement identified in subpart E of this part for the label on the substance container must be followed by the statement, ''See MSDS for details.''

(h) *Human health, environmental hazard exposure and precautionary statements.* (1) Whenever referenced in subpart E of this part for a substance, the following human health, environmental hazard, exposure, and precautionary statements shall appear on each label as specified in paragraph (b) of this section. Additional statements may be included as long as they are true and do not alter the meaning of the required statements.

(i) *Precautionary statements.* (A) The health effects of this chemical substance have not been determined.

(B) When using this substance, use skin protection.

(C) Use respiratory protection when there is a reasonable likelihood of exposure in the work area from dust, mist, or smoke from spray application.

(D) Chemicals similar in structure to this substance have been found to cause cancer in laboratory animals.

(ii) *Human health hazard statements.* This substance may cause:

(A) Skin irritation

(B) Respiratory complications

(C) Central nervous system effects

(D) Internal organ effects

(E) Birth defects

(F) Reproductive effects

(G) Cancer

(H) Immune system effects

(I) Developmental effects

(iii) *Human health hazard precautionary statements.* When using this substance:

(A) Avoid skin contact

(B) Avoid breathing substance

(C) Avoid ingestion

(D) Use respiratory protection

(E) Use skin protection

(iv) *Environmental hazard statements.* This substance may be:

(A) Toxic to fish

(B) Toxic to aquatic organisms

(v) *Environmental hazard precautionary statements.* Notice to Users:

(A) Disposal restrictions apply

(B) Spill clean-up restrictions apply

(C) Do not release to water.

(vi) *Additional statements.* Each human health or environmental precautionary statement identified in subpart E of this part for the label on the substance container must be followed by the statement, ''See MSDS for details.''

(2) Whenever referenced in subpart E of this part for a substance, the following human health, environmental hazard, exposure, and precautionary statements shall appear on each MSDS as specified in paragraph (c) of this section. Additional statements may be included as long as they are true and do not alter the meaning of the required statements.

(i) *Precautionary statements.* (A) The health effects of this chemical substance have not been determined.

(B) When using this substance, use skin protection.

(C) Use respiratory protection when there is a reasonable likelihood of exposure in the work area from dust, mist, or smoke from spray application.

(D) Chemicals similar in structure to this substance have been found to cause cancer in laboratory animals.

(ii) *Human health hazard statements.* This substance may cause:

(A) Skin irritation

(B) Respiratory complications

(C) Central nervous system effects

(D) Internal organ effects

(E) Birth defects

(F) Reproductive effects

(G) Cancer

(H) Immune system effects

(I) Developmental effects

(iii) *Human health hazard precautionary statements.* When using this substance:

(A) Avoid skin contact

(B) Avoid breathing substance

(C) Avoid ingestion

(D) Use respiratory protection

(E) Use skin protection

(iv) *Environmental hazard statements.* This substance may be:

(A) Toxic to fish

(B) Toxic to aquatic organisms

(v) *Environmental hazard precautionary statements.* Notice to Users:

(A) Disposal restrictions apply

(B) Spill clean-up restrictions apply

(C) Do not release to water.

[54 FR 31308, July 27, 1989, as amended at 55 FR 45996, Oct. 31, 1990; 58 FR 34204, June 23, 1993]

### § 721.80 Industrial, commercial, and consumer activities.

Whenever a substance is identified in subpart E of this part as being subject to this section, a significant new use of the substance is:

(a) Use in non-enclosed processes.

(b) Any manner or method of manufacture in non-enclosed processes associated with any use.

(c) Any manner or method of processing in non-enclosed processes associated with any use.

(d) Use beyond the site of manufacture or import.

(e) Processing beyond the site of manufacture or import.

(f) Any manner or method of manufacture (excluding import) of the substance associated with any use.

(g) Use other than as an intermediate.

(h) Use other than as a site-limited intermediate.

(i) Use as an intermediate where the concentration of the intermediate substance in the product intended for distribution in commerce exceeds the concentration specified in subpart E of this part for the substance.

(j) Use other than as described in the premanufacture notice referenced in subpart E of this part for the substance.

(k) Use other than allowed by the section 5(e) consent order referenced in subpart E of this part for the substance.

(l) Non-industrial use.

(m) Commercial use.

(n) Non-commercial use.

(o) Use in a consumer product.

(p) Aggregate manufacture and importation volume for any use greater than that specified in subpart E of this part for the substance.

(q) Aggregate manufacture and importation volume for any use greater than that allowed by the section 5(e)

consent order referenced in subpart E of this part for the substance.

(r) Aggregate manufacture and importation volume for any use greater than that specified in subpart E of this part for the substance unless the manufacturer or importer has submitted the results of the health or environmental effects studies identified in subpart E of this part for the substance and those studies comply with the procedures and criteria for developing and evaluating data identified in subpart E of this part for the substance.

(s) Annual manufacture and importation volume for any use greater than that specified in subpart E of this part for the substance.

(t) Annual manufacture and importation volume for any use greater than that allowed by the section 5(e) consent order referenced in subpart E of this part for the substance.

(u) Annual manufacture and importation volume for any use greater than that specified in subpart E of this part for the substance unless the manufacturer or importer has submitted the results of the health or environmental effects studies identified in subpart E of this part for the substance and those studies comply with the procedures and criteria for developing and evaluating data identified in subpart E of this part for the substance.

(v) Use in the form of:

(1) A powder.

(2) A solid.

(3) A liquid.

(4) A gas.

(w) Any manner or method of manufacture of the substance in the following form associated with any use:

(1) A powder.

(2) A solid.

(3) A liquid.

(4) A gas.

(x) Any manner or method of processing of the substance in the following form associated with any use:

(1) A powder.

(2) A solid.

(3) A liquid.

(4) A gas.

(y) Use involving an application method that generates:

(1) A vapor, mist, or aerosol.

(2) A dust.

### § 721.85 Disposal.

Whenever a substance is identified in subpart E of this part as being subject to this section, a significant new use of the substance is any method of:

(a) Disposal of the process stream associated with any use of the substance or with any manner or method of manufacturing associated with any use of the substance other than by the following. This provision does not supercede any applicable Federal, State, or local laws and regulations.

(1) Incineration.

(2) Landfill.

(3) Deep well injection.

(b) Disposal of the process stream associated with any use or with any manner or method of processing associated with any use other than by the following. This provision does not supercede any applicable Federal, State, or local laws and regulations.

(1) Incineration.

(2) Landfill.

(3) Deep well injection.

(c) Disposal of the use stream associated with any use, other than by the following. This provision does not supercede any applicable Federal, State, or local laws and regulations.

(1) Incineration.

(2) Landfill.

(3) Deep well injection.

(d) Disposal of the substance associated with any use of the substance, or with any manner or method of manufacture or processing in association with any use. This provision does not supercede any applicable Federal, State, or local laws and regulations.

### § 721.90 Release to water.

Whenever a substance is identified in subpart E of this part as being subject to this section, a significant new use of the substance is:

(a) Any predictable or purposeful release of a manufacturing stream associated with any use of the substance, from any site:

(1) Into the waters of the United States.

(2) Into the waters of the United States without application of one or more of the following treatment technologies as specified in subpart E of this part either by the discharger or, in

the case of a release through publicly-owned treatment works, by a combination of treatment by the discharger and the publicly-owned treatment works:

(i) Chemical precipitation and settling.

(ii) Biological treatment (activated sludge or equivalent) plus clarification.

(iii) Steam stripping.

(iv) Resin or activated carbon adsorption.

(v) Chemical destruction or conversion.

(vi) Primary wastewater treatment.

(3) Into the waters of the United States without primary wastewater treatment, and secondary wastewater treatment as defined in 40 CFR Part 133.

(4) Into the waters of the United States if the quotient from the following formula:

$$\frac{\text{number of kilograms/day/site released}}{\text{receiving stream flow (million liters/day)}} \times 1000 = \text{N parts per billion}$$

exceeds the level specified in subpart E of this part when calculated using the methods described in § 721.91. In lieu of calculating the above quotient, monitoring or alternative calculations may be used to predict the surface water concentration which will result from the intended release of the substance, if the monitoring procedures or calculations have been approved for such purpose by EPA. EPA will review and act on written requests to approve monitoring procedures or alternative calculations within 90 days after such requests are received. EPA will inform submitters of the disposition of such requests in writing, and will explain the reasons therefor when they are denied.

(b) Any predictable or purposeful release of a process stream containing the substance associated with any use of the substance from any site:

(1) Into the waters of the United States.

(2) Into the waters of the United States without application of one or more of the following treatment technologies as specified in subpart E of this part either by the discharger or, in the case of a release through publicly-owned treatment works, by a combination of treatment by the discharger and the publicly-owned treatment works:

(i) Chemical precipitation and settling.

(ii) Biological treatment (activated sludge or equivalent) plus clarification.

(iii) Steam stripping.

(iv) Resin or activated carbon adsorption.

(v) Chemical destruction or conversion.

(vi) Primary wastewater treatment.

(3) Into the waters of the United States without primary wastewater treatment, and secondary wastewater treatment as defined in 40 CFR Part 133.

(4) Into the waters of the United States if the quotient from the following formula:

$$\frac{\text{number of kilograms/day/site released}}{\text{receiving stream flow (million liters/day)}} \times 1000 = \text{N parts per billion}$$

exceeds the level specified in subpart E of this part when calculated using the methods described in § 721.91. In lieu of calculating the above quotient, monitoring or alternative calculations may be used to predict the surface water concentration which will result from the intended release of the substance, if the monitoring procedures or calculations have been approved for such purpose by EPA. EPA will review and act on written requests to approve monitoring procedures or alternative calculations within 90 days after such requests are received. EPA will inform submitters of the disposition of such requests in writing, and will explain the reasons therefor when they are denied.

(c) Any predictable or purposeful release of a use stream containing the substance associated with any use of the substance from any site:

(1) Into the waters of the United States.

(2) Into the waters of the United States without application of one or more of the following treatment technologies as specified in subpart E of this part either by the discharger or, in the case of a release through publicly-owned treatment works, by a combination of treatment by the discharger and the publicly-owned treatment works:

(i) Chemical precipitation and settling.

(ii) Biological treatment (activated sludge or equivalent) plus clarification.

(iii) Steam stripping.

(iv) Resin or activated carbon adsorption.

(v) Chemical destruction or conversion.

(vi) Primary wastewater treatment.

(3) Into the waters of the United States without primary wastewater treatment, and secondary wastewater treatment as defined in 40 CFR Part 133.

(4) Into the waters of the United States if the quotient from:

$$\frac{\text{number of kilograms/day/site released}}{\text{receiving stream flow (million liters/day)}} \times 1000 = \text{N parts per billion}$$

exceeds the level specified in subpart E of this part, when calculated using the methods described in § 721.91. In lieu of calculating the above quotient, however, monitoring or alternative calculations may be used to predict the surface water concentration expected to result from intended release of the substance, if the monitoring procedures or calculations have been approved for such purpose by EPA. EPA will review and act on written requests to approve monitoring procedures or alternative calculations within 90 days after such requests are received. EPA will inform submitters of the disposition of such requests in writing, and will explain the reasons therefor when they are denied.

## § 721.91 Computation of estimated surface water concentrations: instructions.

These instructions describe the use of the equation specified in § 721.90(a)(4) and (b)(4) to compute estimated surface water concentrations which will result from release of a substance identified in subpart E of this part. The equation shall be computed for each site using the stream flow rate appropriate for the site according to paragraph (b) of this section, and the highest number of kilograms calculated to be released for that site on a given day according to paragraph (a) of this section. Two variables shall be considered in computing the equation, the number of kilograms released, and receiving stream flow.

(a) *Number of kilograms released.* (1) To calculate the number of kilograms of substance to be released from manufacturing, processing, or use operations, as specified in the numerator of the equation, develop a process description diagram which describes each manufacturing, processing, or use operation involving the substance. The process description must include the major unit operation steps and chemical conversions. A unit operation is a functional step in a manufacturing, processing, or use operation where substances undergo chemical changes and/or changes in location, temperature, pressure, physical state, or similar characteristics. Include steps in which the substance is formulated into mixtures, suspensions, solutions, etc.

(2) Indicate on each diagram the entry point of all feedstocks (e.g., reactants, solvents, and catalysts) used in the operation. Identify each feedstock and specify its approximate weight regardless of whether the process is continuous or batch.

(3) Identify all release points from which the substance or wastes containing the substance will be released into air, land, or water. Indicate these release points on the diagram. Do not include accidental releases or fugitive emissions.

(4) For releases identified in the diagram that are destined for water, estimate the amount of substance that will

be released before the substance enters control technology. The kilograms of substance released may be estimated based on:

(i) The mass balance of the operation, i.e., totaling inputs and outputs, including wastes for each part of the process such that outputs equal inputs. The amount released to water may be the difference between the amount of the substance in the starting material (or formed in a reaction) minus the amount of waste material removed from each part of the process and not released to water and the amount of the substance in the final product.

(ii) Physical properties such as water solubility where a known volume of water being discharged is assumed to contain the substance at concentrations equal to its solubility in water. This approach is particularly useful where the waste stream results from separation of organic/water phases or filtration of the substance from an aqueous stream to be discharged.

(iii) Measurements of flow rates of the process/use stream and known concentrations of the substance in the stream.

(5) After releases of a substance to water are estimated for each operation on a site, total the releases of the substance to water from all operations at that site. The value (number of kilograms) specified in the numerator of the equation should reflect total kilograms of substance released to water per day from all operations at a single site.

(6) Use the highest expected daily release of the substance for each site.

(b) *Receiving stream flow*. (1) The receiving stream flow shall be expressed in million liters per day (MLD). The flow rate data to be used must be for the point of release on the water body that first receives release of the substance whether by direct discharge from a site, or by indirect discharge through a Publicly-Owned Treatment Works (POTW) for each site. The flow rate reported shall be the lowest 7-day average stream flow with a recurrence interval of 10 years (7-Q-10). If the 7-Q-10 flow rate is not available for the actual point of release, the stream flow rate should be used from the U.S. Geological Survey (USGS) gauging station that is nearest the point of release that is expected to have a flow rate less than or equal to the receiving stream flow at the point of release.

(2) Receiving stream flow data may be available from the National Pollutant Discharge Elimination System (NPDES) permit for the site or the POTW releasing the substance to surface water, from the NPDES permit-writing authority for the site or the POTW, or from USGS publications, such as the water-data report series.

(3) If receiving stream flow data are not available for a stream, either the value of 10 MLD or the daily flow of wastewater from the site or the POTW releasing the substance must be used as an assumed minimum stream flow. Similarly, if stream flow data are not available because the location of the point of release of the substance to surface water is a lake, estuary, bay, or ocean, then the flow rate to be used must be the daily flow of wastewater from the site or the POTW releasing the substance to surface water. Wastewater flow data may be available from the NPDES permit or NPDES authority for the site or the POTW releasing the substance to water.

## Subpart C—Recordkeeping Requirements

### § 721.100 Applicability.

This subpart C identifies certain additional recordkeeping requirements applicable to manufacturers, importers, and processors of substances identified in subpart E of this part for each specific substance. The provisions of this subpart C apply only when referenced in subpart E of this part for a substance and significant new use identified in that subpart E. If the provisions in this subpart C conflict with general provisions of subpart A of this part, the provisions of this subpart C shall apply.

[54 FR 31313, July 27, 1989]

### § 721.125 Recordkeeping requirements.

At the time EPA adds a substance to subpart E of this part, EPA will specify

appropriate recordkeeping requirements which correspond to the significant new use designations for the substance selected from subpart B of this part. Each manufacturer, importer, and processor of the substance shall maintain the records for 5 years from the date of their creation. In addition to the records specified in § 721.40, the records whose maintenance this section requires may include the following:

(a) Records documenting the manufacture and importation volume of the substance and the corresponding dates of manufacture and import.

(b) Records documenting volumes of the substance purchased in the United States by processors of the substance, names and addresses of suppliers, and corresponding dates of purchase.

(c) Records documenting the names and addresses (including shipment destination address, if different) of all persons outside the site of manufacture, importation, or processing to whom the manufacturer, importer, or processor directly sells or transfers the substance, the date of each sale or transfer, and the quantity of the substance sold or transferred on such date.

(d) Records documenting establishment and implementation of a program for the use of any applicable personal protective equipment required under § 721.63.

(e) Records documenting the determinations required by § 721.63(a)(3) that chemical protective clothing is impervious to the substance.

(f) Records documenting establishment and implementation of the hazard communication program required under § 721.72.

(g) Copies of labels required under § 721.72(b).

(h) Copies of material safety data sheets required under § 721.72(c).

(i) Records documenting compliance with any applicable industrial, commercial, and consumer use limitations under § 721.80.

(j) Records documenting compliance with any applicable disposal requirements under § 721.85, including the method of disposal, location of disposal sites, dates of disposal, and volume of the substance disposed. Where the estimated disposal volume is not known to or reasonably ascertainable by the manufacturer, importer, or processor, that person must maintain other records which demonstrate establishment and implementation of a program that ensures compliance with any applicable disposal requirements.

(k) Records documenting establishment and implementation of procedures that ensure compliance with any applicable water discharge limitations under § 721.90.

[54 FR 31313, July 27, 1989]

## Subpart D—Expedited Process for Issuing Significant New Use Rules for Selected Chemical Substances and Limitation or Revocation of Selected Significant New Use Rules

SOURCE: 54 FR 31314, July 27, 1989, unless otherwise noted.

### § 721.160 Notification requirements for new chemical substances subject to section 5(e) orders.

(a) *Selection of substances.* (1) In accordance with the expedited process specified in this section, EPA will issue significant new use notification requirements and other specific requirements for each new chemical substance that is the subject of a final order issued under section 5(e) of the Act, except for an order that prohibits manufacture and import of the substance, unless EPA determines that significant new use notification requirements are not needed for the substance.

(2) If EPA determines that significant new use notification requirements are not needed for a substance that is subject to a final order issued under section 5(e) of the Act, except for an order that prohibits manufacture or import of the substance, EPA will issue a notice in the FEDERAL REGISTER explaining why the significant new use requirements are not needed.

(b) *Designation of requirements.* (1) The significant new use notification and other specific requirements will be based on and be consistent with the provisions included in the final order issued for the substance under section 5(e) of the Act. EPA may also designate additional activities as significant new

uses which will be subject to notification. Designation of additional activities as significant new uses will be done in accordance with the criteria and procedures under § 721.170, or through a separate rulemaking proceeding.

(2) Significant new use requirements and other specific requirements designated under this section will be listed in subpart E of this part. For each substance, subpart E will identify:

(i) The chemical name.

(ii) The activities designated as significant new uses.

(iii) Other specific requirements applicable to the substance, including recordkeeping requirements or any other requirements included in the final section 5(e) order.

(c) *Procedures for issuing significant new use rules.* (1) EPA will issue significant new use rules under this section by one of the following three processes: direct final rulemaking, interim final rulemaking, or notice and comment rulemaking. EPA will use the direct final rulemaking process to issue significant new use rules unless it determines that, in a particular case, one of the other processes is more appropriate.

(2) FEDERAL REGISTER documents issued to propose or establish significant new uses under this section will contain the following:

(i) The chemical identity of the substance or, if its specific identity is claimed confidential, an appropriate generic chemical name and an accession number assigned by EPA.

(ii) The premanufacture notice number.

(iii) The CAS number, where available and not claimed confidential.

(iv) A summary of EPA's findings under section 5(e)(1)(A) of the Act for the final order issued under section 5(e).

(v) Designation of the significant new uses subject to, or proposed to be subject to, notification and any other applicable requirements.

(vi) Any modifications of subpart A of this part applicable to the specific substance and significant new uses.

(vii) If the FEDERAL REGISTER document establishes a final rule, or notifies the public that a final rule will not be issued after public comment has been received, the document will describe comments received and EPA's response.

(3) *Direct final rulemaking.* (i) When EPA uses the direct final rulemaking procedure to issue a significant new use rule, it will issue a final rule in the FEDERAL REGISTER following its decision to develop a significant new use rule under this section for a specific new chemical substance.

(ii) The FEDERAL REGISTER document will state that, unless written notice is received by EPA within 30 days of publication that someone wishes to submit adverse or critical comments, the rule will be effective 60 days from the date of publication. The written notice of intent to submit adverse or critical comments should state which SNUR(s) will be the subject of the adverse or critical comments, if several SNURs are established through the direct final rule. If notice is received within 30 days that someone wishes to submit adverse or critical comments, the section(s) of the direct final rule containing the SNUR(s) for which a notice of intent to comment was received will be withdrawn by EPA issuing a document in the final rule section of the FEDERAL REGISTER, and a proposal will be published in the proposed rule section of the FEDERAL REGISTER. The proposal will establish a 30-day comment period.

(iii) If EPA, having considered any timely comments submitted in response to the proposal, decides to establish notification requirements under this section, EPA will issue a final rule adding the substance to subpart E of this part and designating the significant new uses subject to notification.

(4) *Notice and comment rulemaking.* (i) When EPA uses a notice and comment procedure to issue a significant new use rule, EPA will issue a proposal in the FEDERAL REGISTER following its decision to develop a significant new use rule under this section for a specific new chemical substance. Persons will be given 30 days to comment on whether EPA should establish notification requirements for the substance under this part.

(ii) If EPA, having considered any timely comments, decides to establish notification requirements under this section, EPA will issue a final rule adding the substance to subpart E of this part and designating the significant new uses subject to notification.

(5) *Interim final rulemaking.* (i) When EPA uses the interim final rulemaking procedure to issue a significant new use rule, EPA will issue an interim final rule in the final rule section of the FEDERAL REGISTER following its decision to develop a significant new use rule for a specific new chemical substance. The document will state EPA's reasons for using the interim final rulemaking procedure.

(A) The significant new use rule will take effect on the date of publication.

(B) Persons will be given 30 days from the date of publication to submit comments.

(ii) Interim final rules issued under this section shall cease to be in effect 180 days after publication unless, within the 180-day period, EPA issues a final rule in the FEDERAL REGISTER responding to any written comments received during the 30-day comment period specified in paragraph (c)(5)(i)(B) of this section and promulgating final significant new use notification requirements and other requirements for the substance.

(d) *Schedule for issuing significant new use rules.* (1) Unless EPA determines that a significant new use rule should not be issued under this section, EPA will issue a proposed rule, a direct final rule, or an interim final rule within 180 days of receipt of a valid notice of commencement under § 720.102 of this chapter for any substance for which the notice of commencement was received on or after October 10, 1989.

(2) Unless EPA determines that a significant new use rule should not be issued under this section, EPA will issue a proposed rule, a direct final rule, or an interim final rule within 1 year of October 10, 1989, for any substance for which the valid notice of commencement under § 720.102 of this chapter was received before October 10, 1989.

(3) If EPA receives adverse or critical significant comments following publication of a proposed or interim final rule, EPA will either withdraw the rule or issue a final rule addressing the comments received.

### § 721.170 Notification requirements for selected new chemical substances that have completed premanufacture review.

(a) *Selection of substances.* In accordance with the expedited process specified in this section, EPA may issue significant new use notification and recordkeeping requirements for any new chemical substance for which a premanufacture notice has been submitted under Part 720 of this chapter if EPA determines that activities other than those described in the premanufacture notice may result in significant changes in human exposure or environmental release levels and/or that concern exists about the substance's health or environmental effects.

(b) *Concern criteria.* EPA may determine that concern exists about a substance's health or environmental effects if EPA makes any one of the following findings:

(1)(i) The substance may cause carcinogenic effects because the substance:

(A) Has been shown by valid test data to cause carcinogenic effects in humans or in at least one species of laboratory animal.

(B) Has been shown to be a possible carcinogen based on the weight of the evidence in short-term tests indicative of the potential to cause carcinogenic effects.

(C) Is closely analogous, based on toxicologically relevant similarities in molecular structure and physical properties, to another substance that has been shown by test data to cause carcinogenic effects in humans or in at least one species of laboratory animal, provided that if there is more than one such analogue, the greatest weight will be given to the relevant data for the most appropriate analogues.

(D) Is known or can reasonably be anticipated, based on valid scientific data or established scientific principles, to be metabolized in humans or transformed in the environment to a substance which may have the potential to cause carcinogenic effects under the

criteria in paragraphs (b) (1)(i)(A), (B), or (C) of this section.

(ii) No substance may be regulated based on a finding under paragraph (b)(1) of this section unless EPA has also made the finding under § 721.170(c)(2)(ii).

(2) The substance has been shown by valid test data to cause acutely toxic effects in at least one species of laboratory animal or is closely analogous, based on toxicologically relevant similarities in molecular structure and physical properties, to another substance that has been shown by valid test data to cause acutely toxic effects in at least one species of laboratory animal, provided that if there is more than one such analogue, the greatest weight will be given to the relevant data for the most appropriate analogues.

(3) The substance may cause serious chronic effects, serious acute effects, or developmentally toxic effects under reasonably anticipated conditions of exposure because the substance:

(i) Has been shown by valid test data to cause serious chronic effects, serious acute effects, or developmentally toxic effects in humans or in at least one species of laboratory animal at dose levels that could be of concern under reasonably anticipated conditions of exposure.

(ii) Is closely analogous, based on toxicologically relevant similarities in molecular structure and physical properties, to another chemical substance that has been shown by valid test data to cause serious chronic effects, serious acute effects, or developmentally toxic effects in humans or in at least one species of laboratory animal at dose levels that could be of concern under reasonably anticipated conditions of exposure, provided that if there is more than one such analogue, the greatest weight will be given to the relevant data for the most appropriate analogues.

(iii) Is known or can reasonably be anticipated, based on valid scientific data or established scientific principles, to be metabolized in humans or transformed in the environment to a substance which may have the potential to cause serious chronic effects, serious acute effects, or developmentally toxic effects under the criteria in paragraph (b) (3)(i) and (ii) of this section.

(iv) Has been shown to potentially cause developmentally toxic effects based on the weight of the evidence in short-term tests indicative of the potential to cause developmentally toxic effects.

(4) The substance may cause significant adverse environmental effects under reasonably anticipated conditions of release because the substance:

(i) Has been shown by valid test data to cause significant adverse environmental effects at dose levels that could be of concern under reasonably anticipated conditions of release.

(ii) Is closely analogous, based on toxicologically relevant similarities in molecular structure and physical properties, to another substance that has been shown by valid test data to cause significant adverse environmental effects at dose levels that could be of concern under reasonably anticipated conditions of release, provided that if there is more than one such analogue, the greatest weight will be given to the relevant data for the most appropriate analogues.

(iii) Has been determined, based on calculations using the substance's physical and chemical properties, to be potentially able to cause significant adverse environmental effects at dose levels that could be of concern under reasonably anticipated conditions of release.

(iv) Is known or can reasonably be anticipated, based on valid scientific data or established scientific principles, to be environmentally transformed to a substance which may have the potential to cause significant adverse environmental effects under the criteria in paragraph (b) (4)(i), (ii), and (iii) of this section.

(5) Concern exists about the health or environmental effects of one or more impurities or byproducts of the substance because the impurity or byproduct meets one or more of the criteria in paragraph (b) (1) through (4) of this section and either:

(i) The impurity or byproduct is a new chemical substance and may be present in concentrations that could cause adverse health or environmental

effects under reasonably anticipated conditions of exposure or release.

(ii) Reasonably anticipated manufacture, processing, or use activities involving the substance for which a premanufacture notice has been submitted may result in significantly increased human exposure to or environmental release of the impurity or byproduct compared to exposure or release levels resulting from existing activities involving the impurity or byproduct.

(c) *Designation of requirements.* (1) When EPA decides to establish significant new use reporting requirements under this section, EPA may designate as a significant new use any one or more of the activities set forth in subpart B of this part. In addition, EPA may designate specific recordkeeping requirements described under subpart C of this part that are applicable to the substance.

(2) EPA may designate as a significant new use only those activities that (i) are different from those described in the premanufacture notice for the substance, including any amendments, deletions, and additions of activities to the premanufacture notice, and (ii) may be accompanied by changes in exposure or release levels that are significant in relation to the health or environmental concerns identified under paragraph (b) of this section.

(d) *Procedures for issuing significant new use rules.* (1) Significant new use requirements designated under this section will be listed in subpart E of this part. For each substance, subpart E of this part will identify:

(i) The chemical name.

(ii) The activities designated as significant new uses, which may include one or more of the activities described in paragraph (c) of this section.

(iii) Other specific requirements applicable to the substance.

(2) When EPA determines that a substance is a candidate for a significant new use rule under this section, it will notify the person that submitted the premanufacture notice for the substance no later than 7 calendar days before the expiration of the notice review period under § 720.75 of this chapter. In providing this notice, EPA will describe the health or environmental concerns identified under paragraph (b) of this section and the activities under consideration for designation as significant new uses. Such notice may be by telephone, but in this event will be confirmed in writing no later than 30 days after completion of the notice review period.

(3) FEDERAL REGISTER documents issued to propose or establish significant new uses under this section will contain the following:

(i) The chemical identity of the substance or, if its specific identity is claimed confidential, an appropriate generic chemical name and an accession number assigned by EPA.

(ii) The premanufacture notice number.

(iii) The CAS number, where available and not claimed confidential.

(iv) A summary of the basis for action under this section.

(v) Designation of the significant new uses subject to, or proposed to be subject to, notification and any other applicable requirements.

(vi) Any modifications of subpart A of this part applicable to the specific substance and significant new uses.

(vii) If the FEDERAL REGISTER document establishes a final rule, or notifies the public that a final rule will not be issued after public comment has been received, the document will describe comments received and EPA's response.

(4) EPA will issue significant new use rules under this section by one of the following three processes: direct final rulemaking, interim final rulemaking, or notice and comment rulemaking. EPA will use the direct final rulemaking process to issue significant new use rules unless it determines that, in a particular case, one of the other processes is more appropriate.

(i)(A) When EPA uses the direct final rulemaking procedure to issue a significant new use rule it will issue a direct final rule in the final rule section of the FEDERAL REGISTER following its decision to develop a significant new use rule under this section for a specific new chemical substance.

(B) The FEDERAL REGISTER document will state that, unless written notice is received by EPA within 30 days after the date of publication that someone

wishes to submit adverse or critical comments, the SNUR will be effective 60 days from date of publication. The written notice of intent to submit adverse or critical comments should state which SNUR(s) will be the subject of the adverse or critical comments, if several SNURs are established through the direct final rule. If notice is received within 30 days after the date of publication that someone wishes to submit adverse or critical comments, the section(s) of the direct final rule containing the SNUR(s) for which a notice of intent to comment was received will be withdrawn by EPA issuing a document in the final rule section of the FEDERAL REGISTER, and EPA will issue a proposed rule in the proposed rule section of the FEDERAL REGISTER. The proposed rule will establish a 30-day comment period.

(C) If EPA, having considered any timely comments submitted in response to the proposal, decides to establish notification requirements under this section, EPA will issue a final rule adding the substance to subpart E of this part and designating the significant new uses subject to notification.

(ii)(A) When EPA uses a notice and comment procedure to issue a significant new use rule, EPA will issue a proposed rule in the FEDERAL REGISTER following its decision to develop a significant new use rule under this section for a specific new chemical substance. Persons will be given 30 days to comment on whether EPA should establish notification requirements for the substance under this part.

(B) If EPA, having considered any timely comments, decides to establish notification requirements under this section, EPA will issue a final rule adding the substance to subpart E of this part and designating the significant new uses subject to notification.

(iii)(A) When EPA uses the interim final rulemaking procedure to issue a significant new use rule, EPA will issue an interim final rule in the final rule section of the FEDERAL REGISTER following its decision to develop a significant new use rule for a specific new chemical substance. The document will state EPA's reasons for using the interim final rulemaking procedure.

(*1*) The significant new use rule will take effect on the date of publication.

(*2*) Persons will be given 30 days from the date of publication to submit comments.

(B) An interim final rule issued under this section shall cease to be in effect 180 days after publication unless, within the 180-day period, EPA issues a final rule in the FEDERAL REGISTER responding to any written comments received during the 30-day comment period specified in paragraph (d)(4)(iii)(A)(*2*) of this section and promulgating final significant new use notification requirements and other requirements for the substance.

(e) *Schedule for issuing significant new use rules.* (1) EPA will issue a proposed rule, an interim final rule, or a direct final rule within 270 days of receipt of the notice of commencement under § 720.102 of this chapter for any substance for which the notice of commencement was received on or after October 10, 1989.

(2) If EPA receives adverse or critical comments within the designated comment period following publication of a proposed rule or an interim final rule, EPA will either withdraw the rule or issue a final rule addressing the comments received.

[54 FR 31314, July 27, 1989, as amended at 60 FR 16316, Mar. 29, 1995]

### § 721.185 Limitation or revocation of certain notification requirements.

(a) *Criteria for modification or revocation.* EPA may at any time modify or revoke significant new use notification requirements for a chemical substance which has been added to subpart E of this part using the procedures under § 721.160 or § 721.170. Such action may be taken under this section if EPA makes one of the following determinations, unless other information shows that the requirements should be retained:

(1) Test data or other information obtained by EPA provide a reasonable basis for concluding that activities designated as significant new uses of the substance will not present an unreasonable risk of injury to human health or the environment.

(2) EPA has promulgated a rule under section 4 or 6 of the Act, or EPA or another agency has taken action under

another law for the substance that eliminates the need for significant new use notification under section 5(a)(2) of the Act.

(3) EPA has received significant new use notices for some or all of the activities designated as significant new uses of the substance and, after reviewing such notices, concluded that there is no need to require additional notice from persons who propose to engage in identical or similar activities.

(4) EPA has examined new information, or has reexamined the test data or other information or analysis supporting its decision to add the substance to subpart E of this part under § 721.170 and has concluded that the substance does not meet the criteria under § 721.170(b).

(5) For a substance added to subpart E of this part under § 721.160, EPA has examined new information, or has reexamined the test data or other information or analysis supporting its finding under section 5(e)(1)(A)(ii)(I) of the Act, and has concluded that a rational basis no longer exists for the findings that activities involving the substance may present an unreasonable risk of injury to human health or the environment required under section 5(e)(1)(A) of the Act.

(6) For a substance added to subpart E of this part under § 721.160, certain activities involving the substance have been designated as significant new uses pending the completion of testing, and adequate test data developed in accordance with applicable procedures and criteria have been submitted to EPA.

(b) *Procedures for limitation or revocation.* Modification or revocation of significant new use notification requirements for a substance that has been added to subpart E of this part using the procedures described under § 721.160 or § 721.170 may occur either at EPA's initiative or in response to a written request.

(1) Any affected person may request modification or revocation of significant new use notification requirements for a substance that has been added to subpart E of this part using the procedures described in § 721.160 or § 721.170 by writing to the Director of the Office of Pollution Prevention and Toxics and stating the basis for such request. All requests should be sent to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460. ATTN: Request to amend significant new use rule. The request must be accompanied by information sufficient to support the request.

(2) The Director of the Office of Pollution Prevention and Toxics will consider the request, make a determination whether to initiate rulemaking to modify the requirements, and notify the requester of that determination by certified letter. If the request is denied, the letter will explain why EPA has concluded that the significant new use notification requirements for that substance should remain in effect.

(3) If EPA concludes that significant new use notification requirements for a substance should be limited or revoked, EPA will propose the changes in the FEDERAL REGISTER, briefly describe the grounds for the action, and provide interested parties an opportunity to comment.

[54 FR 31314, July 27, 1989, as amended at 58 FR 34204, June 23, 1993; 60 FR 34464, July 3, 1995]

## Subpart E—Significant New Uses for Specific Chemical Substances

### § 721.225 2-Chloro-N-methyl-N-substituted acetamide (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-chloro-*N*-methyl-*N*-substituted acetamide (PMN P–84–393) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (b)(2), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iv), (g)(2)(i), and (g)(2)(v). The provisions of § 721.72(d) requiring employees to be provided with

information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDSs are not required under § 721.72(a) and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified § 721.80(g).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The recordkeeping requirements as specified in § 721.125(a) through (g) and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 32412, Aug. 9, 1990, as amended at 57 FR 20424, May 13, 1992. Redesignated at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.275 Halogenated-N-(2-propenyl)-N-(substituted phenyl) acetamide.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as halogenated-*N*-(2-propenyl)-*N*-(substituted phenyl) acetamide (P–83–1085) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (e), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 25988, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.285 Acetamide, *N*-[4-(pentyloxy)phenyl]-, acetamide, *N*-[2-nitro-4-(pentyloxy)phenyl]-, and acetamide, *N*-[2-amino-4-(pentyloxy)phenyl]-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified as acetamide, *N*-[4-(pentyloxy)phenyl]- (PMN P–92–31), acetamide, *N*-[2-nitro-4-(pentyloxy)phenyl]- (PMN P–92–32), and acetamide, *N*-[2-amino-4-(pentyloxy)phenyl]- (PMN P–92–33) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(h).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 90 ppb for PMNs P–92–31 and P–92–32, and N = 30 ppb for P–92–33). When calculating the surface water concentrations according to the instructions in § 721.90(a)(4), the statement that the amount of the substance that will be released will be calculated before the substance enters control technology does not apply. Instead, if the waste stream containing the substance will be treated before release, then the amount of the substance reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than 25 percent removal efficiency may be attributed to such treatment.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51702, Oct. 4, 1993]

### § 721.320 Acrylamide-substituted epoxy.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as acrylamide-substituted epoxy (PMN P–92–660) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(i), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51681, Oct. 4, 1993]

### § 721.323 Substituted acrylamide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as substituted acrylamide (PMN P–90–1687) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(iii), (a)(3), (a)(4), (a)(6)(ii), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c). Section 721.63(a)(5)(i), (a)(5)(ii), and (a)(5)(iii) apply to manufacturing operations only; § 721.63(a)(5)(ix), (a)(5)(x), and (a)(5)(xi) apply to processing and use operations only.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(ii) (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5). The following additional statement shall appear on each label and MSDS as required by this paragraph: This substance may cause nervous system effects.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51702, Oct. 4, 1993]

### § 721.325 Certain acrylates.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances identified generically as alkanetriol dimethacrylate, substituted (P–84–176); polyalkylene glycol monomethacrylate, substituted (P–84–180); polyalkyl alkanediol monoacrylate, substituted (P–84–181); alkanetriol polyalkylene glycol ester acrylate, substituted (P–84–182); alkylene glycol monomethacrylate, substituted (P–84–183); polyalkyl alkanediol monomethacrylate, substituted (P–84–184); 2-oxepanone, homopolymer, ester with 3-hydroxy-2,2-dimethylpropanoic acid (2:1), di-2-

propenoate (P–84–341); 2-oxepanone, homopolymer, 2-propenoate, (tetrahydro-2-furanyl) methyl ester, (P–84–342); 2-oxepanone, homopolymer, 2-propenoate, ester with 2,2'-[oxybis (methylene)]bis(2-hydroxymethyl)-1,3-propanediol (P–84–343); 2-propenoic acid, [2-[1,1-dimethyl-2-[(1-oxo-2-propenyl)oxyethyl]-5-ethyl-1,3-dioxan-5-yl] methyl ester (P–84–344); and 2-propanol, 1-amino-, reaction products with melamine, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-hydroxyethyl, acrylate-blocked (P–85–703), are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b)(concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v). The statement ''when spray applied'' shall appear with the statements required under (g)(2)(ii) and (g)(2)(iv).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 720.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 25988, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.370 Substituted diacrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted diacrylate (PMN No. P–91–1464) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(iii)(D), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(D), (h)(2)(iii)(A), (h)(2)(iii)(B), and (h)(2)(iii)(D). In addition to the statements specified, the label and MSDS shall contain the following statement: Use respiratory protection when there is a reasonable likelihood of exposure in the work area from dust, mist, smoke, fumes, vapor, or gas.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 32236, June 8, 1993]

### § 721.390 Monoacrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance acrylic ester (PMN P–85–415) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xiv), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(d), (e) (concentration set at 0.1 percent),

(f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), and (g)(4)(i). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a) and (c), respectively. The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72(b) and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (i) and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 39901, Sept. 28, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.400 Polyalkylpolysilazane, bis (substituted acrylate).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as polyalkyl polysilazane, bis(substituted acrylate) (PMN P–89–423) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(ii)(b).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46001, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.415 Aliphatic diurethane acrylate ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as aliphatic diurethane acrylate ester (PMN P–85–1013) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45997, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.430 Oxo-substituted aminoalkanoic acid derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as oxo-substituted amino alkanoic acid derivative (PMN No. P–92–692) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iv), (a)(5)(v), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a) through (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(iii) *Release to water.* Requirements as specified in § 721.90(a)(1), (a)(2), and (a)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32236, June 8, 1993, as amended at 58 FR 29946, May 24, 1993]

### § 721.445 Substituted ethyl alkenamide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted ethyl alkenamide (PMN No. P–86–1315) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(ii), (g)(1)(vii), (g)(2)(i), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Use other than polymerizing all residual materials from the manufacture, processing, and equipment rinsing of the PMN substance so that no monomers of the PMN substance are released to the environment.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[58 FR 32236, June 8, 1993]

### § 721.460 Amino acrylate monomer.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as amino acrylate monomers (PMNs P–85–296 and PMN P–85–298) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii),

(a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45997, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.470 Aliphatic difunctional acrylic acid ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as aliphatic difunctional acrylic acid ester (PMN P–92–1313) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51681, Oct. 4, 1993]

### § 721.490 Modified acrylic ester (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance modified acrylic ester (PMN P–86–387) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xi), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f) and (g)(1)(iii), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1) and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (e) through (g), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions

of § 721.185 apply to this significant new use rule.

[55 FR 32414, Aug. 9, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.505 Halogenated acrylonitrile.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as halogenated acrylonitrile, (PMN P–90–299) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(ii), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) Hazard communication program. Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(iii), (g)(1)(iv), (g)(1)(v), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (h).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 15792, Apr. 17, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.520 Alanine, N-(2-carboxyethyl)-N-alkyl-, salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as alanine, *N*-(2-carboxyethyl)-*N*-alkyl-, salt (P–89–336) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(3)(ii), (g)(4)(i), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) and (q).

(iii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), (c)(4) (where N = 100). The requirement of 40 CFR 721.91(a)(4) that the amount of the substance estimated to be released to water is calculated before entering control technology is not retained. Instead, if the waste stream containing the PMN substance will be treated using biological treatment (activated sludge or equivalent) plus clarification, then the amount of PMN substance reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than 90 percent removal efficiency may be attributed to such treatment.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance as specified in § 721.125(a), (b), (c), (f), (g), (h), (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 15789, Apr. 17, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.530 Substituted aliphatic acid halide (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance substituted aliphatic acid halide (PMN P–84–491) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i) through (a)(5)(iii), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (d), (e) (concentration set at 0.1 percent), (f) and (g)(1)(vii), (g)(2)(i) through (g)(2)(v), and (g)(4)(i). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a) and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (b)(1) and (c)(1). (In lieu of incineration, persons subject to this section may dispose of wastes containing the substance by chemically treating liquid wastes so that the first hydrolysis product is less than 10 ppm prior to discharge or purifying the waste stream so that the first hydrolysis product is less than 10 ppm. Those purified waste streams may be reused or sold. All of the substance removed by these processes must be incinerated or treated and released as described in this paragraph (a)(2)(iv).)

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (e) through (f), (i) and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32412, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.536 Halogenated phenyl alkane.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as halogenated phenyl alkane (PMN P–89–867) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section. The requirements of this section do not apply once the substance has been incorporated into a resin.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv), (a)(5)(v), (6)(i), (b) (concentration set at 0.1 percent), and (c). As an alternative to the respiratory requirements in this section, manufacturers, importers, and processors may use the New Chemical Exposure Limits provisions, including sampling and analytical methods which have previously been approved by EPA for this substance, found in the 5(e) consent order for this substance. As an alternative to the respiratory requirements in this section manufacturers, importers, and processors may use the New Chemical Exposure Limits provisions, including sampling and analytical methods which have previously been approved by EPA for this substance, found in the 5(e) consent order for this substance.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (g)(1)(vii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) [Reserved]

(v) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51681, Oct. 4, 1993]

### § 721.540 Alkylphenoxypolyalkoxyamine (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as akylphenoxypolyalkoxyamine (PMN P–86–1489) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (f), and (g)(3)(ii), (g)(4)(iii), and (g)(5).

(ii) *Release to water.* Section 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(f), (g), (h), and (k).

(2) *Limitations or revocation of certain requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 26097, June 26, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.550 Alkyl alkenoate, azobis-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkyl alkenoate, azobis- (PMN P–88–2470) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(i) through (a)(5)(iii), (a)(6)(ii), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (b)(2), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(v), and (g)(5). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72 (a) and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (l) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), (c), (e), (f), (g), and (h).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 46771, Nov. 6, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.562 Substituted alkylamine salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted alkylamine salt (PMN P–85–941) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where n = 70).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45080, Aug. 30, 1995]

### § 721.575 Substituted alkyl halide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted alkyl halide (PMN P–83–1222) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(i) through (a)(5)(iii), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(ii), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72 (a), and (c), respectively. The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72 (b), and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(h).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), and (f).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 46772, Nov. 6, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.600 3-Alkyl-2-(2-anilino)vinyl thiazolinium salt (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as 3-alkyl-2-(2-anilino)vinylthiazolinium salt (PMN P–84–1007) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (b) (concentration set at 1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e), (f) [concentration set at 1 percent], (g)(1)(iii), (g)(1) (may be lethal if inhaled or in contact with eyes), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS is not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS in not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (j).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 26102, June 26, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.625 Alkylated diarylamine, sulfurized (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The

chemical substance identified generically as alkylated diarylamine, sulfurized (PMN P–89–506) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q)

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), and (c).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26099, June 26, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.639 Amine aldehyde condensate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an amine aldehyde condensate (PMN P–94–1810) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45080, Aug. 30, 1995]

### § 721.642 Amines, *N*-($C_{14–18}$ and $C_{16–18}$ unsaturated alkyl)] dipropylene-tri-, tripropylenetetra-, and tetrapropylenepenta-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances amines, *N*-($C_{14–18}$ and $C_{16–18}$ unsaturated alkyl)] dipropylenetri-, (PMN P–94–1244), tripropylenetetra- (PMN P–94–1245), and tetrapropylenepenta- (PMN P–94–1246) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11041, Mar. 1, 1995]

### § 721.650 11-Aminoundecanoic acid.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance 11-aminoundecanoic acid, CAS Number 2432–99–7, is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is any use other than as.

(i) An intermediate in the manufacture of polymers in an enclosed process when it is expected that the 11-aminoundecanoic acid will be fully polymerized during the manufacturing process, or

(ii) A component in photoprocessing solutions.

(b) *Specific requirements.* The provisions of Subpart A of this part apply to this section except as modified by this paragraph.

(1) *Definitions.* In addition to the definitions in § 721.3, the following definitions apply to this section:

(i) *Enclosed process* means a process that is designed and operated so that there is no intentional release of any substance present in the process. A process with fugitive, inadvertent, or emergency pressure relief releases remains an enclosed process so long as measures are taken to prevent worker exposure to and environmental contamination from the releases.

(ii) *Internal subunit* means a subunit that is covalently linked to at least two other subunits. *Internal subunits* of polymer molecules are chemically derived from monomer molecules that have formed covalent links between two or more other molecules.

(iii) *Monomer* means a chemical substance that has the capacity to form links between two or more other molecules.

(iv) *Polymer* means a chemical substance that consists of at least a simple weight majority of polymer molecules but consists of less than a simple weight majority of molecules with the same molecular weight. Collectively, such polymer molecules must be distributed over a range of molecular weights wherein differences in molecular weight are primarly attributable to differences in the number of internal subunits.

(v) *Polymer molecule* means a molecule which includes at least four covalently linked subunits, at least two of which are internal subunits.

(vi) *Subunit* means an atom or group of associated atoms chemically derived from corresponding reactants.

(2) [Reserved]

[52 FR 19865, May 28, 1987. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993]

### § 721.700 Methylenebistrisubstituted aniline (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as methylenebistrisubstituted aniline (PMN P–87–90) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) and (q).

(iv) *Disposal.* Section 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33305, Aug. 15, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.715 Trisubstituted anthracene.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as trisubstituted anthracene (PMN P–91–689) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (First limit set at 500 kg; second limit set at 25,000 kg).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 10 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27481, May 27, 1994]

### § 721.750 Aromatic amine compound.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance aromatic amine compound (PMN P–86–334) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent) and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vii), (g)(2)(i) through (g)(2)(iii), and (g)(2)(v). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a) and (c), respectively. The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72(b) and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e) and (f).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39899, Sept. 28, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.757 Polyoxyalkylene substituted aromatic azo colorant.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polyoxyalkylene substituted aromatic azo colorant (PMN P–92–1131) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(w)(1) and (w)(2).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51681, Oct. 4, 1993]

### § 721.775 Brominated aromatic compound (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as a brominated aromatic compound (PMN P–84–824) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a),

(b)(1), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), and (g)(2)(v). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS is not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS in not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (j) (use as an additive flame retardant for plastics) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90 (a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (g), (i), and (k).

(2) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

(3) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 26098, June 26, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.805 Benzenamine, 4,4′-[1,3-phenylenebis(1-methylethylidene)]bis[2,6-dimethyl-.

(a) Chemical substances and significant new uses subject to reporting. (1) The chemical substance benzenamine, 4,4′-[1,3-phenylenebis(1-methyl ethylidene)]bis[2,6-dimethyl- (CAS Registry Number 2716–12–3; PMN P–86–501) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(xv), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1), (c)(1), (a)(2), (b)(2), and (c)(2).

(v) *Release to water.* Requirements as specified in § 721.90(a)(2)(vi), (b)(2)(vi), and (c)(2)(vi).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified in § 721.125 (a) through (k) are applicable to manufacturers, importers, and processors of these substances .

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 31330, July 15, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.825 Certain aromatic ether diamines.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The following chemical substances are subject to reporting under this section for the significant new uses described in paragraphs (a)(2), (a)(3), and (a)(4) of this section: Benzenamine, 4,4′-[[1,1′-biphenyl]-2,5-diylbis(oxy)]bis- (CAS Number 94148–67–1, Premanufacture notice (PMN) P–85–335); 1,2,4,5-benzenetetracarboxylic acid, diethyl ester, compound with 4,4′-[[1,1′-biphenyl]-2,5-diylbis(oxy)]bis[benzenamine] (1:1) (PMN P–85–336); and 1,2,4,5-benzenetetracarboxylic acid, 1,4-diethyl ester, compound with 4,4′-[[1,1′-biphenyl]-2,5-diylbis(oxy)]bis[benzenamine] (1:1), polymer with 4,4′-[[1,1′-biphenyl]-2,5-diylbis(oxy)]bis[benzenamine]-1,5-diethyl-1,2,4,5-benzenetetra

carboxylate (1:1), reaction products with phthalic anhydride (PMN P–86–1153).

(2) The significant new use for P–85–335 is: Manufacture, import, or processing in a quantity of 100,000 pounds per year, or greater, for any use.

(3) The significant new use for P–85–336 is: Any use.

(4) The significant new use for P–86–1153 is: Manufacture, import, or processing in a quantity of 225,000 pounds per year, or greater, for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes a substance identified in paragraph (a)(3) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[59 FR 43296, Aug. 23, 1994]

### § 721.840 Alkyl substituted diaromatic hydrocarbons.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an alkyl substituted diaromatic hydrocarbons (PMN P–91–710) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46464, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.875 Aromatic nitro compound.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance aromatic nitro compound (PMN P–86–335) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(vii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vii), and (g)(2)(i) through (g)(2)(v). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a) and (c), respectively. The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72(b) and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), and (f).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39899, Sept. 28, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.925 Substituted aromatic (generic).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted aromatic (PMN P–84–954) is subject to reporting under this section for the significant new

uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), and (g)(2)(v). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS is not required under § 721.72(c). The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72 (b) and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(iv) *Release to water.* Requirements as specified in § 721.90 (a)(4), (b)(4), and (c)(4) (level set at 0.25 ppm).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a) through (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 26098, June 26, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.950 Sodium salt of an alkylated, sulfonated aromatic (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as a sodium salt of an alkylated, sulfonated aromatic (PMN P–84–591) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(j) (use as a dye leveler) and (q).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26098, June 26, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.982 Calcium, bis(2,4-pentanedionato-*O,O′*).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance calcium, bis(2,4-pentanedionato-O,O′) (PMN P–93–214, CAS no. 19372–44–2) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section. The requirements of this section do not apply if the substance is embedded or encapsulated in a plastic matrix.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set a 1.0 percent); and (c). As an alternative to the respiratory requirements in this section, manufacturers, importers, and processors may use the New Chemical Exposure Limits provisions, including sampling and analytical methods which have previously been approved by EPA for this substance, found in the 5(e) consent order for this substance.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iii), (g)(1)(ix), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(b) *Specific requirements.* The provisions of subpart A of this part apply to

this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (d), (f) through (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27482, May 27, 1994]

### § 721.1000 Benzenamine, 3-chloro-2,6-dinitro-N,N-dipropyl-4-(trifluoromethyl)-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as benzenamine, 3-chloro-2,6-dinitro-*N,N*-dipropyl-4-(trifluoromethyl)- (P–86–83) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(i), and (g)(2)(v). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS is not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information in an MSDS or label does not apply when an MSDS and label are not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 720.80(h).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(3), (b)(1), (b)(3), (c)(1), and (c)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a) through (f), (i), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 25989, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1025 Benzenamine, 4-chloro-2-methyl-; benzenamine, 4-chloro-2-methyl-, hydrochloride; and benzenamine, 2-chloro-6-methyl-.

(a) *Chemical substances and significant new use subject to reporting.* (1) The chemical substances benzenamine, 4-chloro-2-methyl- (CAS Number 95–69–2); benzenamine, 4-chloro-2-methyl-, hydrochloride (CAS Number 3165–93–3); and benzenamine, 2-chloro-6-methyl- (CAS Number 87–63–8) are subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Any use.

(b) *Specific requirements.* The provisions of subpart A of this Part apply to this section except as modified by this paragraph:

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes a substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[54 FR 12447, Mar. 27, 1989; 54 FR 17707, Apr. 25, 1989. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1050 Benzenamine, 2,5-dibutoxy-4-(4-morpholinyl)-, sulfate

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as benzenamine, 2,5-dibutoxy-4-(4-morpholinyl), sulfate (PMN P–90–1809; CAS number 130169–66–3) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(3)(ii), (g)(4)(i) and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iii) *Release to water.* Requirements as specified in § 721.90(a)(1), unless the substance is released to the Passaic Valley Sewerage Commission publicly-owned treatment works (NPDES Number NJ0021016) which discharges to the New York Bay.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), (f) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44061, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.1068 Benzenamine, 4-isocyanato-*N,N*-bis(4-isocyanatophenyl)-2,5-dimethoxy-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as benzenamine, 4-isocyanato-*N,N*-bis(4-isocyanatophenyl)-2,5-dimethoxy- (PMN P–92–168) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(ii), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(i), (g)(1)(ii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (22,000 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51682, Oct. 4, 1993]

### § 721.1075 Benzenamine, 4-(1-methylbutoxy)-, hydrochloride.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as benzenamine, 4-(1-methylbutoxy)-, hydrochloride (PMN P–90–559) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Modifications or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44062, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

**§ 721.1120 Benzenamine, 4,4′-[1,4-phenylenebis(1-methylethylidene)]bis[2,6-dimethyl-.**

(a) Chemical substances and significant new uses subject to reporting. (1) The chemical substance benzenamine, 4,4′-[1,4-phenylenebis(1-methylethylidene)]bis- (CAS Registry Number 2716–10–1; PMN P–86–503) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iii) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1), (c)(1), (a)(2), (b)(2), and (c)(2).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(2)(vi), (b)(2)(vi), and (c)(2)(vi).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified in § 721.125 (a), (b), (c), (f), (g), (h), (i), (j), and (k) are applicable to manufacturers, importers, and processors of these substances .

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 31330, July 15, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

**§ 721.1150 Substituted polyglycidyl benzenamine.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The following chemical substance, referred to by premanufacture notice number and its generic chemical name, is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section: Substituted polyglycidyl benzeneamine, P–83–394.

(2) The significant new uses are:

(i) Use in spray applications.

(ii) Manufacture or processing without establishing a program whereby:

(A) During all stages of manufacture and processing of the substance, and during response to emergencies and spills involving the substance, any person employed by or under the control of the manufacturer or processor who may potentially be dermally exposed to the substance wears:

(*1*) Gloves which cover the arm up to the elbow and which have been determined to be impervious to the substance under conditions of exposure (gloves may be determined to be impervious by standard testing methods or by reliance on the manufacturer's specifications for those gloves selected);

(*2*) A face shield of at least 8 inches in length; and

(*3*) Clothing which covers any other exposed areas of the arms, legs, and torso.

(B) All workers described in paragraph (a)(ii)(A) of this section are informed in writing, or by presenting the information as part of a training program in a safety meeting where attendance is recorded, of the following: To avoid all contact with this substance; that structurally similar chemicals have been found to cause cancer, reproductive effects, kidney and liver effects in laboratory animals, and allergic reactions in humans; that this substance is a severe skin and eye irritant; and that the use of impervious gloves, face shields and other clothing to cover exposed areas of the arms, the legs, and the torso is required.

(C) A label is affixed to each container of the substance or of a formulation containing the substance which (in a print size no smaller than ten

point type) contains, at a minimum, the following information:

WARNING: CONTACT WITH SKIN AND EYES IS HARMFUL

—Severe skin and eye irritant.
—Similar chemicals cause cancer, reproductive effects, and kidney and liver changes in laboratory animals. They have also caused allergic reactions in humans.
—Prevent all contact with skin, eyes, and clothing.
—Wear impervious gloves, face shield, and protective clothing. Promptly remove and wash contaminated non-impervious clothing before re-use.
—Wash thoroughly after handling and before eating, drinking, or smoking.

STORAGE INSTRUCTIONS:

—Keep closure tight and upright to prevent leakage.
—Keep container closed during shipment and when not in use.
—In case of spillage absorb with sand or vermiculite and flush with plenty of water.

FIRST AID:

—In case of eye contact, immediately flush with plenty of water and get immediate medical attention.
—In case of skin contact, immediately wash with soap and water and get immediate medical attention.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* In addition to the requirements of § 721.17, manufacturers, importers, and processors of the chemical substance identified in paragraph (a)(1) of this section must maintain the following records for five years from their creation:

(i) The names of persons informed, the date they are informed, and the means by which they are informed in accordance with paragraph (a)(2)(ii)(B) of this section.

(ii) The names of any transferee and the dates of any transfers of containers which are labeled in accordance with paragraph (a)(2)(ii)(C) of this section.

(iii) The method used to determine that the protective gloves are impervious to the substance and date and the results of that determination.

(2) [Reserved]

[49 FR 43653, Oct. 31, 1984. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

## § 721.1175 Benzene, substituted, alkyl acrylate derivative (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as a benzene, substituted, alkyl acrylate derivative (PMN P–86–1692) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i), (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS was not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k)

(iv) *Disposal.* § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (g), (i), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33303, Aug. 15, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

## § 721.1187 Bis(imidoethylene) benzene.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance bis(imidoethylene)benzene (PMN P–93–1447) is subject to reporting under this

section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11041, Mar. 1, 1995]

### § 721.1193 Benzene, 2-bromo-1,4-dimethoxy-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as benzene, 2-bromo-1,4-dimethoxy- (PMN P–95–17, CAS No. 25245–34–5) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements specified in § 721.125(a), (b), (c), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45081, Aug. 30, 1995]

### § 721.1210 Benzene, (2-chloroethoxy)-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as benzene, (2-chloroethoxy)- (PMN P–87–1471) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3) (applies to gloves only), (a)(4), (a)(5)(iii), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(j).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1) and (c)(1). Disposal other than as described in the premanufacture notice referenced in paragraph (a)(1) of this section.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44062, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.1225 Benzene, 1,2-dimethyl-, polypropene derivatives, sulfonated, potassium salts.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as benzene, 1,2-dimethyl-, polypropene derivatives, sulfonated, potassium salts (PMN P–89–711) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 1.0 percent, and (f). The following environmental hazard statement shall appear on each label as specified in § 721.72(b) of this section and the MSDS as specified in § 721.72(c) of this section: EPA is requiring aquatic toxicity testing and fate testing for a substance in this product. These requirements are based on EPA's determination that the substance causes toxicity to fish and aquatic organisms based on data on the substance and similar sulfonate compounds. EPA has further determined that discharge of this substance may cause toxicity to fish and aquatic organisms at concentrations as low as 25 ppb. Water releases of the substance are subject to an EPA Significant New Use Rule (SNUR) under 40 CFR part 721 which requires that EPA be notified 90 days prior to use resulting in surface water concentrations in excess of this level.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (l) and (q).

(iii) *Release to water.* Requirements as specified in § 721.90 (a)(4), (b)(4), and (c)(4) (where N = 25 ppb). The requirement of 40 CFR 721.91(a)(4) that the amount of the substance estimated to be released to water is calculated before entering control technology is not retained. If the waste stream containing the substance will be treated using biological treatment (activated sludge or equivalent) plus clarification, then the amount of substance reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than 50 percent removal efficiency may attributed to such treatment.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a), (b), (c), (f), (g), (h), (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 15789, Apr. 17, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.1300 [(Dinitrophenyl)azo]-[2,4-diamino-5-methoxybenzene] derivatives.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as [(dinitrophenyl)azo]-[2,4-diamino-5-methoxybenzene] derivatives (P–83–817 and P–83–818) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(v)(1), (v)(2), (w)(1), (w)(2), (x)(1), and (x)(2).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 25990, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1325 Benzene, 1-(1-methylbutoxy)-4-nitro-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as benzene, 1-(1-methylbutoxy)-4-nitro- (PMN P–90–560) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(ix), (g)(2)(i), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(l) and (p) (production limit set at 43,000 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Modifications or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 44062, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.1350 Benzene, (1-methylethyl)(2-phenylethyl)-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as benzene, (1-methylethyl)(2-phenylethyl)-, (PMN P–88–894) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (b) (concentration set at 1.0 percent), and (c). However, the personal protective clothing required in paragraph (a)(2)(iv) must be tested or evaluated under the requirements of paragraph (a)(3). Furthermore, the imperviousness of gloves required under paragraph (a)(2)(i) may not be demonstrated according to paragraph (a)(3)(ii), but rather must be tested according to paragraph (a)(3)(i) with the following additional requirements: There must be no permeation of the PMN substance greater than 16 ppb after 8 hours of testing in accordance with the American Society for Testing and Materials (ASTM) F739–85 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases.'' Gloves may not be used for a time period longer than they are actually tested and must be replaced at the end of each work shift.

(ii) *Hazard communication program.* Requirements as specified in §721.72 (a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iv), (g)(2)(i), (g)(2)(iii), (g)(2)(v), (g)(3)(ii), (g)(4)(i) and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(q). In addition, a significant use of the substance is any manner or method of manufacturing, processing, or use other than as an insulating oil for capacitors or transformers.

(iv) *Disposal.* Requirements as specified in §721.85(a)(1), (b)(1), (c)(1), (a)(2), (b)(2), (c)(2), (a)(3), (b)(3), and (c)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[56 FR 40210, Aug. 13, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.1372 Substituted nitrobenzene.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as a substituted nitrobenzene (PMN P–92–1125) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (where N = 50 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a),

(b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51682, Oct. 4, 1993]

### § 721.1375 Disubstituted nitrobenzene (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance disubstituted nitrobenzene (PMN P–84–860) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (d), (e) (concentration set at 0.1 percent), (f) and (g)(1)(vii), (g)(2)(i), (g)(2)(v). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a) and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when a MSDS in not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (e), (f) and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 32416, Aug. 9, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1425 Pentabromoethylbenzene.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance pentabromoethylbenzene (CAS Number 85–22–3) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Any use.

(b) *Specific requirements.* The provisions of subpart A of this Part apply to this section except as modified by this paragraph:

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[54 FR 18286, Apr. 28, 1989. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1430 Pentachlorobenzene.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance pentachlorobenzene (CAS No. 608–93–5) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63516, Dec. 1, 1993]

### § 721.1435 1,2,4,5-Tetrachlorobenzene.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance 1,2,4,5-

tetrachlorobenzene (CAS No. 95–94–3) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63516, Dec. 1, 1993]

### § 721.1440 1,3,5-Trinitrobenzene.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance 1,3,5-trinitrobenzene (CAS No. 95–35–4) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63516, Dec. 1, 1993]

### § 721.1450 1,3-Benzenediamine, 4-(1,1-dimethylethyl)-ar-methyl.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The following chemical substance, referred to by its PMN number and chemical name, is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section: P–85–929; 1,3-Benzenediamine, 4-(l,1-dimethylethyl)-*ar*-methyl.

(2) The significant new uses are:

(i) Use other than for applications where the substance will be completely reacted (cured or used as a chemical intermediate).

(ii) Any method of disposal other than by landfill, incineration, or for wastewater from vent scrubbers, steam vacuum ejectors, pad washings, equipment washouts, and stormwater runoffs, wastewater treatment in permitted industrial wastewater treatment facilities. Each method of disposal must meet all applicable local, State, and Federal laws and regulations.

(iii) Any manner or method of manufacturing, importing, or processing without establishing a program whereby:

(A) Any person who may be exposed dermally to the substance wears:

(*1*) Gloves which have been determined to be impervious to the substance under the conditions of exposure, including the duration of exposure. This determination is made either by testing the gloves under the conditions of exposure or by evaluating the specifications provided by the manufacturer of the gloves. Testing or evaluation of specifications includes consideration of permeability, penetration, and potential chemical and mechanical degradation by the substance and associated chemical substances.

(*2*) Clothing which covers any other exposed areas of the arms, legs, and torso.

(*3*) Chemical safety goggles or equivalent eye protection.

(B) Any person who may be exposed to the substance through inhalation during manufacture, in addition to the dermal protective equipment described in paragraph (a)(2)(iii)(A) of this section, wears at a minimum, a National Institute for Occupational Safety and Health approved, category 23C respirator, organic vapor type. Use of the respirator must be according to 29 CFR 1910.134 and 30 CFR part 11. If a full-face type respirator is selected and worn, the chemical safety goggles requirement in paragraph (a)(2)(iii)(A)(*3*) of this section is waived.

(C)(*1*) All persons who may be exposed to the substance are informed, in writing, and by presenting the information as part of a training program in

safety meetings at which attendance is recorded, by means of the following statement:

WARNING: Avoid all contact. Chemicals similar in structure to [insert appropriate name] have been found to cause chronic organ and systemic effects and cancer in laboratory animals. To protect yourself, you must wear chemical safety goggles or equivalent eye protection, impervious gloves, and protective clothing while handling this material.

(*2*) During manufacture, the warning statement in paragraph (a)(2)(iii)(C)(*1*) of this section shall include the additional following statement:

Respirators are required during clean-up or loading of bulk material.

(D) All persons that receive the PMN substance are notified by means of a Material Safety Data Sheet (''MSDS'') which includes, at a minimum, the language specified in paragraph (a)(2)(iii)(C)(*1*) of this section, and specifies the requirements for protective equipment in paragraph (a)(2)(iii)(A) and (a)(2)(iii)(B) of this section.

(E) Each container of the substance distributed in commerce has affixed to it a label which includes a Warning Statement which consists, at a minimum, of the language specified in paragraph (a)(2)(iii)(C)(*1*) of this section. The first word of the Warning Statement is capitalized, and the type size of the first word is no smaller than 6-point type for a label 5 square inches or less in area, 10-point type for a label above 5 but no greater than 10 square inches in area, 12-point type for a label above 10 but no greater than 15 square inches in area, 14-point type for a label above 15 but no greater than 30 square inches in area, or 18-point type for a label over 30 square inches in area. The type size of the remainder of the Warning Statement is no smaller than 6-point type. All required label text is of sufficient prominence, and is placed with such conspicuousness relative to other label text and graphic material, to ensure that the Warning Statement is read and understood by the ordinary individual under customary conditions of purchase and use.

(iv) Manufacturing and importing the substance for any use at greater than the aggregrate volumes allowed under the consent order issued for Premanufacture Notice P–85–929, without submitting to EPA the corresponding scientifically valid toxicity test data required under that order, developed according to EPA's Good Laboratory Practice standards at 40 CFR part 792 and EPA's testing guidelines at 40 CFR 798.2650 and 798.3300.

(b) *Specific requirements.* The provisions of Subpart A of this part apply to this section except as modified by this paragraph.

(1) *Determining whether a use is a significant new use.* (i) Any person who intends to manufacture or import the substance identified in paragraph (a)(1) of this section shall, before commencing any manufacture or import, submit to EPA the information required under § 721.11(b).

(ii) EPA will review this information to determine whether the person has a *bona fide* intent to manufacture or import the substance. If EPA determines that the person has a *bona fide* intent to manufacture or import the substance, EPA will tell the person the specific production volumes which would constitute a significant new use under paragraph (a)(2)(iv) of this section.

(iii) A disclosure to a person with a *bona fide* intent to manufacture or import the substance of the specific production volumes which would constitute a significant new use under paragraph (a)(2)(iv) of this section will not be considered public disclosure of confidential business information under section 14 of the Act.

(2) *Recordkeeping.* In addition to the requirements of § 721.40, manufacturers, importers, and processors must maintain the following records for 5 years after the date they are created:

(i) Any determination that gloves are impervious to the substance.

(ii) Names of persons who have attended safety meetings in accordance with paragraph (a)(2)(iii)(C) of this section, the dates of such meetings, and copies of any written information provided in accordance with paragraph (a)(2)(iii)(C) of this section.

(iii) Copies of any MSDSs used.

(iv) Names and addresses of all persons to whom the substance is sold or

transferred including shipment destination address if different, the date of each transfer, and the quantity of substance sold or transferred on such date.

(v) Copies of any labels used.

(vi) Any names used for the substance and the corresponding dates of use.

(vii) Quantities of the substance manufactured or imported, with the corresponding dates of manufacture or import.

(viii) Quantities of the substance purchased in the United States by processors of the substance, names and addresses of suppliers, and corresponding dates of purchase.

(ix) Information on disposal of the substance, including dates waste material is disposed of, location of disposal sites, volume of disposed solid material, estimated volume of any disposed liquid wastes containing the substance, and method of disposal.

[55 FR 20795, May 21, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1500 1,2-Benzenediamine, 4-ethoxy, sulfate.

(a) *Chemical substance and significant new use subject to reporting.* (1) The following chemical substance referred to by its chemical name is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section: 1,2-benzenediamine, 4-ethoxy, sulfate, PMN P–83–105.

(2) The significant new use is: Manufacture, import, or processing in powder or dry solid form.

(b) [Reserved]

(Sec. 5, Pub. L. 94–469, 90 Stat. 2012 (15 U.S.C. 2604))

[49 FR 43061, Oct. 26, 1984. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1525 Mixture of: 1,3–benzenediamine, 2–methyl–4,6–bis(methylthio)– (CAS NO. 104983–85–9) and 1,3–benzenediamine, 4–methyl–2,6–bis(methylthio)– (CAS NO. 102093–68–5).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The following chemical substance, referred to by its PMN number, chemical name, and CAS NOS., is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section: P–86–1322, Mixture of: 1,3–benzenediamine, 2–methyl–4,6–bis(methylthio)– (CAS NO. 104983–85–9) and 1,3–benzenediamine, 4–methyl–2,6–bis(methylthio)– (CAS NO. 102093–68–5).

(2) The significant new uses are:

(i) Use other than for industrial uses.

(ii) Any method of disposal of the uncured substance other than by incineration.

(iii) Any manner or method of manufacturing, importing, or processing without establishing a program whereby:

(A) Any person who may be exposed dermally to the substance wears:

(*1*) Gloves which have been determined to be impervious to the substance under the conditions of exposure, including the duration of exposure. This determination is made either by testing the gloves under the conditions of exposure or by evaluating the specifications provided by the manufacturer of the gloves. Testing or evaluation of specifications includes consideration of permeability, penetration, and potential chemical and mechanical degradation by the substance and associated chemical substances.

(*2*) Clothing which covers any other exposed areas of the arms, legs, and torso.

(*3*) Chemical safety goggles or equivalent eye protection.

(B) Any person who may be exposed to the substance through inhalation, in addition to the dermal protective equipment described in paragraph (a)(2)(iii)(A) of this section, wears at a minimum a National Institute for Occupational Safety and Health approved category 19C air-supplied respirator. Use of the respirator is according to 29 CFR 1910.134 and 30 CFR part 11 subpart J. If a full-face type respirator is selected and worn, the chemical safety goggles requirement in paragraph (a)(2)(iii)(A)(*3*) of this section is waived.

(C) All persons who may be exposed to the substance are informed, in writing, and by presenting the information as part of a training program in safety

meetings at which attendance is recorded, by means of the following statement:

WARNING: Avoid all contact. Chemicals similar in structure to (insert appropriate name) have been found to cause chronic organ and systemic effects and cancer in laboratory animals. To protect yourself, you must wear chemical safety goggles or equivalent eye protection, impervious gloves, and protective clothing while handling this material. In addition, you must wear a respirator if there is potential inhalation exposure.

(D) All persons that receive the PMN substance are notified, in advance of such receipt, by means of a Material Safety Data Sheet (MSDS) which includes, at a minimum, the language specified in paragraph (a)(2)(iii)(C) of this section, and specifies the requirements for protective equipment in paragraphs (a)(2)(iii) (A) and (B) of this section.

(E) Each container of the substance, or of a formulation containing the substance, distributed in commerce has affixed to it a label which includes a Warning Statement which consists, at a minimum, of the language specified in paragraph (a)(2)(iii)(C) of this section. The first word of the Warning Statement is capitalized, and the type size for the first word is no smaller than 6-point type for a label 5 square inches or less in area, 10-point type for a label above 5 but no greater than 10 square inches in area, 12-point type for a label above 10 but no greater than 15 square inches in area, 14-point type for a label above 15 but no greater than 30 square inches in area, or 18-point type for all labels over 30 square inches in area. The type size of the remainder of the Warning Statement is no smaller than 6-point type. All required label text is of sufficient prominence and is placed with such conspicuousness relative to other label text and graphic material to ensure that the Warning Statement is read and understood by the ordinary individual under customary conditions of purchase and use.

(iv) Manufacturing and importing the substance, for industrial uses, at greater than the aggregate volumes allowed under the consent order issued for Premanufacture Notice P–86–1322, effective on May 23, 1987, without performing the toxicity testing required under that order.

(b) *Specific requirements.* The provisions of subpart A of this Part apply to this section, except as modified by this paragraph.

(1) *Determining whether a use is a significant new use.* (i) A person who intends to manufacture or import the substance identified in paragraph (a)(1) of this section may submit to EPA the information required under § 721.11(b).

(ii) EPA will review this information to determine whether the person has a *bona fide* intent to manufacture or import the substance. If EPA determines that the person has a *bona fide* intent to manufacture or import the substance, EPA will tell the person the specific production volume which would constitute a significant new use under paragraph (a)(2)(iv) of this section.

(iii) A disclosure to a person with a *bona fide* intent to manufacture or import the substance of specific production volume which would constitute a significant new use under paragraph (a)(2)(iv) of this section will not be considered public disclosure of confidential business information under section 14 of the Act.

(2) *Recordkeeping.* In addition to the requirements of § 721.17, manufacturers, importers, and processors must maintain the following records for 5 years after the date they are created:

(i) Any determination that gloves are impervious to the substance.

(ii) Names of persons who have attended safety meetings in accordance with paragraph (a)(2)(iii)(C) of this section, the dates of such meetings, and copies of any written information provided in accordance with paragraph (a)(2)(iii)(C) of this section.

(iii) Copies of any MSDSs used.

(iv) Names and addresses of all persons to whom the PMN substance is sold or transferred, including shipment destination address if different, the date of each sale or transfer, and the quantity of substance sold or transferred on such date.

(v) Copies of any labels used.

(vi) Any names used for the substance and the corresponding dates of use.

(vii) Quantities of the substance manufactured or imported, with the corresponding dates of manufacture or import.

(viii) Quantities of the substance purchased in the United States by processors of the substance, names and addresses of suppliers, and corresponding dates of purchase.

(ix) Information on disposal of the substance, including dates waste material is disposed of, location of disposal sites, volume of disposed solid material, estimated volume of any disposed liquid wastes containing the substance, and method of disposal.

[54 FR 38384, Sept. 18, 1989. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### §721.1550 Benzenediazonium, 4-(dimethylamino)-, salt with 2-hydroxy-5-sulfobenzoic acid (1:1).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as benzenediazonium, 4-(dimethylamino)-, salt with 2-hydroxy-5-sulfobenzoic acid (1:1) (CAS No. 124737–31–1) (P–90–1366) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (a)(6)(ii), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (f), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), and (g)(5). In addition, the following human health hazard statement shall appear on each label as specified at §721.72(b) and the MSDS as specified at §721.72(c). Additional statements may be included as long as they are true and do not alter the meaning of the required statement. Human health hazard statements: This substance may cause severe acute toxicity and death or serious neurotoxic effects.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(p) (volume set at 31,000 kg).

(iv) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (N = 80 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance as specified in §721.125(a) through (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

[56 FR 40211, Aug. 13, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### §721.1555 Substituted phenyl azo substituted benzenediazonium salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted phenyl azo substituted benzenediazonium salt (PMN P–92–652) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (f), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(ii) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a), (b), (c), (f), (g), (h), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[58 FR 51682, Oct. 4, 1993]

### §721.1568 Substituted benzenediazonium.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The

chemical substance identified generically as a substituted benzenediazonium (PMN P–93–533) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(h).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51682, Oct. 4, 1993]

### § 721.1575 Substituted benzenedicarboxylic acid, poly(alkyl acrylate) derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance substituted benzenedicarboxylic acid, poly(alkyl acrylate) derivative (PMN P–86–1739) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (b)(2), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i) through (g)(2)(iii), (g)(2)(v), and (g)(4)(i). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72 (a) and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on a MSDS does not apply when a MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), (c), (e), (f), (g), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 39899, Sept. 28, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.1612 Substituted 2-nitro- and 2-aminobenzesulfonamide.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as substituted 2-nitro- and 2-aminobenzenesulfonamide (PMNs P–88–1937 and P–88–1938) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72 (a) through (d), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5). The following additional statements shall appear on each label and MSDS required by this paragraph: This substance may be toxic to terrestrial organisms and plants. Notice to user: Release to water restrictions apply.

(ii) *Disposal.* Requirements as specified in § 721.85. A significant new use of these substances is any release of the substances to land.

(iii) *Release to water.* Requirements as specified in § 721.90 (a)(4), (b)(4), and (c)(4) (where N = 100 ppb for P–88–1937 and N = 10 ppb for P–88–1938). When calculating the surface water concentrations according to the instructions in § 721.91(a)(4), the statement that the

amount of the substances that will be released will be calculated before the substances enter control technology does not apply. Instead, if the waste stream containing the PMN substances will be treated before release, the amount of the PMN substances reasonably likely to be removed from the waste stream by treatment may be subtracted in calculating the number of kilograms released. No more than 50 percent removal efficiency may be attributed to such treatment.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (f), (g), (h), (j), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27482, May 27, 1994]

### § 721.1625 Alkylbenzene sulfonate, amine salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkylbenzene sulfonate, amine salt (PMN P–90–456) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), (c)(1).

(ii) [Reserved].

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19242, Apr. 25, 1991; 56 FR 29903, July 1, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1630 1,2-Ethanediol bis(4-methylbenzenesulfonate); 2,2-oxybis-ethane bis(4-methylbenzenesulfonate); ethanol, 2,2′-[oxybis(2,1-ethanediyl oxy)]bis-, bis(4-methylbenzenesulfonate); ethanol, 2,2′-[oxybis (2,1-ethane diyloxy)] bis-, bis(4-methylbenzenesulfonate); ethanol, 2,2′-[[1-[(2-propenyloxy) methyl]-1,2-ethanediyl] bis(oxy)]bis-, bis(4-methylbenzene sulfonate); and ethanol, 2-[1-[[2-[2-[[(4-methylphenyl)sulfonyl] oxy]ethoxy] ethoxy]methyl]-2-(2-propenyloxy)ethoxy]-, 4-methylbenzenesulfonate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances 1,2-ethanediol bis(4-methylbenzenesulfonate) (PMN P–93–1193, CAS no. 6315–52–2), 2,2-oxybis-ethane bis(4-methylbenzenesulfonate) (PMN P–93–1194, CAS no. 7460–82–4), ethanol, 2,2′-[oxybis(2,1-ethanediyloxy)]bis-, bis(4-methylbenzene-sulfonate) (PMN P–93–1195, CAS no. 19249–03–7), ethanol, 2,2′-[oxybis(2,1-ethanediyloxy)] bis-, bis(4-methylbenzene sulfonate) (PMN P–93–1196, CAS no. 37860–51–8), ethanol, 2,2′-[[1-[(2-propenyloxy) methyl]-1,2-ethanediyl]bis(oxy)]bis-, bis(4-methylbenzene sulfonate) (PMN P–93–1203, CAS no. 114719–15–2), and ethanol, 2-[1-[[2-[2- [[(4-methylphenyl) sulfonyl] oxy]ethoxy] ethoxy]methyl]-2-(2-propenyloxy)ethoxy]-, 4-methylbenzenesulfonate (PMN P–93–1204, CAS no. 124029–00–1) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of these substances.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27482, May 27, 1994]

**§ 721.1637 1,2-Propanediol, 3-(2-propenyloxy)-, bis(4-methylbenzene sulfonate); 2-propanol, 1-[2-[[(4-methylphenyl)sulfonyl] oxy]ethoxy]-3-(2-propenyloxy)-4-methylbenzenesulfonate; and 2-propanol, 1-[2-[2-[[(4-methylphenyl)sulfonyl]oxy] ethoxy]ethoxy]-3-(2-propenyloxy)-, 4-methylbenzenesulfonate.**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances 1,2-propanediol, 3-(2-propenyloxy)-, bis(4-methylbenzenesulfonate) (PMN P–93–1198, CAS no. 114719–19–6), 2-propanol, 1-[2-[[(4-methylphenyl)sulfonyl]oxy]ethoxy]-3-(2-propenyloxy)-4-methylbenzenesulfonate (PMN P–93–1199, CAS no. 124213–39–4), and 2-propanol, 1-[2-[2-[[(4-methylphenyl)sulfonyl]oxy] ethoxy]ethoxy]-3-(2-propenyloxy)-, 4-methylbenzenesulfonate (PMN P–93–1200, CAS no. 124028–99–5) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of these substances.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27482, May 27, 1994]

**§ 721.1640 3,6,9,12,-Tetraoxatetradecane-1,14-diol, bis(4-methylbenzenesulfonate; 3,6,9,13-tetraoxahexadec-15-ene-1,11-diol, bis(4-methylbenzenesulfonate); 3,6,9,12,16-pentaoxanonadec-18-ene-1,14-diol, bis(4-methyl benzenesulfonate); and 3,6,9,12-tetraoxatetradecane-1,14-diol, 7-[(2-propenyloxy)methyl]-, bis(4-methylbenzenesulfonate).**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances 3,6,9,12-tetraoxatetradecane-1,14-diol, bis(4-methylbenzenesulfonate (PMN P–93–1197, CAS no. 41024–91–3), 3,6,9,13-tetraoxahexadec-15-ene-1,11-diol, bis(4-methylbenzenesulfonate) (PMN P–93–1201), 3,6,9,12,16-pentaoxanonadec-18-ene-1,14-diol, bis(4-methyl benzenesulfonate) (PMN P–93–1202), and 3,6,9,12-tetraoxatetradecane-1,14-diol, 7-[(2-propenyloxy)methyl]-, bis(4-methylbenzenesulfonate) (PMN P–93–1205) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of these substances.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27483, May 27, 1994]

**§ 721.1643 Benzenesulfonic acid, amino substituted phenylazo-.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a benzenesulfonic acid, amino substituted phenylazo- (PMN P–95–86)

is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(w)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45081, Aug. 30, 1995]

**§ 721.1645 Benzenesulfonic acid, 4-methyl-, reaction products with oxirane mono[($C_{10-16}$-alkyloxy)methyl] derivatives and 2,2,4(or 2,4,4)-trimethyl-1,6–hexanediamine.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance benzenesulfonic acid, 4-methyl-, reaction products with oxirane mono[($C_{10-16}$-alkyloxy)methyl] derivatives and 2,2,4(or 2,4,4)-trimethyl-1,6–hexanediamine (PMN P–93–1047, CAS no. 147170–38–5) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27483, May 27, 1994]

**§ 721.1650 Alkylbenzenesulfonic acid and sodium salts.**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as alkyl benzenesulfonic acid and sodium salts (PMNs P–88–1783, P–88–2231, P–88–2237, and P–88–2530) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44062, Sept. 23, 1993, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.1675 Disulfonic acid rosin amine salt of a benzidine derivative (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as disulfonic acid rosin amine salt of a benzidine derivative (PMN P–87–1337) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (f), (v)(1), (w)(1), and (x)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 33304, Aug. 15, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1700 Halonitrobenzoic acid, substituted (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance halonitrobenzoic acid, substituted (PMN P–86–1098) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(vii), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b), (c), (d), (e) (concentration set at 1.0 percent), (f) and (g)(1)(vi), (g)(2)(i) through (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (e) through (g) and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32416, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.1725 Benzoic acid, 3,3′-methylenebis [6 amino-, di-2-propenyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The following chemical substance, referred to by its CAS Number and chemical name, is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section: 61386–02–5, Benzoic acid, 3,3′-methylenebis [6 amino-, di-2-propenyl ester.

(2) The significant new uses are: (i) Any use other than the use described in Premanufacture Notice P–82–438.

(ii) Any manner or method of manufacturing or processing the substance

for the use described in Premanufacture Notice P–82–438 different than the manner or method described in Premanufacture Notice P–82–438.

(b) *Special provisions.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Determining whether a specific use is subject to this rule.* (i) A person who intends to manufacture, import, or process the chemical substance identified in paragraph (a)(1) of this section may ask EPA whether the use for which the person intends to manufacture, import, or process the substance is a significant new use under paragraph (a)(2)(i) of this section. EPA will answer such an inquiry only if EPA determines that the person has a *bona fide* intent to manufacture, import, or process the chemical substance.

(ii) To establish a *bona fide* intent to manufacture, import, or process the chemical substance, the person must submit to EPA:

(A) All materials and statements required under § 721.6.

(B) The specific use for which the person intends to manufacture, import, or process the chemical substance.

(iii) EPA will review the information submitted by the person under this paragraph to determine whether the person has a *bona fide* intent to manufacture, import, or process the chemical substance.

(iv) If EPA determines that the person has a *bona fide* intent to manufacture, import, or process the chemical substance, EPA will tell the person whether the use for which the person intends to manufacture, import, or process the substance is a significant new use under paragraph (a)(2)(i) of this section. If EPA tells the person that the intended use is not a significant new use under paragraph (a)(2)(i) of this section, EPA will tell the person what activities would constitute a significant new use under paragraph (a)(2)(ii) of this section.

(v) A disclosure to a person with a *bona fide* intent to manufacture, import, or process the chemical substance of the significant new uses subject to this section will not be considered public disclosure of confidential business information under section 14 of the Act.

(vi) EPA will answer an inquiry on whether a particular use is subject to this section within 30 days after receipt of a complete submission under paragraph (b)(1) of this section.

(2) [Reserved]

[51 FR 16687, May 6, 1986. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1728 Benzoic acid, 2-(3-phenylbutylidene)amino-, methyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as benzoic acid, 2-(3-phenylbutylidene)amino-, methyl ester (PMN P–85–1211) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (10,600 kg).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51682, Oct. 4, 1993]

### § 721.1732 Nitrobenzoic acid octyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as nitrobenzoic acid octyl ester (PMN P–93–343) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 1 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51682, Oct. 4, 1993]

### § 721.1735 Alkylbisoxyalkyl (substituted-1,1-dimethylethylphenyl) benzotriazole (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance alkylbisoxyalkyl (substituted-1,1-dimethylethylphenyl) benzotriazole (PMN P–86–1771) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(vii), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 1.0 percent), (f) and (g)(1)(iv), (g)(2)(i) through (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) (light stabilizer for polymers) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (e) through (g), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 21413, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.1740 Substituted dichlorobenzothiazoles.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as substituted dichlorobenzothiazoles (PMN P–91–1190 and P–91–1191) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Industrial, commercial and consumer activities.* Requirements as specified in § 721.80(w)(1), (w)(2), (x)(1), and (x)(2).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) Importers and processors of this substance are not subject to this section if they only resell a formulation containing the PMN substance.

(2) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(3) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51702, Oct. 4, 1993]

### § 721.1745 Ethoxybenzothiazole disulfide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as ethoxybenzothiazole disulfide (PMN P–90–1384) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(i) through (vii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), and (g)(5).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (d) and (f) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44063, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.1750 1*H*-Benzotriazole, 5-(pentyloxy)- and 1*H*-benzotriazole, 5-(pentyloxy)-, sodium and potassium salts.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances 1*H*-benzotriazole, 5-(pentyloxy)- (PMN P–92–34, CAS no. 133145–29–6), 1*H*-benzotriazole, 5-(pentyloxy)-, sodium salt (PMN P–92–35), and 1*H*-benzotriazole, 5-(pentyloxy)- , potassium salt (PMN P–92–36) are subject to reporting for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of these substances is any manner or method of manufacture, import, or processing associated with any use of these substances without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for these substances, the employer becomes aware that these substances may present a risk of injury to the environment, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If these substances are not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substances are reintroduced into the workplace.

(B) The employer must ensure that persons who will receive, or who have received these substances from the employer within 5 years from the date the employer becomes aware of the new information described in paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial consumer activities.* Requirements as specified in § 721.80(p) (limit set at 9,500 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.The following recordkeeping requirements are applicable to manufacturers, importers, and processors of these substances, as specified in § 721.125(a), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 32237, June 8, 1993]

### § 721.1755 Methylenebisbenzotriazole.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance methylenebisbenzotriazole (P–93–578) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* During both manufacture and use of the substance, requirements as specified in § 721.63(a)(4), (a)(6)(i), (b) (concentration set at 1.0 percent) and (c). During manufacture of the PMN substance § 721.63(a)(5)(i); during use of the PMN substance § 721.63(a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), and (a)(5)(vii).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(2)(iii), (g)(2)(iv), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125 (a), (b), (c), (d), (f), (g), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[60 FR 11041, Mar. 1, 1995]

### § 721.1760 Substituted benzotriazole derivatives.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as substituted benzotriazole derivatives (PMNs P–93–374 and P–93–375) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(i), (g)(1)(iv), (g)(1)(vi), (g)(2)(i), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g), (v)(1), (w)(1), and (x)(1).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), (d), (f), (g), (h), (i), and (k) are applicable to manufacturers, importers, and processors of these substances.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11041, Mar. 1, 1995]

### § 721.1765 2-Substituted benzotriazole.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as 2-substituted benzotriazole (PMN P–90–335) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(ii), (a)(5)(iv), (a)(5)(v), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(ii), (g)(1)(iv), (g)(1)(vi), (g)(1)(viii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(5), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), (c)(4), (where N = 80 ). However, contrary to § 721.91(a)(4), if the waste stream containing the PMN substance will be treated using biological treatment (activated sludge or equivalent) plus clarification, then the amount of PMN substance reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than 75 percent removal efficiency may be attributed to such treatment.

(b) *Special requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions

of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19235, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993; 60 FR 30468, June 9, 1995]

### § 721.1775 6-Nitro-2(3H)-benzoxazolone.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance 6-nitro-2(3*H*)-benzoxazolone (PMN P–84–963) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), and (g)(2)(v). The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72 (b) and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(v)(1), (w)(1), (x)(1), and (y)(2).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(d), (e), (f), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 26100, June 26, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1790 Polybrominated biphenyls.

(a) *Chemical substances and significant new use subject to reporting.* (1) The chemical substances 1,1′-(Biphenyl, 4-bromo-(CAS No. 92–66–0); 1,1′-Biphenyl, 4,4′-dibromo-(CAS No. 92–86–4); 1,1′-Biphenyl, 2-bromo-, (CAS No. 2052–07–5); 1,1′- Biphenyl, 3-bromo-, (CAS No. 2113–57–7); 1,1′- Biphenyl, 2,2′, 3,3′ 4,4′, 5,5′, 6,6′- decabromo- (CAS No. 13654–09–6,); Nonabromobiphenyl (CAS No. 27753–52–2); Octabromobiphenyl (CAS No. 27858–07–7); and Hexabromobiphenyl (CAS No. 36355–01–8) are subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Any use.

(b) *Special provisions.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes a substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[52 FR 2703, Jan. 26, 1987; 52 FR 4079, Feb. 9, 1987. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1800 3,3',5,5'-Tetramethylbiphenyl-4,4'-diol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as 3,3',5,5'-tetramethylbiphenyl-4,4'-diol (PMN P–88–972) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(vii), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 1 percent), (f), (g)(1)(iv), (g)(1)(ix), (g)(2)(ii), (g)(2)(iv), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) (monomer for

epoxy resins and engineering plastics or an antioxidizing agent for lubricating oils) and (p) (level set at 42,000 kg and 366,000 kg).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 33308, Aug. 15, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1820 Bisphenol derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as bisphenol derivative (PMN No. P–92–509) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1) (systemic effects—depression in body weight gain and blood effects), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv) (when in dust or mist form), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (d), and (f) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32237, June 8, 1993, as amended at 58 FR 29946, May 24, 1993]

### § 721.1825 Bisphenol A, epichlorohydrin, polyalkylenepolyol and polyisocyanato derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as bisphenol A, epichlorohydrin, polyalkylenepolyol and polyisocyanato derivative (PMN P–89–750) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(viii), (a)(5)(ix), (a)(6)(ii), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f) and (g)(1)(vi), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q) (The production limit applies to the aggregate production volume of both P–89–750 and P–89–760. P–89–760 is the preferred substance for use in performing these tests. Results from such testing can be used to evaluate the toxicity of P–89–750 as well).

(iv) *Disposal.* Requirements as specified in §721.85 (b)(1), (b)(2), (c)(1), and (c)(2).

(v) *Release to water.* Requirements as specified in §721.90(a)(2)(ii) (Oil and grease separation may be used as an alternative treatment), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in

§721.125 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[55 FR 46772, Nov. 6, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.1850 Toluene sulfonamide bisphenol A epoxy adduct.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as toluene sulfonamide bisphenol A epoxy adduct (PMN P–90–113) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows. (A) If, as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in §721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in §721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125 (a), (c), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[56 FR 15791, Apr. 17, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.1875 Boric acid, alkyl and substituted alkyl esters (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance boric acid, alkyl and substituted alkyl esters (PMN P–86–1252) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1) and (a)(3), (b) [concentration set at 0.1 percent], and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(d), (e) [concentration set at 0.1 percent], (f), and (g)(1)(i), (g)(1)(iv), (g)(1)(vii), (g)(1)(viii), and (g)(1)(ix), (g)(2)(i) and (g)(2)(v), (g)(4)(i) and (g)(4)(iii), and (g)(5). The provisions of §721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under §721.72(a) and (c), respectively. The provision of §721.72(g) requiring placement of specific information on a MSDS does not apply when a MSDS was not required under §721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1) and (b)(1).

(v) *Release to water.* Requirements as specified in § 721.90(a)(3), (b)(3), and (c)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26108, June 26, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.1900 Substituted bromothiophene.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted bromothiophene (P–83–769) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), and (a)(6)(i).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(1)(i)(D) and (g)(2)(iv). The provision of § 721.72(g) requiring placement of specific information in an MSDS does not apply when an MSDS is not required under § 721.72(c).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a), (b), (c), (d), (f), and (g).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 25990, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.1907 Butanamide, 2,2′-[3,3′-dichloro [1,1′-biphenyl]-4,4′-diyl)bisazobis[*N*-2,3-dihydro-2-oxo-1*H*-benzimidazol-5-yl)-3-oxo-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance butanamide, 2,2′-[3,3′-dichloro[1,1′-biphenyl]-4,4′-diyl)bisazobis[*N*-2,3-dihydro-2-oxo-1*H*-benzimidazol-5-yl)-3-oxo- (PMN P–93–1111) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f) and processing or use at temperatures above 280 °C.

(iii) *Release to water.* Requirements as specified in § 721.90(b)(1) and (c)(1). When the substance is processed, or used as a colorant for dyeing plastics, this section does not apply.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), (f), (g), (h), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11041, Mar. 1, 1995]

### § 721.1920 1,4-Bis(3–hydroxy-4-benzoylphenoxy)butane.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 1,4-bis(3–hydroxy-4-benzoylphenoxy)butane (PMN P–93–483) is subject to reporting

under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 1 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51683, Oct. 4, 1993]

### § 721.1925 Substituted carboheterocyclic butane tetracarboxylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted butane tetracarboxylate (PMN P–90–440) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(i), (g)(1)(iv), (g)(1)(vi), (g)(1)(viii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (f) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, and specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19242, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.1950 2-Butenedioic acid (Z), mono(2-((1-oxopropenyloxy)ethyl) ester .

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as 2-butenedioic acid (*Z*), mono(2-((1-oxopropenyloxy)ethyl) ester (PMN P–85–543) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f) (g)(1)(iii), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v) and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44063, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.2025 Substituted phenylimino carbamate derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted phenylimino carbamate derivative (PMN P–91–487) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46464, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.2050 Carbamic acid, (trialkyloxy silyalkyl)-substituted acrylate ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as carbamic acid, (trialkyloxy silyalkyl)-substituted acrylate ester (PMN P–89–424) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(ii)(b).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 dddlslsldll;dsfl;sdf(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45998, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.2075 Carbamodithioic acid, methyl-, compound with methanamine (1:1).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as carbamodithioic acid, methyl-, compound with methanamine (1:1) (P–84–1042), is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(1)(vi), and (g)(2)(i). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS is not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information in an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 720.80(k).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(2), (b)(2), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a) through (g), (i), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[56 FR 25990, June 5, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.2084 Carbon oxyfluoride (Carbonic difluoride).

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance carbon oxyfluoride (CAS No. 353–50–4), also referred to as carbonic difluoride, is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63516, Dec. 1, 1993]

### §721.2085 Hydroxyalkylquinoline dioxoindandialkylcarboxamide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a hydroxyalkylquinoline dioxoindandialkylcarboxamide (PMN P–94–682) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in §721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[60 FR 11042, Mar. 1, 1995]

### §721.2086 Coco acid triamine condensate, polycarboxylic acid salts.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as coco acid triamine condensate, polycarboxylic acid salts. (PMN P–92–446) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 46464, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.2088 Carboxylic acids, (C6–C9) branched and linear.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as carboxylic acids, (C6–C9) branched and linear (PMNs P–93–313, 314, 315, and 316) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in §721.72(a),

(b), (c), (d), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(iii) and (g)(5).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 300 ppb for P–93–313, 314, and 315 and N = 50 ppb for P–93–316).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), (f), (g), (h), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11042, Mar. 1, 1995]

### § 721.2089 Tetrasubstituted aminocarboxylic acid.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a tetrasubstituted aminocarboxylic acid (PMN P–85–619) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(1)(vii), (g)(2)(iii), (g)(3)(ii), (g)(4)(ii), (g)(4)(iii), and (g)(5).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (h) and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45081, Aug. 30, 1995]

### § 721.2092 3-Methylcholanthrene.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance 3-methylcholanthrene (CAS No. 56–49–5) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63516, Dec. 1, 1993]

### § 721.2120 Cyclic amide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as a cyclic amide (PMN P–92–131) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 70 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46465, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.2140 Carbopolycyclicol azoalkylaminoalkylcarbomonocyclic ester, halogen acid salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as carbopolycyclicol azoalkylaminoalkylcarbomonocyclic ester, halogen acid salt (PMN P–88–1682) is subject to reporting under this section for the

significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in §721.72(a), (b)(2), (c), (d), (f), (g)(3)(ii), (g)(4)(i), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(q).

(iii) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4) and (c)(4) (where N = 1 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), (f), (g), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[57 FR 44063, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.2170 Cyclic phosphazene, methacrylate derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as cyclic phosphazene, methacrylate derivative (PMN P–92–1134), is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(o).

(iv) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[58 FR 51683, Oct. 4, 1993]

### §721.2175 Salt of cyclodiamine and mineral acid.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a salt of cyclodiamine and mineral acid (PMN P–91–838) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(f).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 46465, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.2225 Cyclohexanecarbonitrile, 1,3,3-trimethyl-5-oxo-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as cyclohexanecarbonitrile, 1,3,3-trimethyl-5-oxo- (PMN P–90–1358; CAS number 7027–11–4) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(6)(v), (b) (concentration set at 0.1 percent) and (c). For the manufacturing workers only, additional requirements as specified in § 721.63(a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), and (a)(6)(v). The respirators described at § 721.63(a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), and (a)(5)(xv) may be used by the manufacturing workers exposed via inhalation only after cartridge service life data on cartridge performance is submitted to and approved in writing by EPA.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(v), and (g)(5). The statement required under (g)(2)(iv) applies only to manufacturers of the substance. In addition, the following human health hazard statement shall appear on each label and MSDS required by this section: This substance may cause neurotoxicity, systemic toxicity, and eye irritation.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) and (q).

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44063, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993; 61 FR 33374, June 27, 1996.]

EFFECTIVE DATE NOTE: At 61 FR 33374, June 27, 1996, § 721.2225 was removed, effective July 29, 1996.

### § 721.2250 1,4-Cyclohexanediamine, cis- and trans-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified as 1,4-cyclohexanediamine, *cis-* and *trans-* (PMNs P–87–1881 and P–87–1882; CAS numbers 15827–56–2 and 2615–25–0) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(3)(ii), (g)(4)(iii), (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iii) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), (f), (g), (h), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44064, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.2260 1,2-Cyclohexanedicarboxylic acid, 2,2-bis[[[[2-[(oxiranylmethoxy) carbonyl]cyclohexy]carbonyl] oxy]methyl]-1,3-propanediyl bis(oxiranylmethyl) ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 1,2-cyclohexanedicarboxylic acid, 2,2-bis[[[[2-[(oxiranylmethoxy) carbonyl] cyclohexy]carbonyl] oxy]methyl]-1,3-propanediyl bis(oxiranylmethyl) ester (PMN P–92–471) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(ii), (a)(5)(viii), (a)(5)(ix), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(ii), (g)(2)(iv), and (g)(5).

(iii) Industrial, commercial, and consumer activities. Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (f), (g), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51702, Oct. 4, 1993]

### § 721.2270 Aliphatic dicarboxylic acid salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as aliphatic dicarboxylic acid salt (PMN P–92–1352) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 1,000 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51683, Oct. 4, 1993]

### § 721.2275 N,N,N',N'-Tetrakis(oxiranylmethyl)-1,3-cyclohexane dimethanamine.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as *N,N,N',N'*-tetrakis(oxiranylmethyl)-1,3-cyclohexanedimethanamine (P–84–7) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(1)(viii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (h).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 25991, June 5, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.2287 DDT (Dichlorodiphenyltrichloroethane).

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance DDT (dichlorodiphenyltrichloroethane) (CAS No. 50–29–3) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63516, Dec. 1, 1993]

### § 721.2340 Dialkenylamide (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The

chemical substance identified generically as a dialkenylamide (P–87–502) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(5)(xv), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (g) and (q).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2) and (c)(1), (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26099, June 26, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.2355 Diethylstilbestrol.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance diethylstilbestrol (CAS No. 56–53–1) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63516, Dec. 1, 1993]

### § 721.2380 Disubstituted diamino anisole.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The following chemical substance referred to by its premanufacture notice number and generic chemical name is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section: P–83–822, disubstituted diamino anisole.

(2) The significant new uses are:

(i) Use other than as an intermediate.

(ii) Manufacture, import, or processing for use as an intermediate without establishing a program whereby:

(A) Persons employed by or under the control of the manufacturer, importer, or processor who may be exposed to the substance (including those persons involved in maintenance, packaging, and storage operations) wear protective gloves determined to be impervious to the substance by testing the gloves under the conditions of exposure or by evaluating the specifications provided by the manufacturer of the gloves, and

(B) Packages containing the substance (including those storing the substance between manufacturing or importing and processing stages) are labeled to indicate that the substance should be handled only while using gloves determined to be impervious to the substance.

(b) *Specific requirements.* The provisions of subpart A of this Part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* In addition to the requirements of § 721.17, manufacturers, importers, and processors of the chemical substance identified in paragraph (a)(1) of this section must maintain the following records for 5 years from their creation:

(i) The results of any determination that gloves are impervious.

(ii) The names of persons required to wear gloves.

(iii) Copies of labels described in paragraph (a)(2)(ii)(B) of this section.

(2) [Reserved]

[50 FR 34465, Aug. 26, 1985. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.2410 Alkoxylated alkyldiethylenetriamine, alkyl sulfate salts.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as alkoxylated dialkyldiethylenetriamine, alkyl sulfate salts (PMN P–94–325, 326, and 327) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11042, Mar. 1, 1995]

### § 721.2420 Alkoxylated dialkyldiethylenetriamine, alkyl sulfate salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an alkoxylated dialkyldiethylenetriamine, alkyl sulfate salt (PMN P–91–288) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46465, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.2475 Dimetridazole.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as dimetridazole (P–90–1308) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v) and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44064, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.2520 Alkylated diphenyls.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances identified generically as alkylated diphenyls (PMN Nos. P–90–237, P–90–248, and P–90–249) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 1 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of these substances.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[58 FR 32237, June 8, 1993]

### § 721.2540 Diphenylmethane diisocyanate (MDI) modified.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a diphenylmethane diisocyanate (MDI) modified (PMN P–92–294) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(v)(1), (v)(2), (w)(1), (w)(2), (x)(1), (x)(2), (y)(1), and (y)(2).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46465, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.2560 Alkylated diphenyl oxide (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance alkylated diphenyl oxide (PMN P–84–1079) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3), (b) [concentration set at 1.0 percent], and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) [concentration set at 1.0 percent], (f), and (g)(1)(vi) and (g)(1)(ix), (g)(2)(i) and (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when a MSDS was not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g). The term intermediate as used in § 721.80(g) is defined as an intermediate for making sulfonated surfactants.

(iv) *Release to water.* Requirements as specified in § 721.90(a)(3), (b)(3), and (c)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26109, June 26, 1990, as amended at 57 FR 54305, Nov. 18, 1992. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.2565 Alkylated sulfonated diphenyl oxide, alkali and amine salts.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified as alkylated sulfonated diphenyl oxide, alkali salt (PMN P–93–352) and alkylated sulfonated diphenyl oxide, amine salt (PMN P–93–353) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 20 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51683, Oct. 4, 1993]

### § 721.2575 Disubstituted diphenylsulfone.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as disubstituted diphenylsulfone (PMN P–92–1119) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iv), (a)(5)(v), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(iii), and (g)(5). The following additional statements shall appear on each label and MSDS as required by this paragraph: This substance may cause blood effects.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f), (o), and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(b)(1) and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51683, Oct. 4, 1993]

### § 721.2600 Epibromohydrin.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance epibromohydrin, CAS Number 3132-64-7, [Listed in TSCA Inventory as oxirane,(bromoethyl)-] is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is any use.

(b) *Special requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[52 FR 41300, Oct. 27, 1987. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.2625 Reaction product of alkanediol and epichlorohydrin.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as reaction product of alkanediol and epichlorohydrin (PMN P–89–760) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii), (a)(5)(ix), (a)(6)(ii), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), and (g)(1)(vi), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l), and (q). (The production limit applies to the aggregate production volume of both P–89–750 and P–89–760. Results from testing this substance can be used to evaluate the toxicity P–89–750 as well.)

(iv) *Disposal.* Requirements as specified in §721.85(b)(1), (b)(2), (c)(1), and (c)(2).

(v) *Release to water.* Requirements as specified in §721.90(a)(2)(ii) (Oil and grease separation may be used as an alternative treatment.), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 46772, Nov. 6, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

**§ 721.2650 Acid modified acrylated epoxide.**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as acid modified acrylated epoxides (PMN P–85–1169 and P–85–1170) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45999, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.2675 Perfluoroalkyl epoxide (generic name).**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as perfluoroalkyl epoxide (PMN P–86–562) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1),

(a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i) and (g)(2)(v). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS is not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) and (q).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(v) *Release to water.* § 721.90(a)(3), (b)(3), and (c)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (g), (i), (j), and (k).

(2) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

(3) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 26099, June 26, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.2725 Trichlorobutylene oxide.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance trichlorobutylene oxide (TCBO), CAS Number 3083–25–8, [Listed in TSCA Inventory as oxirane, (2,2,2-trichloroethyl)-] is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is any use.

(b) *Special requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[52 FR 41300, Oct. 27, 1987. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.2750 Epoxy resin.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance epoxy resin (PMN P–84–1167) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xv), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i) through (g)(2)(v) and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions

of § 721.185 apply to this significant new use rule.

[55 FR 39905, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.2800 Erionite fiber.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance, erionite fiber (CAS No. 66733–21–9 (when an exact molecular formula is known) and 12510–42–8 (when an exact molecular formula is not known)), is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by the following paragraphs:

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) *Exemptions.* Section 721.45 applies to this section except for § 721.45(f). A person who intends to import or process the substance identified in paragraph (a)(1) of this section as part of an article is subject to the notification provisions of § 721.25.

[56 FR 56472, Nov. 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.2815 Aliphatic ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an aliphatic ester (PMN P–93–633) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iv), (g)(1)(ix), and (g)(5). In addition, the following human health and environmental hazard and precautionary statements shall appear on each label as specified in § 721.72(b) and the material safety data sheet (MSDS) as specified in § 721.72(c): This substance may not be used for any application that generates a dust, mist, or aerosol. Avoid inhalation and ingestion.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(y)(1) and (y)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (f), (g), (h), and (i), are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45081, Aug. 30, 1995]

### § 721.2825 Alkyl ester (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance alkyl ester (PMN P–84–968) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent) and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(ix), (g)(2)(i), (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a). The provision of § 721.72(g) requiring placement of specific information on a label does not apply when a label is not required under § 721.72(b).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(3), (b)(3), and (c)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a) through (c), (e), (f), (i) and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[55 FR 32414, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.2840 Alkylcarbamic acid, alkynyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkylcarbamic acid, alkynyl ester (PMN P–91–55) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(i), (g)(4)(iii), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(g).

(iii) *Disposal.* Requirements as specified in §721.85 (a)(1), (b)(1), and (c)(1).

(iv) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (f) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 44064, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.2860 Unsaturated amino ester salt (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as an unsaturated amino ester salt (PMN P–84–537) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (b)(2), (d), (e), (f) (concentration set at 0.1 percent), (g)(1)(vii), (g)(2)(i), (g)(2)(v), and (g)(5). The provision of §721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS was not required under §721.72(c). The provision of §721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under §721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(g).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a) through (g) and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[55 FR 33304, Aug. 15, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### §721.2880 Unsaturated amino alkyl ester salt (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as an unsaturated amino alkyl ester salt (PMN P–84–527) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (d), (e), (f) (concentration set at 0.1 percent), (g)(1)(vii), (g)(2)(i), (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS was not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (g) and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 33305, Aug. 15, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.2900 Substituted aminobenzoic acid ester (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance substituted aminobenzoic acid ester (PMN P–84–951) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii) and (g)(2)(v). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a) and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on a MSDS does not apply when a MSDS in not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (e), (f), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32415, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.2920 tert-Amyl peroxy alkylene ester (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance *tert*-amyl peroxy alkylene ester (PMN P–85–1180) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 1.0 percent), (f) and (g)(1)(vii), (g)(2)(i), (g)(2)(v), (g)(4)(i), and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2) and (a)(3), (b)(1), (b)(2) and (b)(3).

(v) *Release to water.* Requirements as specified in § 721.90(a)(2)(vi), (b)(2)(vi) and (c)(2)(vi).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32413, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.2930 Substituted benzenedicarboxylic acid ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted benzenedicarboxylic acid ester (PMN P–93–699) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27483, May 27, 1994]

### § 721.2940 Benzoate ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as benzoate ester (P–90–549) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows. (A) If, as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (c), (h), and (i).

(2) *Limitations or revocation of certain modification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 15790, Apr. 17, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.2950 Carboxylic acid glycidyl esters.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as carboxylic acid glycidyl ester (PMN P–92–776) is subject to reporting under this section for the significant new uses described in this paragraph.

(i) The significant new uses are:

(A) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(ii), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c). As an alternative to the respiratory requirements in this section, manufacturers, importers, and processors may use the New Chemical Exposure Limits provisions, including sampling and analytical methods which have previously been approved by EPA for this substance, found in the 5(e) consent order for this substance.

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(vi), (g)(1)(vii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(C) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(D) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) and (k) are applicable to manufacturers, importers, and processors of this substance.

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(C) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

(2) The chemical substance identified as carboxylic acid glycidyl ester (PMN P–92–777) is subject to reporting under this section for the significant new uses described in this paragraph.

(i) The significant new uses are:

(A) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(i) (§ 721.63(a)(5)(i) applies only during processing operations), (a)(5)(ii), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c). As an alternative to the respiratory requirements in this section, manufacturers, importers, and processors may use the New Chemical Exposure Limits provisions, including sampling and analytical methods which have previously been approved by EPA for this substance, found in the 5(e) consent order for this substance.

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(ii), (g)(1)(vi), (g)(1)(vii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(C) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(D) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) and (k) are applicable to manufacturers, importers, and processors of this substance.

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(C) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

(b) [Reserved]

[59 FR 27483, May 27, 1994]

### § 721.2980 Substituted cyclohexyldiamino ethyl esters.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted cyclohexyldiamino ethyl esters (PMN P–91–1243) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46465, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.3000 Dicarboxylic acid monoester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The following chemical substance referred to by its premanufacture notice number and its generic chemical name is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section: dicarboxylic acid monoester, P–83–255.

(2) The significant new uses are:

(i) Any manufacture in the United States for commercial purposes.

(ii) Failure to require the use of gloves determined to be impervious to the substance, and/or failure to require the use of clothing to prevent dermal contact for any person involved in any processing or use operation where dermal contact may occur. (Gloves may be determined to be impervious to the substance either by testing the gloves under the conditions of use or by relying on the manufacturer's specifications.)

(iii) Distribution in commerce by any person, including importers, processors, and distributors, without affixing to each container of any formulation containing the substance a label that includes, in letters no smaller than 10 point type, the following statements:

WARNING! HARMFUL IF INHALED OR ABSORBED THROUGH THE SKIN. MAY CAUSE REPRODUCTIVE EFFECTS.

—Do not get in eye, on skin, or clothing.
—Do not breathe (vapor, mist, spray, dust).
—Use with adequate ventilation.
—Wear impervious gloves and protective equipment to prevent contact or exposure.
—Promptly remove contaminated nonimprevious clothing, wash before reuse.
—Discard contaminated leather shoes.
—Wash thoroughly after handling, and before eating, drinking, or smoking.
—Keep container closed.

FIRST AID: In case of contact.

EYES: Immediately flush with water for at least 15 minutes.

SKIN: Promptly wash thoroughly with mild soap and water.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen.

INGESTION: If conscious, give water and induce vomiting.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* In addition to the requirements of § 721.17, importers and processors of the chemical substance identified in paragraph (a)(1) of this section must maintain the following records for five years from their creation:

(i) The names of persons required to wear protective clothing.

(ii) The name and address of each person to whom the substance is sold or transferred and the date of such sale or transfer.

(2) [Reserved]

[49 FR 43064, Oct. 26, 1984. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3020 1,1-Dimethylpropyl peroxyester (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 1,1-dimethylpropyl peroxyester (PMN P–85–680) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), and (a)(6)(v), (b) [concentration set at 0.1 percent], and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) [concentration set at 0.1 percent], (f), and (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v), and (g)(4)(i).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(3) and (b)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26111, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3028 Methacrylic ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a methacrylic ester (PMN P–93–339) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11042, Mar. 1, 1995]

### § 721.3034 Methylamine esters.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as methylamine esters (PMN P–94–982) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11042, Mar. 1, 1995]

### § 721.3040 Alkenoic acid, trisubstituted-benzyl-disubstituted-phenyl ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkenoic acid, trisubstituted-benzyl-disubstituted-phenyl ester (PMN P–89–697) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e)[concentration set at 0.1 percent], (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45997, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3060 Alkenoic acid, trisubstituted-phenylalkyl-disubstituted-phenyl ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkenoic acid, trisubstituted-phenylalkyl-disubstituted-phenyl ester (PMN P–89–694) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45998, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3080 Substituted phosphate ester (generic).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted phosphate ester (PMN P–85–730) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (k).

(iv) *Release to water.* Section 721.90 (a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) Determining whether a specific use is subject to this section. The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26100, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3100 Oligomeric silicic acid ester compound with a hydroxylalkylamine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as oligomeric silicic acid ester compound with a hydroxylalkylamine (PMN P–91–118) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(a).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46465, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.3120 Propenoate-terminated alkyl substituted silyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as propenoate -terminated alkyl substituted silyl ester (PMN P–91–74) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.*

(A) Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c).

(B) The following citations correspond to the NIOSH-approved respirators that would be permitted following submittal by the company and written approval by EPA of the results of cartridge service life testing performed in accordance with *Interim Recommendations for Determining Organic Vapor Cartridge Service Life for Category 23C Respirators* (available through the TSCA Assistance Office), or its equivalent, in a laboratory which demonstrates the effectiveness of the organic vapor cartridge: § 721.63(a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), and (a)(5)(xv).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(iii)(D), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(D), and (h)(2)(iii)(A), (h)(2)(iii)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified at § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 31968, July 20, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.3140 Vinyl epoxy ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance vinyl epoxy ester (PMN P–85–527) is subject to reporting under this section for the significant

new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent) and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i) through (g)(2)(iii), (g)(2)(v), (g)(4)(i), and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) (as an injection molding coating), and (y).

(iv) *Disposal.* Requirements as specified in 721.85(a)(2), (b)(2), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), (g), (h), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39900, Sept. 28, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3152 Ethanaminium, *N*-ethyl-2-hydroxy-*N*,*N*-bis(2-hydroxyethyl)-, diester with $C_{12-18}$ fatty acids, ethyl sulfates (salts).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance ethanaminium, *N*-ethyl-2-hydroxy-*N*,*N*-bis(2-hydroxyethyl)-, diester with $C_{12-18}$ fatty acids, ethyl sulfates (salts) (P–94–24) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health or the environment the employer must incorporate this new information, and any information on methods for protecting against such risk, into a material safety data sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive, or who have received, this substance from the employer within 5 years from the date the employer becomes aware of the new information described in paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (1,900,000 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[60 FR 45081, Aug. 30, 1995]

**§ 721.3160 1-Chloro-2-bromoethane.**

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance 1-chloro-2-bromoethane (CAS No. 107–04–0) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[53 FR 2845, Feb. 2, 1988. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.3180 Ethane, 2-chloro-1,1,1,2-tetrafluoro-.**

(a) Chemical substances and significant new uses subject to reporting. (1) The chemical substance identified as ethane, 2-chloro-1,1,1,2-tetrafluoro- (CAS number 2837–89–0) (PMN P–88–1763) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent; concentration is set at 0.1 percent if new information requires a hazard statement on the MSDS for cancer pursuant to § 721.72(c)(5)), (f), and (g)(5). The following additional human hazard precautionary statement shall appear on the MSDS as specified in § 721.72(c):

Inhalation of high concentrations of vapor is harmful and may cause heart irregularities, unconsciousness, or death. Intentional misuse can be fatal. Vapor reduces oxygen available for breathing and is heavier than air. Liquid contact causes frostbite. The effects in animals from single exposure by inhalation include central nervous system effects, anesthesia, and decreased blood pressure. Cardiac sensitization occurred in dogs exposed to a concentration of 2.5 percent in air and given an intravenous epinephrine challenge. Repeated exposures produced increased liver weights, anesthetic effects, irregular respiration, poor coordination, and nonspecific effects such as decreased body weight gain. However, no irreversible effects were seen as evidenced by histopathologic evaluation. As part of an extensive toxicology program, halogenated chlorofluorocarbon–124 will be tested in subchronic, developmental, and chronic/cancer studies. Avoid breathing high concentration of vapor. Use with sufficient ventilation to keep employee exposure below recommended limits. Avoid contact of liquid with skin and eyes. Wear chemical splash goggles and lined butyl gloves. Do NOT allow product to contact open flame or electrical heating elements because dangerous decomposition products may form.

The following additional human health hazard precautionary statements shall appear on each label as specified in § 721.72(b):

Inhalation of high concentrations of this substance in vapor form may cause:

(a) Heart irregularities.

(b) Unconsciousness.

(c) Death.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q). In addition it is a significant new use to use this substance as a blowing agent in the manufacture of structural insulation foams for commercial or consumer purposes or to use for commercial or consumer purposes structural insulation foams made using this substance.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) Processors of this substance are not subject to this section if they only service, repair, maintain, or sell products that contain the substance.

(2) Notwithstanding § 721.45(f), importers of structural insulation foams made using this substance are subject to notification requirements.

(3) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a), (b), (c), and (f) through (i).

(4) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(5) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 32446, July 22, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.3200 Ethane, 1,1-dichloro-1-fluoro-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as ethane, 1,1-dichloro-1-fluoro- (PMNs P–88–1303, P–88–2177, and P–90–212) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows. (A) If, as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 15791, Apr. 17, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993; 59 FR 39293, Aug. 2, 1994]

### § 721.3220 Pentachloroethane.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance pentachloroethane, CAS Number 76–01–7, is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[51 FR 32079, Sept. 9, 1986. Redesignated at 53 FR 2845, Feb. 2, 1988 and correctly redesignated at 56 FR 29903, July 1, 1991. Further redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3240 Ethane, 1,1,1,2,2-pentafluoro-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as ethane, 1,1,1,2,2-pentafluoro- (PMN P–91–1392) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44064, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3248 Ethane, 1,2,2-trichlorodifluoro-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as ethane, 1,2,2-trichlorodifluoro- (CAS No. 354–21–2, PMN No. P–92–595) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[58 FR 32237, June 8, 1993]

### § 721.3254 Ethane, 1,1,1 trifluoro-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as ethane, 1,1,1 trifluoro- (CAS No. 420–46–2, PMN No. P–92–341) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before

the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive, or who have received these substances from the employer within 5 years from the date the employer becomes aware of the new information described in paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32238, June 8, 1993, as amended at 58 FR 29946, May 24, 1993; 61 FR 33375, June 27, 1996]

EFFECTIVE DATE NOTE: At 61 FR 33375, June 27, 1996, § 721.3254 was removed, effective July 29, 1996.

### § 721.3260 Ethanediimidic acids.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances identified as ethanediimidic acids (PMNs P–90–1472 and P–90–1473), are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(i), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e), (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(4)(ii), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1) and (b)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44065, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3320 Ethanol, 2-amino-, compound with N-hydroxy-N-nitrosobenzenamine (1:1).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as ethanol, 2-amino-, compound with *N*-hydroxy-*N*-nitrosobenzenamine (1:1) (P–86–542), is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), and (g)(2)(v).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 720.80(k) (monomer stabilizer).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 25990, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3340 Ethanol, 2,2'-(hexylamino)bis-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as ethanol, 2,2′-(hexylamino)bis- (PMN P–91–1346) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified at § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 31968, July 20, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.3350 N-Nitrosodiethanolamine.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance N-nitrosodiethanolamine (CAS No. 1116–54–7) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63517, Dec. 1, 1993]

### § 721.3360 Substituted ethanolamine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted ethanolamine (PMN P–91–490) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (v)(1), (v)(2), (w)(1), (w)(2), (x)(1), (x)(2), (y)(1), and (y)(2).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (N = 1 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46466, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.3364 Aliphatic ether.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an aliphatic ether (PMN P–93–1381) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to

this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27484, May 27, 1994]

### § 721.3374 Alkylenediolalkyl ether.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as an alkylenediolalkyl ether (PMN P–93–362) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial and consumer activities.* Requirements as specified in § 721.80(f).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51684, Oct. 4, 1993]

### § 721.3380 Anilino ether.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as anilino ether (P–83–910) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(1)(i)(D) and (g)(2)(v). The provision of § 721.72(g) requiring placement of specific information in an MSDS does not apply when an MSDS is not required under § 721.72(c).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a), (b), (c), (d), (f), and (g).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 25989, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3420 Brominated arylalkyl ether.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as brominated arylalkyl ether (P–83–906) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(1)(i)(D) and (g)(2)(v). The provision of § 721.72(g) requiring placement of specific information in an MSDS does not apply when an MSDS is not required under § 721.72(c).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a), (b), (c), (d), (f), and (g).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 25990, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3430 4-Bromophenyl phenyl ether.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance 4-bromophenyl

phenyl ether (CAS No. 101–55–3) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63517, Dec. 1, 1993]

### § 721.3435 Butoxy-substituted ether alkane.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as butoxy-substituted ether alkane (PMN P–92–755) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (b) (concentration set at 1.0 percent), and (c). In addition, the employer must be able to demonstrate that the gloves selected for handling the chemical substance provide an impervious barrier to prevent dermal exposure during normal and expected duration and conditions of exposure within the work area by testing the material used to make the gloves and the construction of the gloves to establish that they will be impervious for the expected duration and conditions of exposure. The testing must subject the gloves to the expected conditions of exposure, including the likely combinations of chemical substances to which the gloves may be exposed in the work area. There must be no permeation of the gloves by the chemical substance (or an EPA-approved analogue) greater than 0.16 $\mu g/cm^2/min$ after 8 h of testing in accordance with the most recent versions of the American Society for Testing and Materials (ASTM) F739 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases'' and ASTM F1194 ''Guide for Documenting the Results of Chemical Permeation Testing of Protective Clothing Materials.'' The employer must submit all test data to the Agency and must receive written Agency approval of the test results for each type of glove tested prior to use of such gloves. Nitrile gloves with a minimum thickness of 0.5588 mm have already been tested and found to satisfy the terms of this section. Gloves contaminated with the PMN substance shall be disposed of after every work shift.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(ix), (g)(2)(i), (g)(2)(v), and (g)(5). In addition, the human health hazard statements shall include a statement that this substance may cause systemic toxicity and blood effects.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) and records documenting compliance with the glove permeability testing requirements of this section are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51684, Oct. 4, 1993]

### § 721.3437 Dialkyl ether.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as dialkyl ether (PMN P–93–1308) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 180 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11042, Mar. 1, 1995]

### § 721.3440 Haloalkyl substituted cyclic ethers.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances haloalkyl substituted cyclic ethers (PMN P–85–368 and P–85–369) are subject to reporting under this section for the significant new uses described in this paragraph.

(i) The significant new uses are:

(A) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii) and (a)(6)(v) and (a)(6)(vi), (b) [concentration set at 1.0 percent], and (c).

(B) *Hazard communication program.* Requirements as specified in § 721.72(a), (d), (e) [concentration set at 1.0 percent], (f), and (g)(1)(iii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv) and (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when a MSDS was not required under § 721.72(c). The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72(b) and (c), respectively.

(C) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(D) *Disposal.* Requirements as specified in § 721.85 (a)(1) and (a)(2), (b)(1) and (b)(2), and (c)(1) and (c)(2).

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of the substances, as specified in § 721.125 (a) through (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(C) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

(2) The chemical substance haloalkyl substituted cyclic ether (PMN P–85–367) is subject to reporting under this section for the significant new uses described in this paragraph.

(i) The significant new uses are:

(A) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), and (a)(6)(v) and (a)(6)(vi), (b) [concentration set at 0.1 percent], and (c).

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (d), (e) [concentration set at 0.1 percent], (f), and (g)(1)(iii), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv) and (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when a MSDS was not required under § 721.72(c). The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72 (b) and (c), respectively.

(C) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(D) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1) and (b)(2), and (c)(1) and (c)(2).

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a) through (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(C) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

(b) [Reserved]

[55 FR 26109, June 26, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3460 Diglycidyl ether of disubstituted carbopolycyle (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance diglycidyl ether of disubstituted carbopolycyle (PMN P–88–837) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(vii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b), (c), (d), (e) (concentration set at 0.1 percent), (f) and (g)(1)(iv) through (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v) and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c) and (e) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32415, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3480 Halogenated biphenyl glycidyl ethers.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances identified generically as halogenated biphenyl glycidyl ethers (PMNs P–90–1844, P–90–1845, and P–90–1846) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(6)(i), (b) (concentration set at 0.1 percent) and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(ii), (g)(1)(iii), (g)(1)(iv), (g)(1)(vi), (g)(i)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii) and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44065, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.3486 Polyglycerin mono(4-nonylphenyl) ether.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a polyglycerin mono(4-nonylphenyl) ether (PMN P–94–2230) is subject to reporting under this section

for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45082, Aug. 30, 1995]

### § 721.3500 Perhalo alkoxy ether.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as perhalo alkoxy ether (PMN P–83–1227) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i) through (a)(5)(iii), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communicatiom program.* Requirements as specified in § 721.72(d), (e) (concentration set at 1.0 percent), (f), (g)(1)(ii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a), and (c), respectively. The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72(b), and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(h).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), and (f).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 46772, Nov. 6, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3520 Aliphatic polyglycidyl ether.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance aliphatic polyglycidyl ether (PMN P–89–1036) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(vii), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c) through (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 39900, Sept. 28, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3560 Derivative of tetrachloroethylene.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The following chemical substance referred to by its premanufacture notice number and generic chemical name is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section: Derivative of tetrachloroethylene, P–82–684.

(2) The significant new uses are: (i) Manufacture or processing without requiring use of the following by persons employed by or under the control of the manufacturer or processor who are involved in, and in the immediate area of, any operation where dermal contact and/or inhalation of the substance may occur:

(A) A respirator, approved by the National Institute for Occupational Safety (NIOSH) to provide protection against dusts having an air contamination level not less than 0.05 mg per cubic meter of air and fitted according to procedures established by the Occupational Safety and Health Administration and Mine Safety and Health Administration regulations and set forth at 29 CFR 1910.134, and 30 CFR part 11, respectively, and

(B) Gloves which are determined to be impervious to the substance under the conditions of potential exposure (gloves must be determined to be impervious to the substance either by testing the gloves under the conditions of exposure, including the duration of exposure, or by evaluating the data and specifications supplied by the glove manufacturer or others, in the context of the conditions of exposure including the duration of exposure, associated chemical substances, chemical and mechanical stresses, and potential durations of exposures.

(ii) Manufacture or processing without requiring that any container of the substance or of a formulation containing the substance be:

(A) Packaged to prevent any leakage of the substance to the environment.

(B) Labeled on the package that the substance should be handled only while using NIOSH approved respirators and impervious gloves.

(b) *Specific requirements.* The provisions of Subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* In addition to the requirements of § 721.17, manufacturers and processors of the substance identified in paragraph (a)(1) of this section must maintain the following records for five years from the date of their creation:

(i) The names of persons required to wear protective equipment in accordance with paragraph (a)(2) of this section.

(ii) The names and addresses of any person to whom the substance is sold or transferred and the dates of such sale or transfer.

(iii) Records of respirator fit tests for each person required to wear a respirator in accordance with paragraph (a)(2) of this section.

(iv) The method for determining that the gloves described in paragraph (a)(2) of this section are impervious to the substance, the date(s) of such determination, and the results of that determination.

(2) [Reserved]

(Secs. 5, 8, Pub. L. 94–469, 90 Stat. 2012 (15 U.S.C. 2604, 2607))

[49 FR 42932, Oct. 25, 1984. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29947, May 24, 1993]

### § 721.3620 Fatty acid amine condensate, polycarboxylic acid salts.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as a fatty acid amine condensate, polycarboxylic acid salts. (PMN P–92–445) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46466, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.3625 Fatty acid amine salt (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as fatty acid amine salt (PMN P–88–1889) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (f), and (g)(3)(ii). The provisions of § 721.72(g) would require the following warning language on the label: Minimize releases to the environment.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) and (q).

(iii) *Release to water.* Requirements as specified in § 721.90(a)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (f), (g), (h), (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33305, Aug. 15, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3627 Branched synthetic fatty acid.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a branched synthetic fatty acid (PMN P–94–422) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f), (g), and (l).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11043, Mar. 1, 1995]

### § 721.3629 Triethanolamine salts of fatty acids.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as triethanolamine salts of fatty acids (PMN Nos. P–92–156, P–92–157, and P–92–159) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of these substances is any manner or method of manufacture, import, or processing associated with any use of these substances without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for these substances, the employer becomes aware that these substances may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within

90 days from the time the employer becomes aware of the new information. If these substances are not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substances are reintroduced into the workplace.

(B) The employer must ensure that persons who will receive, or who have received these substances from the employer within 5 years from the date the employer becomes aware of the new information described in paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of these substances.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32238, June 8, 1993, as amended at 58 FR 29946, May 24, 1993]

### § 721.3640 Trimethylolpropane fatty acid diacrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as trimethylolpropane fatty acid diacrylate (PMN P–88–2463) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45999, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3680 Ethylene oxide adduct of fatty acid ester with pentaerythritol.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as ethylene oxide adduct of fatty acid ester with pentaerythritol (PMN P–91–442) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46466, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.3700 Fatty acid, ester with styrenated phenol, ethylene oxide adduct.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as fatty acid, ester with styrenated phenol, ethylene oxide adduct (P–90–364) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (f), (g)(3)(ii), and (g)(5).

(ii) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (where N = 400 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), (f), (g), (h), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 44065, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.3720 Fatty amide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a fatty amide (PMN P–91–87) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 46466, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.3740 Bisalkylated fatty alkyl amine oxide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as bisalkylated fatty alkyl amine oxide (PMN P–90–643) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is:

(i) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (concentration set at 80 ppb).

(ii) [Reserved].

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a), (b), and (c).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[56 FR 19238, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.3760 Fluorene-containing diaromatic amines.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as fluorene-containing diaromatic amines (PMN P–88–998 and P–88–999) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (where n = 1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to

this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45082, Aug. 30, 1995]

### § 721.3764 Fluorene substituted aromatic amine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as fluorene containing diaromatic amine (PMN P–91–43) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c). However, these requirements do not apply after the PMN substance is adhered onto film or incorporated into prepreg form (resin impregnated substrate).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44065, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993; 59 FR 29204, June 6, 1994]

### § 721.3790 Polyfluorocarboxylates.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as polyfluorocarboxylates (PMNs P–94–322 and P–94–323) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11043, Mar. 1, 1995]

### § 721.3800 Formaldehyde, condensated polyoxyethylene fatty acid, ester with styrenated phenol, ethylene oxide adduct.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as formaldehyde, condensated polyoxyethylene fatty acid, ester with styrenated phenol, ethylene oxide adduct (PMN P–90–360) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(3)(ii), and (g)(5).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4) and (c)(4) (where N = 400 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), (f), (g), (h), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44066, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.3815 Furan, 2-(ethoxymethyl)-tetrahydro-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance furan, 2-(ethoxymethyl) tetrahydro- (P–93–721) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If, as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health or the environment, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive, or who have received this substance from the employer within 5 years from the date the employer becomes aware of the new information described in paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[60 FR 11043, Mar. 1, 1995]

### § 721.3840 Tetraglycidalamines (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances identified generically as tetraglycidalamines (PMN P–86–500 and P–86–502) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(6)(i), (a)(5)(xi) and (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c). The respirator required under § 721.63 (a)(5)(vi) is applicable only when the PMN substance is in the form of a dust. The respirator required under § 721.63 (a)(5)(xi) is applicable only when the PMN substance is in the form of a mist.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (o).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2) and (c)(1), (c)(2).

(v) *Release to water.* Requirements as specified in § 721.90(a)(2)(vi), (b)(2)(vi) and (c)(2)(vi).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 26101, June 26, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3860 Glycol monobenzoate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as generically as glycol monobenzoate (P–90–1357) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 40211, Aug. 13, 1991, as amended at 56 FR 46729, Sept. 16, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3870 Monomethoxy neopentyl glycol propoxylate monoacrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The substance identified generically as monomethoxy neopentyl glycol propoxylate monoacrylate (PMN P–88–1690) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to

this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19238, Apr. 25, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.3880 Polyalkylene glycol substituted acetate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polyalkylene glycol substituted acetate (PMN P–91–1269) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to the environment, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive this substance from the employer, or who have received this substance from the employer within 5 years from the date the employer becomes aware of this new information described in paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44066, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.3900 Alkyl polyethylene glycol phosphate, potassium salt.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkyl polyethylene glycol phosphate, potassium salt (P–90–481), is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows. (A) If,as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information

to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (c), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 15792, Apr. 17, 1991; 56 FR 29903, July 1, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4000 Polyoxy alkylene glycol amine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polyoxy alkylene glycol amine (PMN P–91–1372) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified at § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified at § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 31968, July 20, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.4020 Polyalkylene glycol alkyl ether acrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The substance identified generically as poly alkylene glycol ether acrylate (PMN P–88–1691) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and other consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19236, Apr. 25, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4040 Glycols, polyethylene-, 3-sulfo-2-hydroxypropyl-p-(1,1,3,3-tetramethylbutyl)phenyl ether, sodium salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as glycols, polyethylene-, 3-sulfo-2-

hydroxypropyl-*p*-(1,1,3,3-tetramethyl butyl)phenyl ether, sodium salt (P–90–1565) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health or the environment, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described at § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (volume set at 1,115,000 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 40212, Aug. 13, 1991, as amended at 56 FR 46729, Sept. 16, 1991. Redesignated at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4060 Alkylene glycol terephthalate and substituted benzoate esters (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkylene glycol terephthalate and substituted benzoate esters (PMN P–89–596) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q)

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c) and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26101, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4080 MNNG (N-methyl-N'-nitro-N-nitrosoguanidine).

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance MNNG (N-methyl-N'-nitro-N-nitrosoguanidine) (CAS No. 70–25–7) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63517, Dec. 1, 1993]

### § 721.4100 Tris(disubstituted alkyl) heterocycle.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as tris(disubstituted alkyl) heterocycle (P–90–142) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(iv), (a)(6)(i), (b) (concentration set at 0.1 percent) and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(1)(vii), (g)(2)(iv), (g)(5). The hazard communication requirements do not apply when the chemical substance is present in a plastic, an elastomer, a rubber matrix, or in a solution.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q). Any amount of the PMN substance imported in a plastic, an elastomer, a rubber matrix, or in a solution, such that inhalation is precluded, shall not be included in the production limit calculations.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (d), (f), (g), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 40212, Aug. 13, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4110 Allyloxysubstituted heterocycle.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an allyloxysubstituted heterocycle (PMN P–93–1471) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 70 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11043, Mar. 1, 1995]

### § 721.4128 Dimethyl-3-substituted heteromonocycle.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as dimethyl-3-substituted heteromonocycle (PMN No. P–91–1322) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(6)(ii), (a)(6)(iii), (a)(6)(v), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iii), (g)(1)(iv), (g)(2)(i), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (d) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32238, June 8, 1993, as amended at 58 FR 29946, May 24, 1993]

### § 721.4133 Dimethyl-3-substituted heteromonocyclic amine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as dimethyl-3-substituted heteromonocycle (PMN No. P–91–1323) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(6)(ii), (a)(6)(iii), (a)(6)(v), (b) (concentration set at 1.0 percent).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iii), (g)(1)(iv), (g)(2)(i), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (d) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32238, June 8, 1993, as amended at 58 FR 29946, May 24, 1993]

### § 721.4140 Hexachloronorbornadiene.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 1,2,3,4,7,7-hexachloronorbornadiene, CAS Number 3389–71–7, is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Use other than as an intermediate in the production of isodrin or endrin.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Definitions.* In addition to the definitions in § 721.3, the following definitions apply:

(i) ''Endrin'' means the pesticide 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1a alpha, 2*beta*,2*abeta*,3*alpha*,6*alpha*,6*abeta*, 7*beta*,7*aalpha*)-, CAS Number 72–20–8.

(ii) ''Isodrin'' means the pesticide 1,4:5,8-Dimethano-naphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1*alpha*, 4*alpha*, 4*abeta*, 5*beta*, 8*beta*, 8*abeta*)-, CAS Number 465–73–6.

(2) [Reserved]

[50 FR 47538, Nov. 19, 1985. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4155 Hexachloropropene.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance hexachloropropene (CAS No. 1888–71–7) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000

pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63517, Dec. 1, 1993]

### § 721.4160 Hexafluoropropylene oxide.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance hexafluoropropylene oxide (HFPO), CAS Number 428–59–1 [Listed in TSCA Inventory as oxirane, trifluoro(trifluoromethyl)-] is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is any use other than as an intermediate in the manufacture of fluorinated substances in an enclosed process.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Definitions.* In addition to the definitions in § 721.3, the following definitions apply to this section:

(i) *Enclosed process* means a process that is designed and operated so that there is no intentional release of any substance present in the process. A process with fugitive, inadvertent, or emergency relief releases remains an enclosed process so long as measures are taken to prevent worker exposure to and environmental contamination from the releases.

(ii) [Reserved]

(2) [Reserved]

[52 FR 41300, Oct. 27, 1987. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4180 Hexamethylphosphoramide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance hexamethylphosphomide, CAS Number 680–31–9, is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new use is: Any use.

(b) *Special provisions.* The provisions of subpart A of the part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a signficant new use notice.

(2) [Reserved]

[51 FR 9453, Mar. 19, 1986. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4200 Substituted alkyl peroxyhexane carboxylate (mixed isomers) (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance substituted alkyl peroxyhexane carboxylate (mixed isomers) (PMN–86–1493) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3), (b) [concentration set at 0.1 percent], and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) [concentration set at 0.1 percent], (f), and (g)(1)(i) and (g)(1)(vii), (g)(2)(i) and (g)(2)(v), and (g)(4)(i).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1) and (a)(2) and (b)(1) and (b)(2).

(v) *Release to water.* Requirements as specified in § 721.90(a)(4) [concern level of 5 ppb], (b)(4) [concern level of 5 ppb], and (c)(4) [concern level of 5 ppb].

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26111, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4215 Hexanedioic acid, diethenyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as hexanedioic acid, diethenyl ester (PMN P–90–1564) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section. The requirements of this section do not apply once the substance has been incorporated into a polymer matrix with the level of residual monomer below 0.1 percent.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (There must be no permeation of the PMN substance greater than 0.05 μg/min·cm² after 8 hours of testing in accordance with the most current version of the American Society for Testing and Materials (ASTM) F739 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases.'' For conditions of exposure which are intermittent, gloves may be tested in accordance with the most current version of ASTM F1383 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under Conditions of Intermittent Contact,'' provided the contact time in testing is greater than or equal to the expected duration of dermal contact, and the purge time used in testing is less than or equal to the expected duration of noncontact during the intermittent cycle of dermal exposure in the workplace. If ASTM F1383 is used for testing, manufacturers, importers, and processors must submit to the Agency a description of worker activities involving the PMN substance which includes daily frequencies and durations of potential worker exposures. The results of all glove permeation testing must be reported in accordance with the most current version of ASTM F1194 ''Guide for Documenting the Results of Chemical Permeation Testing of Protective Clothing Materials.'' Manufacturers, importers, and processors must submit all test data to the Agency and must receive written Agency approval for each type of glove tested prior to use of such gloves. The following gloves have been tested in accordance with the ASTM F739 method and found by EPA to satisfy the requirements for continuous use: North/B-161-R/Butyl rubber gloves (These gloves are acceptable for the solid form of the substance only.), 0.04 cm thick; and Ansell Edmont/4H/PE/EVOH/PE Laminate gloves, 0.006 cm thick. (Gloves may not be used for a time period longer than they are actually tested and must be replaced at the end of each work shift.)), (a)(2)(ii) (With the exception of laboratory activities, full body chemical protective clothing is required for any worker activity in which the substance is reasonably likely to contact the worker in the following state(s): Open liquid pool or solid of greater than 5 kg; liquid spray or splash; mist; aerosol dust; or any worker activity which have potential for contact with the PMN chemical for more than 10 min/h. At a minimum, a chemical protective apron is required for any worker activity with potential for contact with the PMN chemical which is not covered by this paragraph)), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii) (if cartridge service life testing is not available), (a)(5)(xii) or (a)(5)(xiii) (if data on cartridge service life testing has been reviewed and approved in writing by EPA), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), and (a)(6)(v). As an alternative to the respiratory requirements in this section, manufacturers, importers, and processors may use the New Chemical Exposure Limits provisions, including sampling and analytical methods which have previously been approved by EPA for this substance, found in the 5(e) consent order for this substance.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(vi) (The following additional statements shall appear on each label required by this paragraph: The health effects of this material have not been fully determined but are currently being tested. EPA is concerned however, that this material may have serious chronic health and environmental effects. When using this material, use eye and skin protection, which includes gloves which have been determined to be impervious to this substance. Use respiratory protection, unless workplace airborne concentrations are maintained at or below an 8–h time weighted average (TWA) of 1 ppm, when there is a likelihood of exposure in the work area from dust, mist, smoke or vapors.), (h)(2)(ii)(F), (h)(2)(ii)(G), (h)(2)(ii)(I), (h)(2)(iii)(A), (h)(2)(iii)(B), (h)(2)(iii)(C), (h)(2)(iii)(E), (h)(2)(iv)(A), (h)(2)(iv)(B). The following additional statements shall appear on each MSDS required by this paragraph: This substance may cause moderate skin irritation. This substance may cause neurotoxicity. When using this substance, use respiratory protection, unless workplace airborne concentrations are maintained at or below an 8–h TWA of 1 ppm.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90 (a)(4), (b)(4), and (c)(4) (where N = 80 ppb). When calculating the surface water concentrations according to the instructions in § 721.91(a)(4), the statement that the amount of the substance that will be released will be calculated before the substance enters control technology does not apply. Instead, if the waste stream containing the substance will be treated before release, then the amount of the substance reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than 75 percent removal efficiency may be attributed to such treatment. In addition, when the substance is released in combination with the substances hexanoic acid, 2-ethyl-, ethenyl ester, neononanoic acid, ethenyl ester, and propanoic acid, 2,2-dimethyl-, ethenyl ester, the quotient from the formula referenced in this section shall not exceed the average of the quotient applicable to the other substances weighted by the proportion of each substance present in the total daily amount released.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance. Manufacturers, importers, and processors of the substance must document that the PMN substance has been incorporated into a polymer matrix with the level of residual monomer below 0.1 percent if this section does not apply as described in paragraph (a)(1) of this section.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51703, Oct. 4, 1993].

### § 721.4220 Hexanedioic acid, polymer with 1,2-ethanediol and 1,6-diisocyanato-2,2,4(or 2,4,4)-trimethylhexane, 2-hydroxyethyl-acrylate-blocked.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified specifically as hexanedioic acid, polymer with 1,2-ethanediol and 1,6-diisocyanato-2,2,4(or 2,4,4)-trimethylhexane, 2-hydroxyethyl-acrylate-blocked (PMN P–90–1636) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1

percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 40212, Aug. 13, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4240 Alkyl peroxy-2-ethyl hexanoate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkyl peroxy-2-ethyl hexanoate (PMN P–86–1492) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (d), (e)[concentration set at 0.1 percent], (f), (g)(1)(vii), (g)(2)(i), (g)(2)(v), and (g)(5). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a), and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in §721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(v) *Release to water.* Requirements as specified in §721.90(a)(3) (on-site only), (b)(3) (on-site only), and (c)(3) (on-site only).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), (g), (h), (j), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 46773, Nov. 6, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4250 Hexanoic acid, 2-ethyl-, ethenyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as hexanoic acid, 2-ethyl-, ethenyl ester (PMN P–91–826) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section. The requirements of this section do not apply once the substance has been incorporated into a polymer matrix with the level of residual monomer below 0.1 percent.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(2)(i) (There must be no permeation of the substance greater than 0.02 $\mu g/min \cdot cm^2$ after 8 hours of testing in accordance with the most current version of the American Society for Testing and Materials (ASTM) F739 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases.'' For conditions of exposure which are intermittent, gloves may be tested in accordance with the most current version of ASTM

F1383 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under Conditions of Intermittent Contact,'' provided the contact time in testing is greater than or equal to the expected duration of dermal contact, and the purge time used in testing is less than or equal to the expected duration of noncontact during the intermittent cycle of dermal exposure in the workplace. If ASTM F1383 is used for testing, manufacturers, importers, and processors must submit to the Agency a description of worker activities involving the substance which includes daily frequencies and durations of potential worker exposures. The results of all glove permeation testing must be reported in accordance with the most current version of ASTM F1194 ''Guide for Documenting the Results of Chemical Permeation Testing of Protective Clothing Materials.'' Manufacturers, importers, and processors must submit all test data to the Agency and must receive written Agency approval for each type of glove tested prior to use of such gloves. The following gloves have been tested in accordance with the ASTM F739 method and found by EPA to satisfy the requirements for continuous use: North/F101/Vitron gloves, 0.03 cm thick; and Ansell/Edmont/4H/PE/EVOH/PE Laminate gloves, 0.006 cm thick.(Gloves may not be used for a time period longer than they are actually tested and must be replaced at the end of each work shift.)), (a)(2)(ii) (With the exception of laboratory activities, full body chemical protective clothing is required for any worker activity in which the substance is reasonably likely to contact the worker in the following state(s): Open liquid pool or solid of greater than 5 kg; liquid spray or splash; mist; aerosol dust; or any worker activity which have potential for contact with the PMN chemical for more than 10 min/h. At a minimum, a chemical protective apron is required for any worker activity with potential for contact with the PMN chemical which is not covered by this paragraph), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii) (if cartridge service life testing is not available), (a)(5)(xii) or (a)(5)(xiii) (if data on cartridge service life testing has been reviewed and approved in writing by EPA), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), and (a)(6)(v). As an alternative to the respiratory requirements in this section, manufacturers, importers, and processors may use the New Chemical Exposure Limits provisions, including sampling and analytical methods which have previously been approved by EPA for this substance, found in the 5(e) consent order for this substance.

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(vi) (The following additional statements shall appear on each label required by this paragraph: The health effects of this material have not been fully determined but are currently being tested. EPA is concerned however, that this material may have serious chronic health and environmental effects. When using this material, use eye and skin protection, which includes gloves which have been determined to be impervious to this substance. Use respiratory protection, unless workplace airborne concentrations are maintained at or below an 8–h time weighted average (TWA) of 1 ppm, when there is a likelihood of exposure in the work area from dust, mist, smoke or vapors.), (h)(2)(ii)(F), (h)(2)(ii)(G), (h)(2)(ii)(I), (h)(2)(iii)(A), (h)(2)(iii)(B), (h)(2)(iii)(C), (h)(2)(iii)(E), (h)(2)(iv)(A), (h)(2)(iv)(B). The following additional statements shall appear on each MSDS required by this paragraph: This substance may cause moderate skin irritation. This substance may cause neurotoxicity. When using this substance, use respiratory protection, unless workplace airborne concentrations are maintained at or below an 8–h TWA of 1 ppm.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90 (a)(4), (b)(4), and (c)(4) (where N = 7 ppb). When calculating the surface water concentrations according to the instructions in § 721.91(a)(4), the statement that the amount of the substance that will be released will be calculated before the substance enters control technology does not apply. Instead, if the waste stream containing the substance will

be treated before release, then the amount of the substance reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than 75 percent removal efficiency may be attributed to such treatment. In addition, when the substance is released in combination with the substances hexanedioic acid, diethenyl ester, neononanoic acid, ethenyl ester, and propanoic acid, 2,2-dimethyl-, ethenyl ester, the quotient from the formula referenced in this section shall not exceed the average of the quotient applicable to the other substances weighted by the proportion of each substance present in the total daily amount released.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance. Manufacturers, importers, and processors of the substance must document that the substance has been incorporated into a polymer matrix with the level of residual monomer below 0.1 percent if this section does not apply as described in paragraph (a)(1) of this section.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51704, Oct. 4, 1993, as amended at 58 FR 68311, Dec. 27, 1993]

### § 721.4255 1,4,7,10,13,16-Hexaoxacyclooctadecane, 2-[(2-propenyl oxy)methyl]-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 1,4,7,10,13,16-hexaoxacyclooctadecane, 2-[(2-propenyloxy)methyl]- (PMN P–93–1208, CAS no. 84812–04–4) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27484, May 27, 1994]

### § 721.4260 Hydrazine, [4-(1-methylbutoxy)phenyl]-, monohydrochloride.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as hydrazine, [4-(1-methylbutoxy)phenyl]-, monohydrochloride (PMN P–90–558; CAS number 124993–63–1) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(iii), and (g)(5). In addition, the following human health hazard statement shall appear on each label and MSDS required by this section: This substance may cause eye irritation.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (p) (production limit set at 15,500 kg).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a)

through (i) and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Modification or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44066, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.4270 Nitrophenoxylalkanoic acid substituted thiazino hydrazide (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance nitrophenoxylalkanoic acid substituted thiazino hydrazide (PMN P–88–270) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(vii), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b), (c), (d), (e) (concentration set at 1.0 percent), (f) and (g)(1)(iv) (also acute toxicity), (g)(2)(i) through (g)(2)(v), (g)(4)(i) and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) (industrial intermediates only).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1) and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 32415, Aug. 9, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4280 Substituted hydrazine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted hydrazine (PMN P–90–594) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vii), (g)(2), (g)(3), (g)(4)(i), (g)(4)(iii), and (g)(5). In addition, the human health hazard statement shall include mutagenicity.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1), and (c)(1).

(v) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 40213, Aug. 13, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4300 Hydrazinecarboxamide, N,N'-1,6–hexanediylbis [2,2-dimethyl-].

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as

hydrazinecarboxamide, *N,N'*-1,6-hexanediylbis [2,2-dimethyl- (P–87–1192)] is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) Hazard communication program. Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set a 0.1 percent), (f), (g)(1)(vii), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(3), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f), (k) (any application which, if there are releases to water or discharges to land, will not result in releases to facilities with a National Pollutant Discharge Elimination System permit), and (l).

(iv) *Release to water.* Requirements as specified in § 721.90(b)(4), (c)(4), (where N = 30).

(A) Selling or transferring the substance to any person for use where the substance is released to surface waters without notifying in writing the parties listed in subparagraph (B) of the identities of all such persons. Such notification shall be sent within 15 days of the date of the first sale or transfer and shall contain the following information:

(*1*) The name and address (including shipment destination address, if different) of the person to whom the substance is sold or transferred.

(*2*) The date on which sale or transfer commenced.

(*3*) The chemical identity of the substance.

(*4*) The name of the stream or river into which the specific buyer or transferee is expected to discharge the substance.

(*5*) Notification that the substance is subject to a Significant New Use Rule issued under section 5 of the Toxic Substances Control Act.

(*6*) A summary of the water release restrictions contained in paragraph (a)(iv) of this section.

(*7*) A request that the party notify the following office of any information which indicates that the in-stream concentration of the PMN substance specified in paragraph (a)(iv) of this section has been exceeded: Chief, New Chemicals Branch, Chemical Control Division (7405), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room E–447, 401 M St., SW., Washington, DC, 20460.

(B) The parties to be notified are as follows.

(*1*) The Director, Water Management Division (or, in the case of Regions 5 and 10, Water Division) at the headquarters of the EPA region in which the specific buyer or transferee is located.

(*2*) The Agency, Department, or Office of the State or U.S. Territory with jurisdiction over point source water discharges in the State or Territory in which the specific buyer or transferee is located (EPA is available for consultation regarding the identity and address of the appropriate Agency, etc.)

(*3*) The Publicly Owned Treatment Works (POTW) authority, if any, expected to receive the discharge of the PMN substance from the specific buyer or transferee.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance as specified in § 721.125(a), (b), (c), (d), (f), (g), (h), (i), and records documenting notification to parties identified in § 721.90.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 15792, Apr. 17, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993; 60 FR 34464, July 3, 1995]

### § 721.4320 Hydrazinecarboxamide, N,N'-(methylenedi-4,1-phenylene)bis [2,2-dimethyl-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The

chemical substance hydrazinecarboxamide, *N,N'*-(methylenedi-4,1-phenylene)bis[2,2-dimethyl- (PMN P–88–522) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv) (and blood effects), (g)(1)(vii), (g)(2)(iv), (g)(2)(v), (g)(4)(iii), and (g)(5). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a), and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f), and (l).

(iv) *Release to water.* Requirements as specified in § 721.90(b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), (g), (h), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 46773, Nov. 6, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4340 Substituted thiazino hydrazine salt (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance substituted thiazino hydrazine salt (PMN P–88–63) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(iii) through (a)(5)(vii), and (a)(6)(i), (b) [concentration set at 0.1 percent], and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b)(2), (c), (d), (e) [concentration set at 0.1 percent], (f), and (g)(1)(iv) and (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (g) and (l).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1) and (a)(2) and (b)(1) and (b)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 26112, June 26, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4360 Certain hydrogen containing chlorofluorocarbons.

(a) Chemical substances and significant new uses subject to reporting.

(1) The chemical substances ethane, 2-chloro-1,1,1-trifluoro- (CAS Number 75–88–7) and ethane, 1,2-dichloro-1,1-difluoro- (CAS Number 1649–08–7) are subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Use other than as an intermediate.

(b) [Reserved]

[55 FR 35632, Aug. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.4380 Modified hydrocarbon resin.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a modified hydrocarbon resin (P–91–1418) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive this substance from the employer, or who have received the substance from the employer within 5 years from the date the employer becomes aware of the information described in paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44067, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

**§ 721.4390 Trisubstituted hydroquinone diester.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as trisubstituted hydroquinone diester (PMN No. P–92–329) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4) (where N = 30 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (f), (g), (h), (j), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[58 FR 32239, June 8, 1993]

**§ 721.4400 Substituted hydroxyalkyl alkenoate, [(1-oxo-2-propenyl)oxy] alkoxy] carbonylamino] substituted] aminocarbonyl]oxy-.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted hydroxyalkyl alkenoate, [(1-oxo-2-propenyl)oxy]alkoxy]carbonylamino] substituted] aminocarbonyl]oxy- (PMN P–86–1088) is subject to reporting under this section for the significant new

uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(ii), (a)(6)(iv), (b) (concentration set a 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manaufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19237, Apr. 25, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4420 Substituted hydroxylamine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted hydroxylamine (PMN P–84–492) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communicatiom program.* Requirements as specified in § 721.72(b)(2), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), and (g)(2)(i) through (g)(2)(iii). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a), and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Release to water.* Requirements as specified in §721.90(a)(4) (chemically treated liquid wastes must contain no more than 10 ppm of the substance prior to discharge), (b)(4) (chemically treated liquid wastes must contain no more than 10 ppm of the substance prior to discharge), and (c)(4) (chemically treated liquid wastes must contain no more than 10 ppm of the substance prior to discharge).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 46773, Nov. 6, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4460 Amidinothiopropionic acid hydrochloride.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as amidinothiopropionic acid hydrochloride (PMN P–91–102) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 46466, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.4463 Hydrochlorofluorocarbon.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a hydrochlorofluorocarbon (PMN P–94–1453) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial and consumer activities.* Requirements as specified in §721.80(g).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[60 FR 45082, Aug. 30, 1995]

### §721.4466 3-Hydroxy-1,1-dimethylbutyl derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a 3-hydroxy-1,1-dimethylbutyl derivative (PMN P–86–1491) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(k).

(iv) *Disposal.* Requirements as specified in §721.85(a)(1) and (a)(2).

(v) *Release to water.* Requirements as specified in §721.90(a)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[60 FR 45082, Aug. 30, 1995]

### §721.4470 2,4-Imidazolidinedione, bromochloro-5,5-dimethyl-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2,4-imidazolidinedione, bromochloro-5,5-dimethyl- (PMN P–94–34) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(v)(3), (w)(3), and (x)(3).

(ii) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (where N = 10 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in §721.125(a), (b), (c), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[60 FR 11043, Mar. 1, 1995]

### §721.4473 Dialkylamidoimidazoline.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The

chemical substance identified as dialkylamidoimidazoline (PMN P–94–1864) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(h).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45082, Aug. 30, 1995]

### § 721.4480 2-Imino-1,3-thiazin-4-one-5,6-dihydromonohydrochloride.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 2-imino-1,3-thiazin-4-one-5,6-dihydromonohydrochloride (PMN P–91–101) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f), (v)(1), (v)(2), (w)(1), (w)(2), (x)(1), and (x)(2).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46466, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.4490 Capped aliphatic isocyanate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a capped aliphatic isocyanate (PMN P–86–1146) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(ii)(G), (h)(1)(iii)(A), (h)(1)(iii)(B), (h)(1)(iii)(D), and (h)(1)(iii)(E).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(h).

(iv) *Disposal.* Requirements as specified in § 721.90 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b) through (g), (i), and (j) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51685, Oct. 4, 1993]

### § 721.4500 Isopropylamine distillation residues and ethylamine distillation residues.

(a) *Chemical substances and significant new use subject to reporting.* (1) The following chemical substances referred to by their Chemical Abstracts Service (CAS) register numbers and chemical names are subject to reporting under this section for the significant new use identified in paragraph (a)(2) of this section: CAS No. 79771–08–7, isopropylamine distillation residues, and CAS No. 79771–09–98, ethylamine distillation residues.

(2) The significant new use is use in metalworking fluids.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Notice Requirements and Procedures.* Section 721.10 applies to this section, except persons submitting a notice must complete only Parts I and III of the notice form.

(2) [Reserved]

(Sec. 5, Pub. L. 94–469, 90 Stat. 2012 (15 U.S.C. 2604))

[49 FR 46378, Nov. 26, 1984. Redesignated at 51 FR 23539, June 30, 1986, and 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### §721.4520 Isopropylidene, bis(1,1-dimethylpropyl) derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as isopropylidene, bis(1,1-dimethylpropyl) derivative (PMN P–85–648) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3)(applies to gloves only), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(k).

(iv) *Release to water.* Requirements as specified in §721.90(a)(2)(ii), (b)(2)(ii), and (c)(2)(ii).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[57 FR 44067, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.4550 Diperoxy ketal.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as diperoxy ketal (PMN–92–1394) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (f), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(q).

(iii) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a), (b), (c), (f), (g), (h), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[58 FR 51705, Oct. 4, 1993]

### §721.4568 Methylpolychloro aliphatic ketone.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as methylpolychloro aliphatic ketone (PMN No. P–91–1321) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3),

(a)(6)(ii), (a)(6)(iii), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c). The employer is able to demonstrate that the gloves selected for handling P–91–1321 provide an impervious barrier to prevent dermal exposure during normal and expected duration and conditions of exposure within the work area by testing the material used to make the gloves and the construction of the gloves to establish that they will be impervious for the expected duration and conditions of exposure. The testing must subject the gloves to the expected conditions of exposure, including the likely combinations of chemical substances to which the gloves may be exposed in the work area. There must be no permeation of P–91–1321 greater than 0.017 $mg/cm^2/min$ after 8 h of testing in accordance with the most recent versions of the American Society for Testing and Materials (ASTM) F739 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases'' and ASTM F1194 ''Guide for Documenting the Results of Chemical Permeation Testing of Protective Clothing Materials.'' The employer must submit all test data to the Agency and must receive written Agency approval of the test results for each type of glove tested prior to use of such gloves. Neoprene gloves with a minimum thickness of 1.50 mm have already been tested and found to satisfy the terms of this rule. Nitrile gloves with a minimum thickness of 0.61 mm also satisfy the terms of this rule, as long as the duration of exposure to P–91–1321 is less than 2 h per work shift. If the duration of exposure is longer than 2 h, nitrile gloves shall be discarded and replaced every 2 h. Unless otherwise indicated, gloves contaminated with P–91–1321 shall be disposed of after every work shift.

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(v), (g)(1)(vii), (g)(1)(ix), (g)(2)(i), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (d) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32239, June 8, 1993, as amended at 58 FR 29946, May 24, 1993]

### § 721.4585 Lecithins, phospholipase A2-hydrolyzed.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as lecithins, phospholipase A2-hydrolyzed (PMN P–93–333) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(3)(i), and (g)(3)(ii).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 10 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (f), (g), (h), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[59 FR 27484, May 27, 1994]

### §721.4590 Mannich-based adduct.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as a Mannich-based adduct (PMN P–93–66) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(h).

(ii) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (where N = 8 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[58 FR 51705, Oct. 4, 1993]

### §721.4594 Substituted azo metal complex dye.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted azo metal complex dye (PMN P–94–499) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(f).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in §721.125(a) and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[60 FR 11044, Mar. 1, 1995]

### §721.4596 Diazo substituted carbomonocyclic metal complex.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a diazo substituted carbomonocyclic metal complex (PMN P–94–1039) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(f).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in §721.125(a) and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[60 FR 11044, Mar. 1, 1995]

### §721.4600 Recovered metal hydroxide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a recovered metal hydroxide (PMN P–91–809) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to the environment, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in §721.72(c) within 90 days from the time the employer becomes aware

of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive this substance from the employer, or who have received this substance from the employer within 5 years from the date the employer becomes aware of the new information described under paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44067, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4620 Dialkylamino alkanoate metal salt.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as dialkylamino alkanoate metal salt (P–90–274), is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows. (A) If, as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (production limit set at 573,300 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (c), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 15789, Apr. 17, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4640 Substituted benzenesulfonic acid, alkali metal salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted benzenesulfonic acid, alkali metal salt (P–89–776) is subject to reporting under this section for

the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows. (A) If, as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance as specified in § 721.125 (a), (c), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 15790, Apr. 17, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4660 Alcohol, alkali metal salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as alcohol, alkali metal salt (PMN P–91–151) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (N = 5 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 40213, Aug. 13, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4680 Metal salts of complex inorganic oxyacids (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances identified generically as metal salts of complex inorganic oxyacids (PMNs P–89–576 and P–89–577) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33305, Aug. 15, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4700 Metalated alkylphenol copolymer (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance metalated alkylphenol copolymer (PMN P–87–723) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72 (b)(1)(i)(C), (b)(1)(ii), (b)(1)(iii), (b)(1)(iv), (b)(2), (c)(1), (f), (g)(3)(ii), (g)(4)(i), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(j) (industrial coating material).

(iii) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(3), (b)(1), (b)(3), (c)(1), and (c)(3).

(iv) *Release to water.* Requirements as specified in § 721.90 (a)(3), (b)(3), and (c)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The recordkeeping requirements as specified in § 721.125(a) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 32416, Aug. 9, 1990, as amended at 57 FR 20424, May 13, 1992. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4720 Disubstituted phenoxazine, chlorometalate salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as disubstituted phenoxazine, chlorometalate salt (PMN P–90–0002) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46467, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.4740 Alkali metal nitrites.

(a) *Chemical substances and significant new use subject to reporting.* (1) The category of chemical substances which are nitrites of the alkali metals (Group IA in the periodic classification of chemical elements) lithium, sodium, potassium, rubidium, cesium, and francium, is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Use as an ingredient in metalworking fluids (as defined in 40 CFR 721.3) containing amines.

(b) [Reserved]

[58 FR 27944, May 12, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4780 Hydroxyalkyl methacrylate, alkyl ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as hydroxyalkyl methacrylate, alkyl ester (PMN P–89–507) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: §721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[55 FR 45999, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### §721.4790 2-(2-Hydroxy-3-tert-butyl-5-methylbenzyl)-4-methyl-6-tert-butylphenyl methacrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-(2-hydroxy-3-*tert*-butyl-5-methylbenzyl)-4-methyl-6-*tert*-butylphenyl methacrylate (PMN P–87–147) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(vi), (a)(6)(i) through (a)(6)(iii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(b)(2), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), and (g)(4)(i). The provisions of §721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under §721.72(a) and (c), respectively. The provision of §721.72(g) requiring placement of specific information on a MSDS does not apply when a MSDS in not required under §721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(l).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a), (b), (c), and (e) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

[55 FR 39901, Sept. 28, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### §721.4794 Polypiperidinol-acrylate methacrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polypiperidinol-acrylate methacrylate (PMN P–88–1304) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (e) (concentration set 1.0 percent), (f), (g)(1)(vi), (g)(1)(viii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v). The following additional statement shall appear on each label and MSDS required by this paragraph: This substance may cause acute and chronic toxicity.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(l) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27484, May 27, 1994]

### § 721.4800 Methacrylic ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance methacrylic ester (PMN P–86–650) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i) through (g)(2)(iii), (g)(2)(v), (g)(4)(i), and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), (g), (h), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 39900, Sept. 28, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.4820 Methane, bromodifluoro-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as methane, bromodifluoro- is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(v), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(ii), (g)(2)(iii), and (g)(5). In addition, the following statements shall appear on the label and MSDS: This substance may cause cardiotoxicity. Evacuate area before the concentration of this substance in the area reaches 1 percent. Residential use is prohibited due to cardiotoxic dangers. General consumer use is prohibited, with the exception of outdoor automotive use and outdoor marine use. Following discharge and evacuation, use protective gear (self-contained breathing apparatus) before reentering an area in which the airborne concentration of the PMN substance exceeds 1 percent.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) (Use in portable fire extinguishers intended for consumer use except for outdoor automotive use and outdoor marine use; use in fire extinguisher units with an Underwriters Laboratory (UL) rating of less than 5BC; use in other than rechargeable fire extinguisher units; use in occupied areas from which personnel cannot be evacuated before the concentration of the PMN substance exceeds 1 percent or egress cannot occur within 30 seconds; or use without protective gear (self-contained breathing apparatus) being made available in the event that, following discharge of the PMN substance and evacuation of the area, personnel must reenter an area in which the airborne concentration of the PMN substance exceeds 1 percent.)

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (f) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19238, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993; 59 FR 39296, Aug. 2, 1994]

### § 721.4840 Substituted triphenylmethane.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted triphenylmethane (PMN P–87–1553) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(v)(1), (w)(1), (x)(1) and (y)(2).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 40216, Aug. 13, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4880 Methanol, trichloro-, carbonate (2:1).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as methanol, trichloro-, carbonate (2:1) (CAS No. 32315–10–9) (PMN P–90–1535) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(ii), (g)(1)(iii), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(5). The following additional human hazard precautionary statement shall appear on the label: This substance may react to form phosgene gas. When using this substance, handle with extreme caution.

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (f), (g), and (h).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 40213, Aug. 13, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.4925 Methyl n-butyl ketone.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance methyl n-butyl ketone, CAS Number 591–78–6, is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is any use.

(b) *Specific Requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[52 FR 11825, Apr. 13, 1987. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.5050 2,2′-[(1-Methylethylidene)bis[4,1-phenyloxy[1-(butoxymethyl)-(2,1-ethanediyl]oxymethylene]]bisoxirane, reaction product with a diamine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as 2,2′-[(1-methylethylidene)bis[4,1-phenyloxy[1-(butoxymethyl)-(2,1-ethanediyl]oxymethylene]]bisoxirane, reaction product with a diamine (PMN P–91–934), is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46467, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.5075 Mixed methyltin mercaptoester sulfides.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as mixed methyltin mercaptoester sulfides (PMN P–92–177) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(1)(i), (g)(1)(iii), (g)(1)(iv), (g)(1)(viii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iii) *Disposal.* Requirements as specified in § 721.85(a)(1) and (a)(2) (only in a facility permitted to landfill Resources Conservation and Recovery Act (RCRA) hazardous wastes with the landfill operated in accordance with subtitle C of RCRA).

(iv) [Reserved]

(v) *Release to water.* Requirements as specified in § 721.90(a)(4) (where N = 2 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (f) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51685, Oct. 4, 1993]

### § 721.5175 Mitomycin C.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance mitomycin C (CAS No. 5007–7) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63517, Dec. 1, 1993]

**§ 721.5192 Substituted 1,6-dihydroxy naphthalene.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted 1,6-dihydroxy naphthalene (PMN P–87–1036) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f), (k), and (q).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1) and (a)(2).

(v) *Release to water.* Requirements as specified in § 721.90(a)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[60 FR 45083, Aug. 30, 1995]

**§ 721.5200 Disubstituted phenylazo trisubstituted naphthalene.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as disubstituted phenylazo trisubstituted naphthalene (PMN P–91–328) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g), (v)(1), (w)(1), (x)(1), and (y)(2).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 46467, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

**§ 721.5225 Naphthalene,1,2,3,4-tetrahydro(1-phenylethyl) (specific name).**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance naphthalene,1,2,3,4-tetrahydro(1-phenylethyl) (PMN P–85–1331) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (e) [concentration set at 1.0 percent], (f), and (g)(3)(i) and (g)(3)(ii), (g)(4)(i) and (g)(4)(iii), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iii) *Disposal.* Requirements as specified in § 721.85(a)(1) and (2), (b)(1) and (b)(2), and (c)(1) and (c)(2).

(iv) [Reserved]

(v) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26110, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5250 Trimethyl spiropolyheterocyclic naphthalene compound.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as trimethyl spiropolyheterocyclic naphthalene compound (PMN P–91–1456) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified at § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 31968, July 20, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.5275 2-Napthalenecarboxamide-N-aryl-3-hydroxy-4-arylazo (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-naphthalenecarboxamide-N-aryl-3-hydroxy-4-arylazo (PMN P–87–1265) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(iii) through (a)(5)(vii), and (a)(6)(i), (b) [concentration set at 0.1 percent], and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) [concentration set at 0.1 percent], (f), and (g)(1)(i), (g)(1)(v), and (g)(1)(vii), and (g)(2)(ii) and (g)(2)(iv).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26110, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5278 Substituted naphthalenesulfonic acid, alkali salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted naphthalenesulfonic acid, alkali salt (PMN P–95–85) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45083, Aug. 30, 1995]

**§ 721.5282 Trisodium chloro [(trisubstituted heteromonocycle amino) propylamino]triazinylamino hydroxyazo naphthalenetrisulfonate.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a trisodium chloro[(trisubstituted heteromonocycleamino) propylamino]triazinyl aminohydroxyazo naphthalenetrisulfonate (PMN P–94–2177) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45083, Aug. 30, 1995]

**§ 721.5285 Ethoxylated substituted naphthol.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an ethoxylated substituted naphthol (PMN P–88–2484) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 200 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51685, Oct. 4, 1993]

**§ 721.5300 Neodecaneperoxoic acid, 1,1,3,3-tetramethylbutyl ester.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as neodecaneperoxoic acid, 1,1,3,3-tetramethylbutyl ester (PMN P–89–764; CAS number 51240–95–0) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), and (b) (concentration set at 0.1 percent).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(b), (c), and (l).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) Recordkeeping requirements . Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44068, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

**§ 721.5310 Neononanoic acid, ethenyl ester.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as neononanoic acid, ethenyl ester (PMN P–92–129) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section. The requirements of this section do not apply once the substance has been incorporated into a

polymer matrix with the level of residual monomer below 0.1 percent.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i) (There must be no permeation of the substance greater than 0.02 μg/min·cm² after 8 hours of testing in accordance with the most current version of the American Society for Testing and Materials (ASTM) F739 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases.'' For conditions of exposure which are intermittent, gloves may be tested in accordance with the most current version of ASTM F1383 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under Conditions of Intermittent Contact,'' provided the contact time in testing is greater than or equal to the expected duration of dermal contact, and the purge time used in testing is less than or equal to the expected duration of noncontact during the intermittent cycle of dermal exposure in the workplace. If ASTM F1383 is used for testing, manufacturers, importers, and processors must submit to the Agency a description of worker activities involving the substance which includes daily frequencies and durations of potential worker exposures. The results of all glove permeation testing must be reported in accordance with the most current version of ASTM F1194 ''Guide for Documenting the Results of Chemical Permeation Testing of Protective Clothing Materials.'' Manufacturers, importers, and processors must submit all test data to the Agency and must receive written Agency approval for each type of glove tested prior to use of such gloves. The following gloves have been tested in accordance with the ASTM F739 method and found by EPA to satisfy the requirements for continuous use: North/F101/Vitron gloves, 0.03 cm thick; and Ansell/Edmont/4H/PE/EVOH/PE Laminate gloves, 0.006 cm thick. Gloves may not be used for a time period longer than they are actually tested and must be replaced at the end of each work shift.), (a)(2)(ii) (With the exception of laboratory activities, full body chemical protective clothing is required for any worker activity in which the substance is reasonably likely to contact the worker in the following state(s): Open liquid pool or solid of greater than 5 kg; liquid spray or splash; mist; aerosol dust; or any worker activity which have potential for contact with the substance for more than 10 min/h. At a minimum, a chemical protective apron is required for any worker activity with potential for contact with the substance which is not covered by this paragraph), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii) (if cartridge service life testing is not available), (a)(5)(xii) or (a)(5)(xiii) (if data on cartridge service life testing has been reviewed and approved in writing by EPA), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), and (a)(6)(v). As an alternative to the respiratory requirements in this section, manufacturers, importers, and processors may use the New Chemical Exposure Limits provisions, including sampling and analytical methods which have previously been approved by EPA for this substance, found in the 5(e) consent order for this substance.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(vi) (The following additional statements shall appear on each label required by this paragraph: The health effects of this material have not been fully determined but are currently being tested. EPA is concerned however, that this material may have serious chronic health and environmental effects. When using this material, use eye and skin protection, which includes gloves which have been determined to be impervious to this substance. Use respiratory protection, unless workplace airborne concentrations are maintained at or below an 8–h time weighted average (TWA) of 1 ppm, when there is a likelihood of exposure in the work area from dust, mist, smoke or vapors.), (h)(2)(ii)(F), (h)(2)(ii)(G), (h)(2)(ii)(I), (h)(2)(iii)(A), (h)(2)(iii)(B), (h)(2)(iii)(C), (h)(2)(iii)(E), (h)(2)(iv)(A), (h)(2)(iv)(B) (The following additional statements shall appear on each MSDS required by this paragraph: This substance may cause moderate skin irritation. This substance may cause neurotoxicity. When using this substance, use respiratory protection,

unless workplace airborne concentrations are maintained at or below an 8-h TWA of 1 ppm.)

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 5 ppb). When calculating the surface water concentrations according to the instructions in § 721.91(a)(4), the statement that the amount of the substance that will be released will be calculated before the substance enters control technology does not apply. Instead, if the waste stream containing the substance will be treated before release, then the amount of the substance reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than 75 percent removal efficiency may be attributed to such treatment. In addition, when the substance is released in combination with the substances hexanedioic acid, diethenyl ester, hexanoic acid, 2-ethyl-, ethenyl ester, and propanoic acid, 2,2-dimethyl-, ethenyl ester, the quotient from the formula referenced in this section shall not exceed the average of the quotient applicable to the other substances weighted by the proportion of each substance present in the total daily amount released.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance. Manufacturers, importers, and processors of the substance must keep records documenting that the PMN substance has been incorporated into a polymer matrix with the level of residual monomer below 0.1 percent if this section does not apply as described in paragraph (a)(1) of this section.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51705, Oct. 4, 1993, as amended at 58 FR 68311, Dec. 27, 1993]

### § 721.5325 Nickel acrylate complex.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance nickel acrylate complex (PMN P–85–1034) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vii), (g)(2)(i) through (g)(2)(iii), (g)(2)(v), (g)(4)(i), and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), (g), and (h).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 39901, Sept. 28, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

**§ 721.5330 Nickel salt of an organo compound containing nitrogen.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as nickel salt of an organo compound containing nitrogen (PMN P–92–686) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(1)(ii), (g)(1)(vii), (g)(1)(viii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(i), and (g)(5). The following additional statements shall appear on each label and MSDS as required by this paragraph: This substance may cause skin sensitization. This substance may cause blood effects.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(b), (c), and (k).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(2) (landfill operated in accordance with subtitle C of the Resource Conservation and Recovery Act (RCRA) to receive nickel wastes), § 721.85(b)(2) (landfill operated in accordance with subtitle C of RCRA to receive nickel wastes), and § 721.85(c)(2) (landfill operated in accordance with subtitle C of RCRA to receive nickel wastes).

(v) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 40 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51685, Oct. 4, 1993]

**§ 721.5350 Substituted nitrile (generic name).**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted nitrile (PMN P–83–603) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(v), (b) (concentration set at 1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(1), (d), (e) (concentration set at 1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), and (g)(4)(i). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS was not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Release to water.* Requirements as specified in § 721.90 (a)(4), (b)(4), and (c)(4) (level set at 1 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (g), (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33305, Aug. 15, 1990; 55 FR 52275, Dec. 21, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5375 Nitrothiophenecarboxylic acid, ethyl ester, bis[[[[(substituted)] amino]alkylphenyl]azo] (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance nitrothiophenecarboxylic acid, ethyl ester, bis [[[[(substituted)]amino]alkylphenyl]azo] (PMN P–87–304) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f), (k), (v)(1), (w)(1), and (x)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26110, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5385 Octanoic acid, hydrazide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as octanoic acid, hydrazide (PMN P–92–1086) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(ii), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1) and (b)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (j) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51706, Oct. 4, 1993]

### § 721.5400 3,6,9,12,15,18,21-Heptaoxatetratriaoctanoic acid, sodium salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 3,6,9,12,15,18,21-heptaoxatetratriaoctanoic acid, sodium salt is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new use is:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved].

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), (c), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 19237, Apr. 25, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.5425 α-Olefin sulfonate, potassium salts.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as an α-olefin sulfonate, potassium salt (PMN P–91–100) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90 (a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 40215, Aug. 13, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.5450 α-Olefin sulfonate, sodium salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as α-olefin sulfonate, sodium salt (PMN P–88–2210) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(1)(i)(A) within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44068, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5475 1-Oxa-4-azaspiro[4.5]decane, 4-dichloroacetyl-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 1-oxa-4-azaspiro[4.5]decane, 4-dichloroacetyl- (PMN P–86–1648, CAS number 71526-07-3) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3) (applies to gloves only), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(5)(iv), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(ix), (g)(2)(i),

(g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f) and (k). (iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1) and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (j) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44068, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5500 7-Oxabicyclo[4.1.0]heptane, 3-ethenyl, homopolymer, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), epoxidized.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 7-oxabicyclo[4.1.0] heptane, 3-ethenyl, homopolymer, ether with 2-ethyl-2(hydroxymethyl)-1,3-propanediol (3:1), epoxidized (PMN P–88–1898) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(ii), (a)(5)(viii), (a)(5)(ix), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 39902, Sept. 28, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5525 Substituted spiro oxazine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted spiro oxazine (PMN P–92–283) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified at § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 31969, July 20, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.5540 1*H*,3*H*,5*H*-oxazolo [3,4-c] oxazole, dihydro-7a-methyl-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as 1*H*,3*H*,5*H*-oxazolo [3,4-c] oxazole, dihydro-7a-methyl- (PMN P–91–1324) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(2)(iii) and (a)(3).

(ii) *Release to water.* Requirements as specified in § 721.90 (a)(4), (b)(4), and (c)(4) (where N = 500 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements specified in § 721.125 (a), (b), (c), (d), (e), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 26691, May 18, 1995]

### § 721.5550 Substituted dialkyl oxazolone (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted dialkyl oxazolone (PMN P–86–1634) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33306, Aug. 15, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5575 Oxirane, 2,2'-(1,6-hexanediyl-bis (oxymethylene)) bis-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as oxirane, 2,2'-(1,6-hexanediylbis(oxymethylene))bis- (PMNs P–88–2179 and P–89–539) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1),(a)(3), (a)(4), (a)(5)(viii), (a)(5)(ix), (a)(6)(ii), and (b) (concentration set at 0.1 percent).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(iv) *Disposal.* Requirements as specified in § 721.85 (b)(1), (b)(2), (c)(1), and (c)(2).

(v) *Release to water.* Requirements as specified in § 721.90 (a)(2)(ii), (b)(1), and (c)(1). The following may be used as an alternative to the technologies in § 721.90(a)(2)(ii): Oil and grease separation.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (k).

(2) *Limitation of revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19238, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5600 Substituted oxirane.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted oxirane (PMN P–83–1157) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i) through (a)(5)(iii), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(d), (e) (concentration set at 0.1 percent), (f), (g)(1)(ii), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a), and (c), respectively. The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72(b), and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(h).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (d), (e), (f), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 46774, Nov. 6, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.5625 Oxiranemethanamine, N,N′-[methylenebis(2-ethyl-4,1-phenylene)]bis[N-(oxiranylmethyl)]-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as oxiranemethanamine, *N,N′*-[methylenebis(2-ethyl-4,1-phenylene)]bis[*N*-(oxiranylmethyl)]- (PMN P–91–411; CAS number 130728–76–6) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f), (o), and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44070, Sept. 23, 1992. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5700 Pentanenitrile, 3-amino-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as pentanenitrile, 3-amino- (PMN P–91–222; CAS number 75405–06–0) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1),

(a)(2)(i), (a)(3), (a)(4), during both drumming and transfer of the substance requirements as specified in § 721.63(a)(5)(i), (a)(5)(ii), and (a)(5)(iii) apply, and during transfer (but not drumming) of the substance, requirements as specified in § 721.63(a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), and (a)(5)(xv) apply following submittal by the company, and written approval by the EPA, of the results of cartridge service life testing performance in accordance with *Interim Recommendations for Determining Organic Vapor Cartridge Service Life for Category 23C Respirators* (available through the TSCA Assistance Office), or equivalent, which demonstrates the effectiveness of the organic vapor cartridge, (a)(6)(v), (b) (concentration set at 1.0 percent), and (c). The requirements specified in § 721.63(a)(4) and (5) apply only during drumming activities and during transfer of liquid PMN substance from a process vessel into a tank, truck, or rail car.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(i), (g)(1)(ix), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44069, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5705 2,5,8,10,13-Pentaoxahexadec-15-enoic acid, 9,14-dioxo-2-[(1-oxo-2-propenyl)oxy]ethyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 2,5,8,10,13-pentaoxahexadec-15-enoic acid, 9,14-dioxo-2-[(1-oxo-2-propenyl)oxy]ethyl ester (P–91–548) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c). Based on organic vapor cartridge service life data available on the PMN substance, respirator cartridges shall be changed at least every 8 hours.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(D), and (h)(2)(iii)(A). The following additional statement shall appear on each label and MSDS as required by this paragraph: Use respiratory protection when there is a reasonable likelihood of exposure in the work area from dust, mist, smoke, fumes, vapor, or gas.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51706, Oct. 4, 1993]

### § 721.5710 Phenacetin.

(a) Chemical substance and significant new use subject to reporting. (1) The chemical substance phenacetin (CAS No. 62–442) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63517, Dec. 1, 1993]

### § 721.5740 Phenol, 4,4'-methylenebis (2,6-dimethyl-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance phenol, 4,4'-methylenebis(2,6-dimethyl-, (PMN P–88–864) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(6)(i), (b) (concentration set at 1 percent), (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(1), (d), (e) (concentration set at 1 percent), (f), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), and (g)(4)(iii). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS was not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (g), (i), (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33306, Aug. 15, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5760 Phenol, 4,4'-[methylenebis (oxy-2,1-ethanediylthio)]bis-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance phenol, 4,4'-[methylenebis(oxy 2,1-ethanediylthio)]bis- (PMN P–87–1760) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (f), (g)(3)(ii), and (g)(4)(iii). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: Recordkeeping requirements specified in § 721.125(a), (b), (c), (f), (g), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 33306, Aug. 15, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.5763 Methylenebisbenzotriazolyl phenols.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as methylenebisbenzotriazolyl phenols (P–94–1042) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(6)(i), (b)(concentration set at 1.0 percent) and (c). Requirements as specified in § 721.63(a)(5)(i) apply during manufacture of the PMN substance. Requirements as specified in § 721.63(a)(5)(iii) through (a)(5)(vii) apply during use of the PMN substance.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(2)(iii), (g)(2)(iv), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125 (a) through (d) and (f) through (i) are applicable to manufacturers, importers, and processors of these substances.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.575(b)(1) apply to this section.

[60 FR 45083, Aug. 30, 1995]

### § 721.5769 Mixture of nitrated alkylated phenols.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as a mixture of nitrated alkylated phenols (PMN P–93–987) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where n = 1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45083, Aug. 30, 1995]

### § 721.5780 Phenol, 4,4'-(oxybis(2,1-ethanediylthio)bis-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance phenol, 4,4'-(oxybis(2,1-ethanediylthio)bis- (PMN P–89–651) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(ix), (g)(2)(iv), and (g)(2)(v).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(r) (82,000 kg; 141,000 kg; and 272,000 kg with testing required at each interval).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39902, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.5800 Sulfurized alkylphenol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance described generically as sulfurized alkylphenol (PMN P–89–708) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is

any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(1)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified in § 721.125 (a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 4578, Feb. 6, 1992. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5820 Aminophenol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as aminophenol (P–83–909) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(1)(i)(D) and (g)(2)(v). The provision of § 721.72(g) requiring placement of specific information in an MSDS does not apply when an MSDS is not required under § 721.72(c).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a), (b), (c), (d), (f), and (g).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 25989, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.5840 Ethylated aminophenol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as ethylated aminophenol (P–83–908) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(1)(i)(D) and (g)(2)(v). The provision of § 721.72(g) requiring placement of specific information in an MSDS does not apply when an MSDS is not required under § 721.72(c).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a), (b), (c), (d), (f), and (g).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 25989, June 5, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.5860 Methylphenol, bis(substituted)alkyl.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as methylphenol, bis(substituted)alkyl (P–84–417) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (b)(concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e)(concentration set at 1.0 percent), (f), (g)(1)(ii), (g)(1)(iv), (g)(2)(i), and (g)(2)(v).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 720.80(k) (antioxidant/stabilizer for polymers) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 25991, June 5, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5867 Substituted phenol.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a substituted phenol (PMN P–89–1125, L–91–87, P–92–41, P–92–511, P–94–1527, P–94–1755) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where n = 1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45083, Aug. 30, 1995]

### § 721.5880 Sulfur bridged substituted phenols (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance sulfur bridged substituted phenols (PMN P–89–396) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(3), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iv) (specifically liver and blood effects), (g)(2)(i), (g)(2)(v), and (g)(5).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The recordkeeping requirements as specified in § 721.125(a) and (c) through (h) are applicable to manufacturers and importers of this substance. Any statements requiring processors to keep records in § 721.125 do not apply.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32417, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993; 59 FR 40260, Aug. 8, 1994]

### § 721.5900 Trisubstituted phenol (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance trisubstituted phenol (PMN P–85–605) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iii) through (a)(5)(vii) and (a)(6)(i), (b) [concentration set at 0.1 percent], and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (d), (e) [concentration set at 0.1 percent], (f), (g)(1)(vii), and (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when a MSDS was not required under § 721.72(c). The provisions of § 721.72(g) requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72(b) and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26111, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.5910 Acrylated epoxy phenolic resin.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as acrylated epoxy phenolic resin (PMN P–92–44) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51686, Oct. 4, 1993]

### § 721.5915 Polysubstituted phenylazopolysubstitutedphenyl dye.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The

chemical substance identified generically as a polysubstituted phenylazopolysubstitutedphenyl dye (PMN P–93–658) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Industrial, commercial and consumer activities.* Requirements as specified in § 721.80(w)(1), (w)(2), (x)(1), and (x)(2).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51706, Oct. 4, 1993]

**§ 721.5920 Phenyl(disubstitutedpolycyclic).**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as phenyl(disubstitutedpolycyclic) (PMN P–92–1337) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 10 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51706, Oct. 4, 1993]

**§ 721.5960 N,N'-Bis(2-(2-(3-alkyl)thiazoline) vinyl)-1,4-phenylenediamine methyl sulfate double salt (generic name).**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as *N,N'*-Bis(2-(2-(3-alkyl)thiazoline)vinyl)-1,4-phenylenediamine methyl sulfate double salt (PMN P–84–913) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (b) (concentration set at 1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b)(2), (c), (d), (e), (f) (concentration set at 1 percent), (g)(1)(iii), (g)(1), (may be lethal if inhaled or in contact with eyes), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), and (g)(5). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS is not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS in not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (j).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 26098, June 26, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§721.5970 Phosphated polyarylphenol ethoxylate, potassium salt.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as phosphated polyarylphenol ethoxylate, potassium salt (PMN P–93–1222) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (where N = 600 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[59 FR 27485, May 27, 1994]

**§721.5980 Dialkyl phosphorodithioate phosphate compounds.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances identified generically as dialkyl phosphorodithioate phosphate compounds (P–90–1642 through 1649) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of these substances is any manner or method of manufacture, import, or processing associated with any use of these substances without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for these substances, the employer becomes aware that any of these substances may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described at §721.72(c) within 90 days from the time the employer becomes aware of the new information. If these substances are not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before these substances are reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, these substances from the employer are provided an MSDS as described in §721.72(c) containing the information required under paragraph (a)(2)(i)(A) within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80 (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[56 FR 40214, Aug. 13, 1991, as amended at 56 FR 46729, Sept. 16, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

**§721.5990 Halogenated phosphate ester.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a halogenated phosphate ester (PMN P–86–1662) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section. The requirements of this section do not apply once the substance has been incorporated into a polymer matrix with the level of residual monomer below 0.1 percent.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)

(vi), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(2)(i), (g)(2)(iv), (g)(2)(v), (g)(5). The following additional statements shall appear on each label and MSDS as required by this paragraph: This substance may cause neurotoxicity.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (j) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51707, Oct. 4, 1993]

### § 721.6000 Tris (2,3-dibromopropyl) phosphate.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance tris (2,3-dibromopropyl) phosphate (CAS Number 126–72–7) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Any use.

(b) *Special provisions.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[52 FR 2703, Jan. 26, 1987. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6020 Phosphine, dialkylyphenyl.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as phosphine dialkylphenyl (P–83–1023) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (d), (e) (concentration set at 1 percent), (f), (g)(1)(iii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), and (g)(2)(v). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS is not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information in an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Disposal.* Requirements as specified in § 721.85 (a)(2); (b)(2); and (c)(2).

(iv) *Release to Water.* Requirements as specified in § 721.90(a)(3), (b)(3), and (c)(3).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (g), (i), (j), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 25991, June 5, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§721.6060 Alkylaryl substituted phosphite.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkylaryl substituted phosphite (PMN P–91–899) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in §721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in §721.72(c) containing the information required under paragraph (a)(2)(i)(A) within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified at §721.125(a) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[57 FR 31969, July 20, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

**§721.6070 Alkyl phosphonate ammonium salts.**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as alkyl phosphonate ammonium salts (PMNs P–93–725 and P–93–726) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (where N = 400 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[58 FR 51707, Oct. 4, 1993]

**§721.6080 Phosphonium salt (generic name).**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance phosphonium salt (PMN Number P–84–820) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1) and (a)(3), (b) [concentration set at 1.0 percent], and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (d), (e) [concentration set at 1.0 percent], (f), and (g)(1)(iii) and (g)(2)(i) and (g)(2)(v). The provision of §721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when a MSDS was not required under §721.72(c). The provisions of §721.72(g)

requiring placement of specific information on a label and MSDS do not apply when a label and MSDS are not required under § 721.72(b) and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26111, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.6085 Phosphonocarboxylate salts.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as phosphonocarboxylate salts (PMNs P–93–722, P–93–723, and P–93–724) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 1000 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51707, Oct. 4, 1993]

### § 721.6090 Phosphoramide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as phosphoramide (P–89–538) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive, or who have received this substance from the employer within 5 years from the date the employer becomes aware of the new information described under paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51686, Oct. 4, 1993]

### § 721.6100 Phosphoric acid, $C_{6-12}$-alkyl esters, compounds with 2-(dibutylamino) ethanol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified as phosphoric acid, $C_{6-12}$-alkyl esters, compounds with 2-(dibutylamino)ethanol (PMN P–90–384) are subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 700 ppb).

(ii) [Reserved].

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c) and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 19239, Apr. 25, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6110 Alkyldi(alkyloxyhydroxypropyl) derivative, phosphoric acid esters, potassium salts.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an alkyldi(alkyloxyhydroxypropyl) derivative, phosphoric acid esters, potassium salts (PMN P–91–818) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f) and (o).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45084, Aug. 30, 1995]

### § 721.6120 Phosphoric acid, 1,2-ethanediyl tetrakis(2-chloro-1-methylethyl) ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as phosphoric acid, 1,2-ethanediyl tetrakis(2-chloro-1-methylethyl) ester (PMN P-861263) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iii), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) (use other than as a flame retardant for polyurethane foams).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 33307, Aug. 15, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6140 Dialkyldithiophosphoric acid, aliphatic amine salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a dialkyldithiophosphoric acid, aliphatic amine salt (P–90–1839) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons will receive this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44069, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.6160 Piperazinone, 1,1′,1″-[1,3,5-triazine-2,4,6-triyltris[(cyclohexylimino)-2,1-ethanediyl]]tris-[3,3,4,5,5-pentamethyl]-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as piperazinone, 1,1′,1″-[1,3,5-triazine-2,4,6-triyltris [(cyclohexylimino)-2,1-ethanediyl]]tris-[3,3,4,5,5-pentamethyl]- (PMN P–89–589; CAS number 130277–45–1) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(4), (a)(5)(iv) through (vii), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d) (e) (concentration set at 1.0 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(1)(viii), (g)(2)(ii), (g)(2)(iv), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (d), and (f) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[57 FR 44069, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.6186 Polyamine dithiocarbamate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a polyamine dithiocarbamate (PMN No. P–91–1328) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (where N = 50 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

[58 FR 32239, June 8, 1993]

### §721.6200 Fatty acid polyamine condensate, phosphoric acid ester salts.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified as fatty acid polyamine condensate, phosphate ester salts (PMNs P–90–1984 and P–90–1985) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 46467, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.6220 Aryl sulfonate of a fatty acid mixture, polyamine condensate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an aryl sulfonate of a fatty acid mixture, polyamine condensate (PMN P–91–584) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 46467, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.6440 Polyamine ureaformaldehyde condensate (specific name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance polyamine ureaformaldehyde condensate (PMN P–87–1456) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(4) [concern level of 1 ppb], (b)(4) [concern level of 1 ppb], and (c)(4) [concern level of 1 ppb].

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 26112, June 26, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6470 Polyaminopolyacid.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a polyaminopolyacid (PMN No. P–92–491) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90.(a)(4), (b)(4), and (c)(4) (concentration set at 500 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[58 FR 32240, June 8, 1993]

### § 721.6500 Polymer.

(a) *Chemical substance and significant new uses subject to reporting.*

(1) The chemical substance polymer (PMN P–86–164) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xiv), (a)(6)(ii), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(4)(i), and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), (c), (e), (f), (g), (h) and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39902, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6520 Acrylamide, polymer with substituted alkylacrylamide salt (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as acrylamide, polymer with substituted alkylacrylamide salt (PMN P–87–794) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (limit set at 216,700 kg).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: Recordkeeping requirements specified in §721.125(a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[55 FR 33303, Aug. 15, 1990. Redesignated at 55 FR 52276, Dec. 21, 1990. Further redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### §721.6540 Acrylamide, polymers with tetraalkyl ammonium salt and polyalkyl, aminoalkyl methacrylamide salt.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as acrylamide, polymers with tetraalkyl ammonium salt and polyalkyl, amino alkyl methacrylamide salt (PMNs P–88–2100 and P–88–2169) are subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is:

(i) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 46468, Oct. 8, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.6560 Acrylic acid, polymer with substituted ethene.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as acrylic acid, polymer with substituted ethene (PMN P–91–521) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (N = 200 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 46468, Oct. 8, 1992, as amended at 53 FR 34204, June 23, 1993]

### §721.6580 Polymer of adipic acid, alkanepolyol, alkyldiisocyanatocarbomonocycle, hydroxyalkyl acrylate ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance polymer of adipic acid, alkanepolyol, alkyldiisocyanatocarbomonocycle, hydroxyalkyl acrylate ester (PMN P–89–726) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63 (a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xv), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i), (g)(2)(iv) (when dust, mist or smoke from spray is likely), (g)(2)(v) and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39903, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6620 Alkanaminium, polyalkyl-[(2-methyl-1-oxo-2-propenyl)oxy] salt, polymer with acrylamide and substituted alkyl methacrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkanaminium, polyalkyl-[(2-methyl-1-oxo-2-propenyl)oxy] salt, polymer with acrylamide and substituted alkyl methacrylate (PMN P–87–252) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (production limit set at 680,000 kg).

(ii) *Release to water.* Requirements as specified in § 721.85(a)(4), (b)(4) and (c)(4) (concentration set at 40 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), (i), and (j) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44070, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.6640 Polymer of alkanedioic acid, methylenebiscarbomonocyclic diisocyanate, and alkylene glycols, hydroxyalkyl acrylate ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as a polymer of alkanedioic acid, methylenebiscarbomonocyclic diisocyanate, and alkylene glycols, hydroxyalkyl acrylate ester (PMN P–91–505) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44070, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.6660 Polymer of alkanepolyol and polyalkylpolyisocyanatocarbomonocycle, acetone oxime-blocked (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a polymer of alkanepolyol and polyalkylpolyisocyanatocarbomonocycle, acetone oxime-blocked (PMN P–88–1658) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to

this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[55 FR 26100, June 26, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.6680 Alkanoic acid, butanediol and cyclohexanealkanol polymer (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance alkanoic acid, butanediol, and cyclohexanealkanol polymer (PMN P–89–672) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows.

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in §721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in §721.72(c) containing the information required under paragraph (a)(2)(i)(A) within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(q) (293,000 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a) through (c), (h) and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[55 FR 32417, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.6700 Polymer of alkenoic acid, substituted alkylacrylate sodium salt (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identifed generically as polymer of alkenoic acid, substituted alkylacrylate sodium salt (PMN P-88-854) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80 (l), (v)(1), (v)(2), (w)(1), (w)(2), (x)(1), and (x)(2).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(i).

(2) *Limitations or revocation of certain notification requirements.* The provisions

of § 721.185 apply to this significant new use rule.

[55 FR 26100, June 26, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6720 Alkyldicarboxylic acids, polymers with alkanepolyol and TDI, alkanol blocked, acrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as akyldicarboxylic acids, polymers with alkanepolyol and TDI, alkanol blocked, acrylate (PMN P–89–77) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45997, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6740 Polymer of alkyl carbomonocycle diisocyanate with alkanepolyol polyacrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as polymer of alkyl carbomonocycle diisocyanate with alkanepolyol polyacrylate (PMN P–89–73) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46000, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6760 Alkylenebis (substituted carbomonocycle), epichlorohydrin, disubstituted heteromonocycle, acrylate polymer.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as alkylenebis(substituted carbomonocycle), epichlorohydrin, disubstituted heteromonocycle, acrylate polymer (PMN P–89–626) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities. Requirements as specified in § 721.80(o).*

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19237, Apr. 25, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6780 Polymer of substituted alkylphenol formaldehyde and phthalic anhydride, acrylate (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identifed generically as polymer of substituted alkylphenol formaldehyde and phthalic anhydride, acrylate, (PMN P–88–1616) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 33307, Aug. 15, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6820 Polymer of substituted aryl olefin.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polymer of substituted aryl olefin (PMN P–85–612) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section. The requirements of this section do not apply once the substance has been encapsulated into a plastic matrix.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(vii), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(vi), (g)(2), (g)(4), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), (c)(2), and any disposal associated with any use, or with manufacturing or processing associated with any use other than by means of recycling.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified in § 721.125(a) through (j) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 39295, Aug. 2, 1994]

### § 721.6840 Substituted bis(hydroxyalkane) polymer with epichlorohydrin, acrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted bis(hydroxyalkane) polymer with epichlorohydrin, acrylate (PMN P–84–1167) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19236, Apr. 25, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6880 Bisphenol A, epichlorohydrin, methylenebis (substituted carbomonocycle), polyalkylene glycol, alkanol, methacrylate polymer.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as Bisphenol A, epichlorohydrin, methylenebis (substituted carbomonocycle), polyalkylene glycol, alkanol, methacrylate polymer (PMN P–88–2380) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45998, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.6900 Polymer of bisphenol A diglycidal ether, substituted alkenes, and butadiene.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as polymer of bisphenol A diglycidal ether, substituted alkenes, and butadiene (PMNs P–90–244 and P–90–245) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 15791, Apr. 17, 1991. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.6920 Butyl acrylate, polymer with substituted methyl styrene, methyl methacrylate, and substituted silane.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as butyl acrylate, polymer with substituted methyl styrene, methyl methacrylate, and substituted silane (PMN P–91–272) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(ii), (a)(5)(viii), (a)(5)(ix), (a)(6)(ii), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 per cent), (f), (g)(1)(i), (g)(1)(ii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (volume set at 90,000 kg), (volume set at 512,000 kg), (volume set at 1,235,000 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44070, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.6940 Caprolactone, polymer with hexamethylene diisocyanate, hydroxyalkyl acrylate ester, reaction products with substituted alkanoic acid and metal heteromonocycle.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as caprolactone, polymer with hexamethylene diisocyanate, hydroxyalkyl acrylate ester, reaction products with substituted alkanoic acid and metal heteromonocycle (PMN P–89–946) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45998, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.6960 E-Caprolactone modified 2-hydroxyethyl acrylate monomer.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as *E*-caprolactone modified 2-hydroxyethyl acrylate monomer (PMN P90-584) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19235, Apr. 25, 1991; 56 FR 29903, July 1, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.6980 Dimer acids, polymer with polyalkylene glycol, bisphenol A-diglycidyl ether, and alkylenepolyols polyglycidyl ethers (generic name).**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance dimer acids, polymer with polyalkylene glycol, bisphenol A-diglycidyl ether, and alkylenepolyols polyglycidyl ethers (PMN P–86–628) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1) and (a)(3), (b) [concentration set at 0.1 percent], and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) [concentration set at 0.1 percent], (f), and (g)(1)(vi) and (g)(1)(vii), (g)(2)(i) and (g)(2)(v), (g)(4)(i), and (g)(5). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when a MSDS was not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) and (y).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1) and (a)(2) and (b)(1) and (b)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26109, June 26, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

**§ 721.7000 Polymer of disodium maleate, allyl ether, and ethylene oxide.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a polymer of disodium maleate, allyl ether, and ethylene oxide (P–91–1086) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44071, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7020 Distillates (petroleum), C(3-6), polymers with styrene and mixed terpenes (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance distillates (petroleum), C(3-6), polymers with styrene and mixed terpenes (PMN P–89–676) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows.

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (h) and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32414, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

**§ 721.7040 Formaldehyde, polymer with (chloromethyl)oxirane, 4,4'-(1-methyl ethylidene)bis[2,6-dibromophenol] and phenol, 2-methyl-2-propenoate.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as formaldehyde, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[2,6-dibromophenol] and phenol, 2-methyl-2-propenoate (PMN P–90–667) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of these substances, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19237, Apr. 25, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.7046 Formaldehyde, polymer with substituted phenols, glycidyl ether.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as formaldehyde, polymer with substituted phenols, glycidyl ether (P–93–955) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c). Requirements as specified in § 721.63 (a)(5)(i) apply during manufacturing only. Requirements as specified in § 721.63(a)(5)(i) through (a)(5)(vii) apply during processing for workers exposed greater than 17 days per year or during use.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(b), (l), and (q).

(iv) *Release to water.* Requirements as specified in § 721.90 (a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[60 FR 45084, Aug. 30, 1995]

**§ 721.7080 Polymer of hydroxyethyl acrylate and polyisocyanate.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance polymer of hydroxyethyl acrylate and polyisocyanate (PMN P–84–938) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii) through

(a)(5)(xiv), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(2), (b)(2) and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), (h) and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39903, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7100 Polymer of isophorone diisocyanate, trimethylolpropane, polyalkylenepolyol, disubstituted alkanes and hydroxyethyl acrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as polymer of isophorone diisocyanate, trimethylolpropane, polyalkylenepolyol, disubstituted alkanes and hydroxyethyl acrylate (PMN P–91–11) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 40214, Aug. 13, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7140 Methylenebis(4-isocyanato benzene), polymer with polycaprolactone triol and alkoxylated alkanepolyol, hydroxyalkyl methacrylate ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as methylenebis(4-isocyanato benzene), polymer with polycaprolactone triol and alkoxylated alkanepolyol, hydroxyalkyl methacrylate ester (PMN P–89–749) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable

to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46000, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7160 2-Oxepanone, polymer with 4,4'-(1-methylethylidene)bisphenol and 2,2-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, graft.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-oxepanone, polymer with 4,4'(1-methylethylidene)bisphenol and 2,2-[(1-methylethylidene) bis(4,1-phenyleneoxymethylene)]bisoxirane, graft (PMN P–88–2582) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(i),(a)(5)(ii), (a)(5)(iii), (a)(5)(viii), (a)(5)(ix), (a)(5)(x), (a)(5)(xi), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33306, Aug. 15, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7180 Substituted oxide-alkylene polymer, methacrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted oxide-alkylene polymer, methacrylate (PMN P–88–2566) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46000, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7200 Perfluoroalkyl aromatic carbamate modified alkyl methacrylate copolymer.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The

chemical substance identified generically as perfluoroalkyl aromatic carbamate modified alkyl methacrylate copolymer (PMN P–87–1555) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements asspecified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent for cancer; 1.0 percent for other effects), (f), (g)(1)(ii), (g)(2)(ii), and (g)(5). In addition, the following human health hazard statement shall appear on each label and MSDS required by this section: This substance may cause lung effects.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a), (b), (c), and (f) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44071, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7210 Epoxidized copolymer of phenol and substituted phenol.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as epoxidized copolymer of phenol and substituted phenol (P–91–598) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(iv), (a)(5)(v), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a) through (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90 (a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44071, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7220 Polymer of substituted phenol, formaldehyde, epichlorohydrin, and disubstituted benzene.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polymer of substituted phenol, formaldehyde, epichlorohydrin, and disubstituted benzene (PMN P–89–1104) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(v), (g)(4)(i), and (g)(5). The following additional human hazard precautionary statement shall appear on each label as specified in § 721.72(b): Disposal restrictions apply.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1), and (c)(1).

(v) *Release to water.* Requirements as specified in § 721.90(c)(2)(v), or diatomaceous earth filtration.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19242, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7240 Polymer of disubstituted phthalate, dioxoheteropolycycle, and methacrylic acid.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as polymer of disubstituted phthalate, dioxoheteropolycycle, and methacrylic acid (PMN P–91–937) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified at § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notificationrequirements.* The provisions of § 721.185 apply to this section.

[57 FR 31969, July 20, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.7260 Polymer of polyethylenepolyamine and alkanediol diglycidyl ether.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polymer of polyethylenepolyamine and alkanediol diglycidyl ether (PMN P–89–810) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows.

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health or the environment, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) which includes a written listing of safety data for this substance within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS containing a written listing of safety data for this chemical and the information required under paragraph (a)(2)(i)(A)

within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (2,000,000 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (c), and (h) (In addition, each manufacturer, importer and processor of this substance shall maintain for five years from the date of their creation, copies of material safety data sheets required under paragraph (a)(2)(i)(A) of this section).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 46774, Nov. 6, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7280 1,3-Propanediamine, N,N'-1,2-ethanediylbis-, polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products with N-butyl-2,2,6,6-tetramethyl-4-piperidinamine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 1,3-propanediamine, *N, N'*-1,2-ethanediylbis-, polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products with *N*-butyl-2,2,6,6-tetramethyl-4-piperidinamine (PMN P–89–632) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) Protection in the workplace. Requirements as specified in § 721.63 (a)(1), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iv), (a)(5)(v), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) Hazard communication program. Requirements as specified in § 721.72 (a) through (f), (g)(1)(iv), (g)(1)(viii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33308, Aug. 15, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993; 60 FR 65582, Dec. 20, 1995]

### § 721.7300 2-Propenenitrile, polymer with 1,3-butadiene, 3-carboxy-1-cyano-1-methylpropyl-terminated, polymers with bisphenol A, epichlorohydrin, and 4,4'-(1-methylethylidene)bis[2,6-dibromophenol], dimethacrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified as 2-propenenitrile, polymer with 1,3-butadiene, 3-carboxy-1-cyano-1-methylpropyl-terminated, polymers with bisphenol A, epichlorohydrin, and 4,4'-(1-methylethylidene)bis[2,6-dibromophenol], dimethacrylate (PMN P–90–1393), are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19240, Apr. 25, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7320 2-Propenenitrile, polymer with 1,3-butadiene, 3-carboxy-1-cyano-1-methylpropyl-terminated, polymers with epichlorohydrin, formaldehyde, 4,4'-(1-methylethylidene)bis[2,6-dibromophenol], and phenol, 2-methyl-2-propenoate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified as 2-propenenitirile, polymer with 1,3-butadiene, 3-carboxy-1-cyano-1-methylpropyl-terminated, polymers with epichlorohydrin, formaldehyde, 4,4'-(1-methylethylidene)bis[2,6-dibromophenol], and phenol, 2-methyl-2-propenoate (PMN P–90–668), are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of these substances, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19240, Apr. 25, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7340 Polymer of styrene, substituted alkyl methacrylates, 2-ethylhexyl acrylate, methacrylic acid and substituted bis(benzene).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance polymer of styrene, substituted alkyl methacrylates, 2-ethylhexyl acrylate, methacrylic acid and substituted bis(benzene) (PMN P–87–739) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xiv), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(4)(i), and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iv) *Disposal.* Requirements as specified in 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(v) *Release to water.* Requirements as specified in § 721.90 (a)(2)(vi) (on-site only), (b)(2)(vi) (on-site only) and (c)(2)(vi) (on-site only).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), (c), (e), (f), (g), (h), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 39903, Sept. 28, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7360 Terpenes and terpenoids, limonene fraction, polymer with substituted carbopolycycles (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as terpenes and terpenoids, limonene fraction, polymer with substituted carbopolycycles (PMN P–88–1617) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33308, Aug. 15, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7370 Acrylates of aliphatic polyol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as acrylates of aliphatic polyol (PMN No. P–91–1077) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D) and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 32240, June 8, 1993]

### § 721.7400 Di(alkanepolyol) ether, polyacrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as di(alkanepolyol) ether, polyacrylate (PMN P–85–718) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to

this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19236, Apr. 25, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7420 Oxyalkanepolyol polyacrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as oxyalkanepolyol polyacrylate (PMN P–89–1072) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent); (f); (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19239, Apr. 25, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7440 Polyalkylenepolyol alkylamine. (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polyalkylenepolyol alkylamine (PMN P–89–483) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(vi), (g)(1)(ix), (g)(2)(i), (g)(2)(iii), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 33307, Aug. 15, 1990, as amended at 55 FR 52276, Dec. 21, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7450 Aromatic amine polyols.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as aromatic amine polyols (PMNs P–93–212 and P–93–213) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) and (i) are applicable to manufacturers, importers, and processors of these substances.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51686, Oct. 4, 1993]

### § 721.7460 Polyol carboxylate ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as polyol, carboxylate ester (PMN P–84–27) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46001, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7480 Isocyanate terminated polyols.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as isocyanate terminated polyols (P–90–404, P–90–405, and P–90–406) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(ii), (b) (concentration set at 1.0 percent) and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(i), (g)(1)(ii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), and (g)(5). The following additional human health hazard statements shall appear on each label and MSDS required by this paragraph: The substance may cause eye irritation, lung effects, dermal sensitization, pulmonary sensitization, or systemic effects.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (volume set at 245,000 kg; aggregate manufacture and import volume for PMNs P–90–404, P–90–405, and P–90–406 combined).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance as specified in § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 40214, Aug. 13, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7500 Nitrate polyether polyol (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance nitrate polyether

polyol (PMN P88-2540) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows.

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c) , (h) and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32418, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7540 Polysubstituted polyol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as polysubstituted polyol (PMN P–84–814) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46002, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7560 Alkoxylated alkane polyol, polyacrylate ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The

chemical substance identified generically as alkoxylated alkane polyol, polyacrylate ester (PMN P–84–713) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o) and (q).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 46001, Oct. 31, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7580 Substituted acrylated alkoxylated aliphatic polyol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted acrylated alkoxylated aliphatic polyol (PMN P–86–346) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46002, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7600 Alkyl(heterocyclicyl) phenylazohetero monocyclic polyone (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance alkyl (heterocyclicyl) phenylazohetero monocyclic polyone (PMN P–85–1370) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(vii), (a)(6)(i) through (a)(6)(iii), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(d), (e) (concentration set at 1.0 percent), (f) and (g)(1)(ix), (g)(2)(i) through (g)(2)(v) and (g)(4). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written

program and MSDS are not required under § 721.72(a) and (c), respectively.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) (as intermediates to manufacture dyes for coloring pulp or paper only) and (q).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (b)(1) and (c)(1).

(v) *Release to water.* Requirements as specified in § 721.90(a)(2)(iv), (b)(2)(iv) and (c)(2)(iv).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (f), (i), (j) and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 32418, Aug. 9, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7620 Alkyl(heterocyclicyl) phenylazohetero monocyclic polyone, ((alkylimidazolyl) methyl) derivative (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance alkyl (heterocyclicyl) phenylazohetero monocyclic polyone, ((alkylimidazolyl) methyl) derivative (PMN P–86–136) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iv) through (a)(5)(vii), (a)(6)(i), (a)(6)(ii) and (a)(6)(iii), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (d), (e) (concentration set at 1.0 percent), (f) and (g)(1)(ix), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v). The provisions of § 721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under § 721.72(a) and (c), respectively. The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g), (k) and (q). The term intermediate as used in § 721.80(g) is defined as intermediate for manufacture of dyes for coloring pulp or paper.

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (b)(1) and (c)(1).

(v) *Release to water.* Requirements as specified in § 721.90(a)(2), (b)(2) and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (e), (f), (i) and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32418, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7655 Alkylsulfonium salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as alkylsulfonium salt (PMN P–93–1166) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 50 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a),

(b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27485, May 27, 1994]

**§ 721.7660 Poly(oxy-1,4-butanediyl), α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy].**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as poly(oxy-1,4-butanediyl), α-(1-oxo-2-propenyl)-ω-[(1-oxo-2propenyl)oxy]- (PMN P–84–274) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46001, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.7680 Poly(oxy-1,2-ethanediyl), .α.-hydro-.ω.hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) di-2-propenoate, methyl ether**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as poly(oxy-1,2-ethanediyl), .α.-hydro-.ω.-hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) di-2-propenoate, methyl ether (PMN P–88–1211) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[56 FR 19239, Apr. 25, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.7700 Poly(oxy-1,2-ethanediyl), α-hydro-ω-(oxiranylmethoxy)-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1).**

(a) Chemical substance and significant new uses subject to reporting. (1) The chemical substance identified as

poly(oxy-1,2-ethanediyl),α-hydro-ω-(oxiranylmethoxy)-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (PMN P–88–2188) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(viii), (a)(5)(ix), (a)(6)(ii), and (b) (concentration set at 0.1 percent).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (l) and (q).

(iv) *Disposal.* Requirements as specified in § 721.85 (b)(1), (b)(2), (c)(1), and (c)(2).

(v) *Release to water.* Requirements as specified in § 721.90 (a)(2)(ii), (b)(1), and (c)(1). The following may be used as alternative to the technologies in § 721.90(a)(2)(ii): Oil and grease separation.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (k).

(2) *Limitation of revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19240, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7710 Polyepoxy polyol.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a polyepoxy polyol (PMN P–93–364) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial and consumer activities.* Requirements as specified in § 721.80(v)(1), (w)(1), and (x)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27485, May 27, 1994]

### § 721.7720 Poly(oxy-1,2-ethanediyl), α,α'-[(1-methylethylidene) di-4,1-phenylene] bis [ω-(oxiranylmethoxy)-.

(a) Chemical substance and significant new uses subject to reporting. (1) The chemical substance identified as poly(oxy-1,2-ethanediyl), α,α'-[(1-methylethylidene) di-4,1-phenylene] bis [ω-(oxiranylmethoxy)- (PMN P–88–2181) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(viii), (a)(5)(ix), (a)(6)(ii), and (b) (concentration set at 0.1 percent).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (l) and (q).

(iv) *Disposal.* Requirements as specified in § 721.85 (b)(1), (b)(2), (c)(1), and (c)(2).

(v) *Release to water.* Requirements as specified in § 721.90 (a)(2)(ii), (b)(1), and (c)(1). The following may be used as an alternative to the technologies in § 721.90(a)(2)(ii): Oil and grease separation.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (k).

(2) *Limitation of revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19240, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.7740 Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxy-, $C_{10-16}$-alkyl ethers.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxy-, $C_{10-16}$-alkyl ethers (PMN P–86–588) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46002, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.7760 Poly(oxy-1,2-ethanediyl), α-(1-oxo-2-propenyl)-ω-hydroxy-, $C_{10-16}$-alkyl ethers.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as poly(oxy-1,2-ethanediyl), α-(1-oxo-2-propenyl)-ω-hydroxy-, $C_{10-16}$-alkyl ethers (PMN P–86–554) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46002, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.7770 Alkylphenoxypoly(oxyethylene) sulfuric acid ester, substituted amine salt.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as alkyl phenoxypoly(oxyethylene) sulfuric acid ester, substituted amine salt (PMN P–92–396) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(iii) *Release to water.* Requirements as specified in § 721.90(a)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (f), (g), (h), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51707, Oct. 4, 1993]

**§ 721.7780 Poly[oxy(methyl-1,2-ethanediyl)], α,α'-(2,2-dimethyl-1,3-propanediyl)bis[ω-(oxiranymethoxy)-.**

(a) Chemical substance and significant new uses subject to reporting. (1) The chemical substance identified as poly[oxy(methyl-1,2-ethanediyl)], α,α,'-(2,2-dimethyl-1,3-propanediyl)bis[ω-(oxiranymethoxy)- (PMN P–88–2180) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(viii), (a)(5)(ix), (a)(6)(ii), and (b) (concentration set at 0.1 percent).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vi), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (l) and (q).

(iv) *Disposal.* Requirements as specified in § 721.85 (b)(1), (b)(2), (c)(1), and (c)(2).

(v) *Release to water.* Requirements as specified in § 721.90 (a)(2)(ii), (b)(1), and (c)(1). The following may be used as an alternative to the technologies in § 721.90(a)(2)(ii): Oil and grease separation.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (k).

(2) *Limitation of revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19239, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

**§ 721.8075 Polyurethane.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance polyurethane (PMN P–85–118) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xiv), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(4)(i) and (g)(5). The provision of § 721.72(d) requiring that employees to be provided

with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k).

(vi) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), (g), (h), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 39904, Sept. 28, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.8082 Polyester polyurethane acrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polyester polyurethane acrylate (PMN P–93–498) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(y)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51686, Oct. 4, 1993]

### § 721.8090 Polyurethane polymer.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a polyurethane polymer (P–94–47) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(viii) through (a)(5)(xi), (a)(6)(ii), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(i), (g)(1)(ii), (g)(2)(i) through (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[60 FR 45084, Aug. 30, 1995]

### § 721.8100 Potassium N,N-bis (hydroxyethyl) cocoamine oxide phosphate, and potassium N,N-bis (hydroxyethyl) tallowamine oxide phosphate.

(a) *Chemical substances and significant new use subject to reporting.* (1) The following chemical substances, identified by their chemical names and CAS Number are subject to reporting under this part for the significant new use identified in paragraph (a)(2) of this section: Potassium N,N-bis

(hydroxyethyl) cocoamine oxide phosphate (CAS Number 855712–26–1), and potassium N,N-bis (hydroxyethyl) tallowamine oxide phosphate (CAS Number 855712–27–2).

(2) The significant new use is: Use in a consumer product at concentrations greater than five percent by weight.

(b) *Specific Requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Definitions.* In addition to the definitions in § 721.3, the following definitions apply to this section:

''Consumer'' means any natural person who uses products for personal rather than business purposes.

''Consumer product'' means any chemical substance which is directly, or as part of a mixture, sold or made available to consumers for their use in or around a permanent or temporary household or residence, in or around a school, or in recreation.

(2) *Persons who must report.* The provisions of § 721.5 apply to determine persons who must report under this section, except § 721.5(a)(2) does not apply to a person who intends to distribute either of the substances in commerce as part of a mixture at concentrations of five percent or less by weight of the mixture.

(3) *Notice requirements and procedures.* Section 721.10 applies to this section, except a person submitting a notice must complete only Parts I and II of the notice form.

[49 FR 35018, Sept. 5, 1984. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8125 Propane, 1,1,1,2,3,3,3-heptafluoro-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as propane, 1,1,1,2,3,3,3-heptafluoro- (PMN P–91–831; CAS number 431–89–0) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q), use in aerosol products intended for consumer use. This restriction does not apply to use of the PMN substance in fire extinguishing apparatus or systems.

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) (b), (c), (f), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44071, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.8155 Propanenitrile, 3-[amino, *N*-tallowalkyl] dipropylenetri- and tripropylenetri- and propanenitrile, 3-[amino, ($C_{14-18}$ and $C_{16-18}$ unsaturated alkyl)] trimethylenedi-, dipropylenetri-, and tripropylenetetra-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified as propanenitrile, 3-[amino, *N*-tallowalkyl] dipropylenetri- (PMN P-94 1238), propanenitrile, 3-[amino, *N*-tallowalkyl] tripropylenetri- (PMN P–94–1239), propanenitrile, 3-[amino, ($C_{14-18}$ and $C_{16-18}$ unsaturated alkyl)] trimethylenedi- (PMN P–94–1241), propanenitrile, 3-[amino, ($C_{14-18}$ and $C_{16-18}$ unsaturated alkyl)] dipropylenetri- (PMN P–94–1242), and propanenitrile, 3-[amino, ($C_{14-18}$ and $C_{16-18}$ unsaturated alkyl)] tripropylenetetra- (PMN P–94–1243) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in

§ 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11044, Mar. 1, 1995]

**§ 721.8160 Propanoic acid, 2,2-dimethyl-, ethenyl ester.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as propanoic acid, 2,2-dimethyl-, ethenyl ester (PMN P–89–1058) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section. The requirements of this section do not apply once the substance has been incorporated into a polymer matrix with the level of residual monomer below 0.1 percent.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i) (There must be no permeation of the substance greater than 0.02 μg/min·cm² after 8 hours of testing in accordance with the most current version of the American Society for Testing and Materials ASTM F739 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases.'' For conditions of exposure which are intermittent, gloves may be tested in accordance with the most current version of ASTM F1383 ''Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under Conditions of Intermittent Contact,'' provided the contact time in testing is greater than or equal to the expected duration of dermal contact, and the purge time used in testing is less than or equal to the expected duration of noncontact during the intermittent cycle of dermal exposure in the workplace. If ASTM F1383 is used for testing, manufacturers, importers, and processors must submit to the Agency a description of worker activities involving the substance which includes daily frequencies and durations of potential worker exposures. The results of all glove permeation testing must be reported in accordance with the most current version of ASTM F1194 ''Guide for Documenting the Results of Chemical Permeation Testing of Protective Clothing Materials.'' Manufacturers, importers, and processors must submit all test data to the Agency and must receive written Agency approval for each type of glove tested prior to use of such gloves. The following gloves have been tested in accordance with the ASTM F739 method and found by EPA to satisfy the requirements for continuous use: Ansell Edmont/15-554/PVA, 0.08 cm thick; and Ansell Edmont/4h/PE/EVOH/PE laminate gloves, 0.006 cm thick. Gloves may not be used for a time period longer than they are actually tested and must be replaced at the end of each work shift. The following gloves have been tested in accordance with the ASTM 1383 method and found by EPA to satisfy the requirements for intermittent use: North/B-161-R/Butyl rubber gloves, 0.04 cm thick, time period tested 2 min/h. The gloves listed may not be used for a time period longer than they are actually tested and must be replaced at the end of each work shift unless based on its review of data from the ASTM 1383 method, the company's personal protective equipment required under this paragraph, and other appropriate information, the Agency approves, in writing, a time period of greater duration.), (a)(2)(ii) (With the exception of laboratory activities, full body chemical protective clothing is required for any worker activity in which the substance is reasonably likely to contact the worker in the following state(s): Open liquid pool or solid of greater than 5 kg; liquid spray or splash; mist; aerosol dust; or any worker activity which has the potential for contact with the substance for more than 10 min/h. At a minimum, a chemical protective apron is required for any worker activity with potential for contact with the substance which is not covered by this paragraph), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii) (if cartridge service life testing is not available), (a)(5)(xii) or (a)(5)(xiii) (if data on cartridge service life testing has been reviewed and approved in writing by EPA), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), and (a)(6)(v). As an alternative to the respiratory requirements in this section,

manufacturers, importers, and processors may use the New Chemical Exposure Limits provisions, including sampling and analytical methods which have previously been approved by EPA for this substance, found in the 5(e) consent order for this substance.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(vi), The following additional statements shall appear on each label required by this paragraph: The health effects of this material have not been fully determined but are currently being tested. EPA is concerned however, that this material may have serious chronic health and environmental effects. When using this material, use eye and skin protection, which includes gloves which have been determined to be impervious to this substance. Use respiratory protection, unless workplace airborne concentrations are maintained at or below an 8–h time weighted average (TWA) of 1 ppm, when there is a likelihood of exposure in the work area from dust, mist, smoke or vapor, (h)(2)(ii)(F), (h)(2)(ii)(G), (h)(2)(ii)(I), (h)(2)(iii)(A), (h)(2)(iii)(B), (h)(2)(iii)(C), (h)(2)(iii)(E), (h)(2)(iv)(A), (h)(2)(iv)(B). The following additional statements shall appear on each MSDS required by this paragraph: This substance may cause moderate skin irritation. This substance may cause neurotoxicity. When using this substance, use respiratory protection, unless workplace airborne concentrations are maintained at or below an 8–h TWA of 1 ppm.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 40 ppb). When calculating the surface water concentrations according to the instructions in § 721.91, the statement in paragraph (a)(4) that the amount of the substance that will be released will be calculated before the substance enters control technology does not apply. Instead, if the waste stream containing the substance will be treated before release, then the amount of the substance reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than 75 percent removal efficiency may be attributed to such treatment. In addition, when the substance is released in combination with the substances hexanedioic acid, diethenyl ester, hexanoic acid, 2-ethyl-, ethenyl ester, and neononanoic acid, ethenyl ester, the quotient from the formula referenced in this section shall not exceed the average of the quotient applicable to the other substances weighted by the proportion of each substance present in the total daily amount released.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance. Manufacturers, importers, and processors of the substance must document that the substance has been incorporated into a polymer matrix with the level of residual monomer below 0.1 percent if this section does not apply as described in paragraph (a)(1) of this section.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 51707, Oct. 4, 1993]

### § 721.8170 Propanol, [2-(1,1-dimethylethoxy)methylethoxy]-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance propanol, [2-(1,1-dimethylethoxy)methylethoxy]- (CAS no. 132739-31-2) (P–93–193) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If, as a result of the test data required under the section 5(e) consent

order for this substance, the employer becomes aware that this substance may present a risk of injury to human health or the environment, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive, or who have received this substance from the employer within 5 years from the date the employer becomes aware of the new information described in paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified in § 721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[60 FR 11044, Mar. 1, 1995]

### § 721.8225 2-Propenamide, N-[3-dimethylamino)propyl]-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenamide, *N*-[3-dimethylamino)propyl]- (PMN P–86–1602) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(3), (a)(6)(ii), (b) (concentration set at 0.1 percent) and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(v), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(v), (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 300 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i) and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 40215, Aug. 13, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.8250 1-Propanol, 3,3′-oxybis[2,2-bis(bromomethyl)-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 1-propanol, 3,3′-oxybis[2,2-bis(bromomethyl)]- (PMN P–87–1273) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3)(applies to gloves only), (a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements asspecified in § 721.72(a),

(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(v), and (g)(5). In addition, the human health hazard statement shall include a statement that this substance may cause acute and chronic toxicity.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f) and (p). In addition, use other than as a flame retardant additive is a significant new use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i), and (j) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44072, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.8265 2-Propenoic acid, $C_{18–26}$ and $C_{>20}$ alkyl esters.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified as 2-propenoic acid, $C_{18–26}$ alkyl ester (P–93–37) and 2-propenoic acid, $C_{>20}$ alkyl esters (P–93–38) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51687, Oct. 4, 1993]

### § 721.8275 2-Propenoic acid, 3-(dimethylamino)-2,2-dimethylpropyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-propenoic acid, 3(dimethylamino)-2,2-dimethylpropyl ester (PMN P–85–545) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(vii) through (xiv), (a)(6)(ii), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(4)(i) and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in

§ 721.125(a), (b), (c), (e), (f), (g), (h), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39904, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8290 2-Propenoic acid, docosyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenoic acid, docosyl ester (PMN P–93–36) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51687, Oct. 4, 1993]

### § 721.8300 2-Propenoic acid, 2-hydroxybutyl ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenoic acid, 2-hydroxybutyl ester (PMN P–87–930) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46002, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8325 2-Propenoic acid, 1-(hydroxymethyl) propyl ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenoic acid, 1-(hydroxymethyl) propyl ester (PMN P–87–931) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B),

(h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46003, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8335 2-Propenoic acid, 2-[[(1-methylethoxy)carbonyl]amino]ethyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenoic acid, 2-[[(1-methylethoxy) carbonyl]amino] ethyl ester (P–91–503) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c). Based on organic vapor cartridge service life data available on the PMN substance, respirator cartridges shall be changed at least every 8 hours.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(D), and (h)(2)(iii)(A). The following additional statement shall appear on each label and MSDS as required by this paragraph: Use respiratory protection when there is a reasonable likelihood of exposure in the work area from dust, mist, smoke, fumes, vapor, or gas.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51708, Oct. 4, 1993]

### § 721.8350 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester (PMN P–89–31) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii), (a)(5)(xv), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vi), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 46774, Nov. 6, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.8375 2-Propenoic acid, 2-(2-oxo-3-oxazolidinyl)ethyl ester.**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenoic acid, 2-(2-oxo-3-oxazolidinyl)ethyl ester (PMN P–91–391) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c). Based on organic vapor cartridge service life data available on the PMN substance, respirator cartridges shall be changed at least every 8 h.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(D), and (h)(2)(iii)(A). In addition to the preceding statements, the label and MSDS shall contain the following statement: Use respiratory protection when there is a reasonable likelihood of exposure in the work area from dust, mist, smoke, fumes, vapor, or gas.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44072, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

**§ 721.8400 2-Propenoic acid, 3,3,5-trimethylcyclohexyl ester.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-propenoic acid, 3,3,5-trimethylcyclohexyl ester (PMN P–85–547) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xiv), (a)(6)(ii), (a)(6)(v), (a)(6)(vi), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(4)(i) and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), (g), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39904, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§ 721.8425 2-Propenoic acid, 2-[[[[[1,3,3-trimethyl-5- [[[2- [(1-oxo- 2-propenyl)oxy] ethoxy]carbonyl] amino]cyclohexyl] methyl] amino] carbonyl]oxy] ethyl ester.**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenoic acid, 2-[[[[[1,3,3-trimethyl-5- [[[2-[(1-oxo-2-propenyl)oxy]ethoxy] carbonyl]amino] cyclohexyl]methyl] amino]carbonyl]oxy]ethyl ester (PMN P–90–1825; CAS number 42404–50–2) is subject to reporting under this section

for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44072, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.8450 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenoic acid, 2-methyl-, 2-[3-(2*H*-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, (PMN P–90–333) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(ii), (a)(5)(iv), (a)(5)(v), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(ii), (g)(1)(iv), (g)(1)(v), (g)(1)(vi), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(5), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), (c)(4), ( where N = 80 ). However, contrary to § 721.91(a)(4), if the waste stream containing the PMN substance will be treated using biological treatment (activated sludge or equivalent) plus clarification, then the amount of PMN substance reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than 75 percent removal efficiency may be attributed to such treatment.

(b) *Special requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19241, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993; 60 FR 30468, June 9, 1995]

### § 721.8475 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenoic acid, 2-methyl-, 1,1-dimethylethyl ester (PMN P–89–422) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xii), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (a)(6)(v), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46003, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8500 2-Propenoic acid, 2-methyl-, 7-oxabicyclo [4.1.0]hept-3-ylmethyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester (PMN P–89–30) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii), (a)(5)(xv), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(vi), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 46775, Nov. 6, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8525 2-Propenoic acid, 2-methyl-, 3,3,5-trimethylcyclohexyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-propenoic acid, 2-methyl-, 3,3,5-trimethylcyclohexyl ester (PMN-85-546) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(vii) through (a)(5)(xiv), (6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(4)(i) and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (e), (f), (g), (h), and (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions

of § 721.185 apply to this significant new use rule.

[55 FR 39904, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8550 2-Propenoic acid, 2-methyl-, 7,7,9-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane, 1,16-diyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-propenoic acid, 2-methyl-, 7,7,9-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane, 1,16-diyl ester (PMN P–85–544) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(viii) through (a)(5)(xiv), (a)(6)(ii), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i) through (g)(2)(v), (g)(4)(i) and (g)(5). The provision of § 721.72(d) requiring that employees to be provided with information on the location and availability of a written hazard communication program does not apply when the written program is not required under § 721.72(a).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c) and (e) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39905, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8575 2-Propenoic acid [octahydro-4,7-methano-1H-indene-1, 5(1,6 or 2,5)-diyl]bis(methylene) ester.

(a) Chemical substance and significant new uses subject to reporting. (1) The chemical substance specifically identified as 2-propenoic acid [octahydro-4, 7-methano-1*H*-indene-1, 5(1,6 or 2,5)-diyl]bis(methylene) ester (PMN P–89–1135) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 19241, Apr. 25, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8600 2-Propenoic acid, octahydro-4, 7-methano-1H-indenyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 2-propenoic acid, octahydro-4, 7-methano-1*H*-indenyl ester (PMN P–90–1285) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1),

(a)(2)(i), (a)(2)(ii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(i), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: Requirements as specified in § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 19241, Apr. 25, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.8650 2-Propenoic acid, reaction product with 2-oxepanone and alkyltriol.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as 2-propenoic acid, reaction product with 2-oxepanone and alkyltriol (PMN P–92–1447) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51687, Oct. 4, 1993]

### § 721.8654 2-Propenoic acid 3-(trimethoxy silyl)propyl ester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 2-propenoic acid 3-(trimethoxysilyl)propyl ester (PMN P–93–1235) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial and consumer activities.* Requirements as specified in § 721.80(g).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27485, May 27, 1994]

### § 721.8670 Alkylcyano substituted pyridazo benzoate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an alkylcyano substituted

pyridazo benzoate (PMN P–94–1129) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11044, Mar. 1, 1995]

### § 721.8675 Halogenated pyridines.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as halogenated pyridine (PMN P–83–1163) is subject to reporting under this section for the significant new uses described in paragraph (a)(1)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* The general requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contain residual amounts of the chemical substance.

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(C) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(D) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 0.2 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (h), (j), and (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(2) The chemical substances identified generically as halogenated pyridines (PMN P–85–216, P–85–1184) is subject to reporting under this section for the significant new uses described in paragraph (a)(4)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* The general requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contains residual amounts of the chemical substance.

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(C) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply:

Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(D) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 0.2 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (h), (j), and (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(b) [Reserved]

[56 FR 23769, May 23, 1991; 56 FR 29903, July 1, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993; 59 FR 66747, Dec. 28, 1994]

### § 721.8700 Halogenated alkyl pyridine.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as halogenated alkyl pyridine (PMN P–83–237) is subject to reporting under this section for the significant new uses described in paragraph (a)(1)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* The general requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contains residual amounts of the chemical substance.

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(C) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(D) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 10 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (h), (j), and (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(2) The chemical substance identified generically as halogenated alkyl pyridine (PMN P–83–1162) is subject to reporting under this section for the significant new uses described in paragraph (a)(2)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* The general requirements as specified in § 721.63(a) (1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contain residual amounts of the chemical substance.

(B) *Hazard communication program.* Requirements as specified in §721.72(a), (b) , (c), (d), (f), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(C) *Disposal.* Requirements as specified in §721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(D) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (concentration set at 0.2 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: §721.125 (a) through (h), (j), and (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(b) [Reserved]

[56 FR 23771, May 23, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993; 59 FR 66747, Dec. 28, 1994]

### §721.8750 Halogenated substituted pyridine.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as halogenated substituted pyridine (PMN P–86–838) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* The general requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that §721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition §721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contains residual amounts of the chemical substance.

(ii) *Hazard communication program.* Requirements as specified in §721.72 (a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Disposal.* Requirements as specified in §721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(iv) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (concentration set at 1 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: §721.125(a) through (h), (j), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[56 FR 23769, May 23, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993; 59 FR 66747, Dec. 28, 1994]

### §721.8775 Substituted pyridines.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted pyridine (PMN P–84–1219) is subject to reporting under this section for the significant new uses described in paragraph (a)(1)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* The general requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contains residual amounts of the chemical substance.

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(C) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(D) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 10 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (h), (j), and (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(2) The chemical substances identified generically as substituted pyridines (PMNs P–85–236 and P–85–706) are subject to reporting under this section for the significant new uses described in paragraph (a)(2)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* The general requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contains residual amounts of the chemical substance.

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(C) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(D) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 0.2 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (h), (j), and (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) The chemical substance identified generically as substituted pyridine (PMN P–85–36) is subject to reporting under this section for the significant new uses described in paragraph (a)(3)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* The general requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contain residual amounts of the chemical substance.

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(C) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(D) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 10 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (h), (j), and (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(4) The chemical substance identified generically as substituted pyridine (PMN P–85–1184) is subject to reporting under this section for the significant new uses described in paragraph (a)(4)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* The general requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contains residual amounts of the chemical substance.

(B) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(vii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(C) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(D) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 1.3 ppb). Where primary, secondary, and tertiary waste treatment will occur or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(ii) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(A) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (h), (j), and (k).

(B) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(b) [Reserved]

[56 FR 23770, May 23, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993; 59 FR 66747, Dec. 28, 1994]

### § 721.8825 Substituted methylpyridine and substituted 2-phenoxypyridine.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The following chemical substances, referred to by their PMN numbers and generic chemical names, are subject to reporting under this section for the significant new uses described in paragraphs (a)(2) and (3) of this section: Substituted methylpyridine (P–83–24, P–83–49, and P–83–272) and substituted 2-phenoxypyridine (P–83–23 and P–83–75).

(2) The significant new uses for P–83–49 and P–83–272 are manufacture or processing without:

(i) Requiring use of the following personal protective equipment for persons involved in any operation where dermal contact and/or inhalation of the substances may occur, and where local exhaust ventilation is present at the site of the operation:

(A) Chemical cartridge respirator, approved by the National Institute for Occupational Safety and Health for protection from organic vapors, and used and fitted according to 29 CFR 1910.134 and 30 CFR part 11.

(B) Chemical worker gloves and aprons or other equivalent personal protective clothing determined to be impervious to the particular substance in its conditions of use. (Equipment may be determined to be impervious either by testing under the conditions of use, including the duration of exposure, or by evaluating the specifications supplied by the supplier of the equipment.)

(ii) Requiring use of the following personal protective equipment for persons involved in and in the immediate area of any operation where dermal contact and/or inhalation of the substance may occur, and where local exhaust ventilation is not present at the site of the operation:

(A) Full facepiece, positive pressure air-supplied respirator, approved by the Bureau of Mines, Department of the Interior or by the National Institute of Occupational Safety and Health fitted according to procedures established at 29 CFR 1910.134.

(B) Chemical worker gloves and aprons, or other equivalent personal protective clothing determined to be impervious to the particular substance in its conditions of use. (Equipment may be determined to be impervious either by testing under the conditions of use, including the duration of exposure, or by evaluating the specifications supplied by the supplier of the equipment.)

(iii) Notifying in writing, each employee required to use protective equipment that these chemical substances may present a hazard of liver, kidney, and nervous system toxicity unless the specified protective equipment is used.

(3) The significant new uses for P–83–23, P–83–24, and P–83–75 are manufacture or processing without:

(i) Requiring the use of the following personal protective equipment for persons involved in any operation where dermal contact may occur:

(A) Chemical goggles.

(B) Chemical worker gloves and aprons, or other equivalent personal protective clothing determined to be impervious to the particular substance in its conditions of use. (Equipment may be determined to be impervious either by testing under the conditions of use, including the duration of exposure, or by evaluating the specifications supplied by the supplier of the equipment.)

(ii) Notifying in writing, each employee required to use protective equipment that these chemical substances may present a hazard of liver, kidney, and nervous system toxicity unless the specified protective equipment is used.

(b) *Specific requirements.* In addition to the general provisions of subpart A of this part, the following specific requirements apply.

(1) *Recordkeeping.* In addition to the requirements of § 721.17, manufacturers, importers, and processors of the chemical substances identified in paragraph (a) of this section must maintain the following records for five years from the date of their creation:

(i) The names of persons required to wear protective clothing and/or equipment.

(ii) Records of respirator fit tests for each person required to wear a respirator.

(iii) The names and addresses of persons to whom any of these substances are sold or transferred and the date of such sale or transfer.

(2) [Reserved]

[49 FR 50400, Dec. 28, 1984. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.8850 Disubstituted halogenated pyridinol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as disubstituted halogenated pyridinol (PMN P–88–1274) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* The general requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contains residual amounts of the chemical substance.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(iv) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (concentration set at 44 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (h), (j), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 23771, May 23, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993; 59 FR 66748, Dec. 28, 1994]

### § 721.8875 Substituted halogenated pyridinol.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted halogenated pyridinol (PMN P–88–1273) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* The general requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that § 721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition § 721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contains residual amounts of the chemical substance.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Disposal.* Requirements as specified in § 721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(iv) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (concentration set at 44 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: §721.125(a) through (h), (j), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[56 FR 23772, May 23, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993; 59 FR 66748, Dec. 28, 1994]

### §721.8900 Substituted halogenated pyridinol, alkali salt.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as substituted halogenated pyridinols, alkali salts (PMNs P–88–1271 and P–88–1272) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* The general requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(iii), (a)(5)(xii), (a)(5)(xiii), (a)(5)(xiv), (a)(6)(i), (a)(6)(ii), (a)(6)(iii), (a)(6)(iv), (a)(6)(v), (a)(6)(vi), and (c) apply in all cases except that §721.63(a)(2)(ii) does not apply for reactor sampling operations where enclosed vented sample boxes are used. In addition §721.63(a)(2)(iv) applies for processing of any byproduct generated during manufacturing, processing, or use of the chemical substance which contains residual amounts of the chemical substance.

(ii) *Hazard communication program.* Requirements as specified in §721.72 (a), (b), (c), (d), (f), (g)(1)(iii), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Disposal.* Requirements as specified in §721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2). The following additional disposal methods also apply: Chemical destruction or, where necessary to ensure complete destruction of the substance, chemical destruction and carbon adsorption.

(iv) *Release to water.* Requirements as specified in §721.90(a)(4), (b)(4), and (c)(4) (concentration set at 44 ppb). Where primary, secondary, and tertiary waste treatment will occur, or treatment in a lined, self-contained solar evaporation pond where UV light will degrade the substance, the number of kilograms per day per site is calculated after wastewater treatment.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: §721.125(a) through (h), (j), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[56 FR 23772, May 23, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993; 59 FR 66748, Dec. 28, 1994]

### §721.8965 1*H*-Pyrole-2, 5-dione, 1-(2,4,6-tribromophenyl)-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 1*H*-pyrole-2, 5-dione, 1-(2,4,6-tribromophenyl)-, (PMN No. P–90–159) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63 (a)(2)(iii) for employees likely to have ocular exposure, (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 0.1 percent by weight or volume), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72 (a), (b), (c), (d), (e) concentration set at 0.1 percent by weight or volume, (f),

(g)(1)(ii), (g)(1)(iii), (g)(1)(iv), (g)(1)(v), (g)(1)(vii), (g)(1)(ix) (corrosion to the eyes), (g)(2)(iii), (g)(2)(iv)( use chemical goggles), (g)(3)(ii), (g)(4)(i), (g)(4)(iii) (except the dewatering step during polymerization of acrylonitrile/butadiene/styrene), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (a), (c), (f), (k) (any use in a system other than as flame retardant in styrenic, polyolefin elastomer, and thermoset systems), (l), and (q).

(iv) *Disposal.* Requirements as specified in § 721.85(b)(1) (by industrial incinerator), (b)(2), (c)(1), and (c)(2). Dispose of the PMN substance by industrial incinerator or landfill.

(v) *Release to water.* Requirements as specified in § 721.90(b)(1) and (c)(1). Section 721.90 (c)(1) does not apply to releases of the PMN substance during the dewatering step of the polymerization reactions from use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (d), and (f) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32240, June 8, 1993, as amended at 58 FR 29946, May 24, 1993]

### § 721.9000 N-Nitrosopyrrolidine.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance N-nitrosopyrrolidine (CAS No. 930–55–2) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63517, Dec. 1, 1993]

### § 721.9075 Quaternary ammonium salt of fluorinated alkylaryl amide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as quaternary ammonium salt of fluorinated alkylaryl amide (PMN No. P–92–688) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(f).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[58 FR 32241, June 8, 1993]

### § 721.9100 Substituted quinoline.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as substituted quinoline (PMN P–93–1183) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(c).

(ii) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in §721.125(a), (b), (c), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[59 FR 27485, May 27, 1994]

**§721.9220 Reaction products of secondary alkyl amines with a substituted benzenesulfonic acid and sulfuric acid (generic name).**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as reaction products of secondary alkyl amines with a substituted benzenesulfonic acid and sulfuric acid (PMNs P–89–703, P–89–755, and P–89–756) are subject to reporting under this section for significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Uses as specified in §721.80(q).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of these substances: Recordkeeping requirements specified in §721.125(a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[55 FR 17381, Apr. 24, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

**§721.9240 Reaction product of alkyl carboxylic acids, alkane polyols, alkyl acrylate, and isophorone diisocyanate.**

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as reaction product of alkyl carboxylic acids, alkane polyols, alkyl acrylate, and isophorone diisocyanate, (PMN P–89–1081) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63 (a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in section §721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f); (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(o).

(b) *Special requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: §721.125 (a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

[56 FR 19238, Apr. 25, 1991. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

**§721.9260 Reaction product of alkylphenol, tetraalkyl titanate and tin complex.**

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as reaction product of alkylphenol, tetraalkyl titanate and

tin complex (P–90–583) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows. (A) If, as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) Specific requirements. The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (c), (h), and (i).

(2) *Limitations or revocation of certain modification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[56 FR 15793, Apr. 17, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9280 Reaction product of ethoxylated fatty acid oils and a phenolic pentaerythritol tetraester.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a reaction product of ethoxylated fatty acid oils and a phenolic pentaerythritol tetraester (PMN P–92–63) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[57 FR 44072, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.9300 Reaction products of substituted hydroxyalkanes and polyalkylpolyisocyanatocarbomonocycle.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as reaction products of substituted hydroxyalkanes and polyalkylpolyisocyanatocarbomonocycle (PMN P–91–75) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into an MSDS as described in §721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive this substance from the employer are provided an MSDS as described in §721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(p)(volume set at 433,000 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 44073, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.9320 Reaction product of hydroxyethyl acrylate and methyl oxirane.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified as reaction product of hydroxyethyl acrylate and methyl oxirane (PMN P-86832) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(o).

(iv) *Disposal.* Requirements as specified in §721.85(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46000, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.9360 Reaction product of a monoalkyl succinic anhydride with an ω-hydroxy methacrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as reaction product of a monoalkyl succinic anhydride with an ω-hydroxy methacrylate (PMN P–88–701) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 45999, Oct. 31, 1990. Redesignated at 58 FR 29946, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.9400 Reaction product of phenolic pentaerythritol tetraesters with fatty acid esters and oils, and glyceride triesters.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as Reaction product of phenolic pentaerythritol tetraesters with fatty acid esters and oils, and glyceride triesters (PMNs P–91–1231, –1232, –1233, –1234, and –1235) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protectintg against such risk, into an MSDS as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive this substance, or who have received this substance from the employer within 5 years from the date the employer becomes aware of the new information described in section (a)(2)(i)(A) of this subparagraph, are provided an MSDS as described in § 721.72(c) containing the information required under paragraph

(a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125 (a), (h), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.575(b)(1) apply to this section.

[57 FR 44073, Sept. 23, 1992, as amended by 58 FR 34204, June 23, 1993]

### §721.9420 Polymethylcarbomonocycle, reaction product with 2-hydroxyethyl acrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as polymethylcarbomonocycle, reaction product with 2-hydroxyethyl acrylate (PMN P–90–1338) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(iii)(A), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(o).

(iv) *Disposal.* Requirements as specified in §721.85(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a) through (j) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[57 FR 44074, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### §721.9460 Tall oil fatty acids, reaction products with polyamines, alkyl substituted.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as tall oil fatty acids, reaction products with polyamines, alkyl substituted (PMN P–91–225) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in §721.72(a), (b), (c), (d), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(iii), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(q) and any use in a manner that will result in overspray over or into waters of the United States.

(iii) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), (c)(1), or use in any manner that will result in overspray over or into waters of the United States.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in §721.125(a), (b), (c), and (f) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[57 FR 44074, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.9470 Reserpine.

(a) *Chemical substance and significant new use subject to reporting.* (1) The

chemical substance reserpine (CAS No. 50–555) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63517, Dec. 1, 1993]

### § 721.9480 Resorcinol, formaldehyde substituted carbomonocycle resin.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance resorcinol, formaldehyde substituted carbomonocycle resin (PMN P–89–769) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(i) through (a)(5)(iii), (a)(6)(i), (a)(6)(ii), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(i) through (g)(1)(iv), blood effects), and eye effects, (g)(1)(ix), (g)(2)(i) (avoid eye contact as well) through (g)(2)(v), (g)(3)(ii), (g)(4)(i), (g)(4)(iii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) (use other than as an additive in rubber) and (q).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1), and (c)(1).

(v) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 39905, Sept. 28, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9500 Silane, (1,1-dimethylethoxy) dimethoxy(2-methyl propyl)-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance silane, (1,1-dimethylethoxy) dimethoxy (2-methylpropyl)- (PMN P–89–906) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(iv) through (a)(5)(vii), (a)(6)(i) through (a)(6)(vi), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(ii), (g)(2)(ii), (g)(2)(iv), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), (d), (f), (g), (h), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 46775, Nov. 6, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9505 Silanes substituted macrocycle polyethyl.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as silanes substituted macrocycle polyethyl (PMNs P–93–1423, 1424, 1425, and 1426) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of these substances.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11045, Mar. 1, 1995]

### § 721.9510 Silicone ester polyacrylate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an silicone ester polyacrylate (PMN P–85–296), is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85 (a)(1), (a)(2), (b)(1), (b)(2), (c)(1), and (c)(2).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (j) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51687, Oct. 4, 1993]

### § 721.9525 Acrylate substituted siloxanes and silicones.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as acrylate substituted siloxanes and silicones (PMN P–91–1153) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44074, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

### § 721.9526 Sodium perthiocarbonate.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as sodium perthiocarbonate (PMN P–94–2166) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45084, Aug. 30, 1995]

### § 721.9527 Bis(1,2,2,6,6-pentamethyl-4-piperidin-4-ol) ester of cycloaliphatic spiroketal.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as bis(1,2,2,6,6-pentamethyl-4-piperidin-4-ol) ester of cycloaliphatic spiroketal (PMN No. P–91–1361) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* For manufacturing workers only, requirements as specified in § 721.63(a)(4), (a)(5)(i), (a)(6)(i), and (b) (concentration set at 1.0 percent). For processing/use workers only, requirements as specified in § 721.63(a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(vi), (g)(1)(viii), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(3)(ii), (g)(4)(iii), and (g)(5). The following additional statements shall appear on each label and MSDS required by this paragraph: This substance may cause systemic effects, eye irritation.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (d), (f) through (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32241, June 8, 1993, as amended at 58 FR 29946, May 24, 1993]

### § 721.9530 Bis(2,2,6,6-tetramethylpiperidinyl) ester of cycloalkyl spiroketal.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as bis(2,2,6,6-tetramethyl piperidinyl) ester of cycloalkyl spiroketal (PMN P–88–0083) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* For the manufacturing workers only, requirements as specified in § 721.63(a)(4), (a)(5)(i), (a)(6)(i), and (b) (concentration set at 1.0 percent). For the processing/use workers only, requirements as specified in § 721.63 (a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (b) (concentration set at 1.0 per cent) and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(vi), (g)(1)(viii),

(g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(3)(ii), (g)(4)(iii), and (g)(5). The following additional human health hazard statements shall appear on each label and MSDS required by this paragraph: This substance may cause: systemic effects, eye irritation.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(l).

(iv) *Release to water.* Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a), (b), (c), (d), (f), (g), (h), (i), and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

[56 FR 40215, Aug. 13, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### §721.9540 Polysulfide mixture.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a polysulfide mixture (PMN P–93–1043) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If, as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, or the environment, the employer must incorporate this new information, and any information on methods for protecting against such risk, into the applicable Material Safety Data Sheet (MSDS) as described in §721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who will receive, or who have received this substance from the employer within 5 years from the date the employer becomes aware of the new information described in paragraph (a)(2)(i)(A) of this section, are provided an MSDS as described in §721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the Company becomes aware of the new information. Requirements as specified in §721.72(a), (b), (c), (d), (f), and (g)(4)(iii).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(p) (153,000 kg).

(iii) Release to water. Requirements as specified in §721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in §721.125(a), (b), (c), (f), (g), (h), (i), (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this section.

[60 FR 11045, Mar. 1, 1995]

### §721.9550 Sulfonamide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as a sulfonamide (PMN P–90–1732) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(iv), (a)(5)(v), (a)(5)(vi), (a)(5)(vii), (a)(6)(i), (b) (concentration set at 1.0 percent) and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(iv), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), (g)(4)(ii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 10 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44074, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9570 Halophenyl sulfonamide salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as halophenyl sulfonamide salt (PMN P–90–1730) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g) and (q).

(iii) *Release to water.* Requirements as specified in § 721.90 (a)(4), (b)(4), and (c)(4) (N = 10 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements as specified at § 721.125(a), (b), (c), (f), (g), (h), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 31970, July 20, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9580 Ethyl methanesulfonate.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance ethyl methanesulfonate (CAS No. 62–50–0) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63518, Dec. 1, 1993]

### § 721.9620 Aromatic sulfonic acid compound with amine.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as aromatic sulfonic acid compound with amine (PMN P–93–832) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 30 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51709, Oct. 4, 1993]

### § 721.9630 Polyfluorosulfonic acid salt.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as polyfluorosulfonic acid salt (P–90–587) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(y) (1) and (2).

(ii) [Reserved].

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.100 (a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[56 FR 15793, Apr. 17, 1991. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.9650 Tetramethylammonium salts of alkylbenzenesulfonic acid.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as tetramethylammonium salts of alkylbenzenesulfonic acid (PMN P–92–1364) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 80 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51687, Oct. 4, 1993]

### § 721.9656 Thiaalkanethiol.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a thiaalkanethiol (PMN P–94–1487) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(1), (b)(1), and (c)(1).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45084, Aug. 30, 1995]

### § 721.9658 Thiadiazole derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as a thiadiazole derivative (PMN P–94–1631) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(a), (c), (f), (v)(1), (w)(1), and (x)(1).

(ii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where n = 90).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (i), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 45085, Aug. 30, 1995]

### § 721.9660 Methylthiouracil.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance methylthiouracil (CAS No. 56–04–2) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63517, Dec. 1, 1993]

### § 721.9665 Organotin catalysts.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as organotin catalysts (PMNs P–93–853, P–93–854, P–93–855, P–93–856, P–93–857, and P–93–858) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Industrial, commercial and consumer activities.* Requirements as specified in § 721.80(v)(1), (v)(2), (w)(1), (w)(2), (x)(1), and (x)(2).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51709, Oct. 4, 1993]

### § 721.9675 Titanate [$Ti_6O_{13}$ (2-)], dipotassium.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as titanate [$Ti_6O_{13}$ (2-)], dipotassium (CAS No. 12056–51–8) (PMN P–90–0226) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (f), (g)(1)(ii), (g)(1)(vii), (g)(2)(ii), and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80 (f), (l), and (q). In addition, a significant new use of the substance is importation of the PMN substance if:

(A) Manufactured by other than the method described in premanufacture notice P–90–226.

(B) The bulk density measurements of the PMN substance in the pure form are less than 0.4 g/cm$^3$ or greater than 0.6 g/cm$^3$. The bulk density of each shipment must be verified, by lot, prior to clearing U.S. customs.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance as specified in § 721.125 (a), (b), (c), (f), (g), (h), and (i). In addition, records shall be kept identifying the foreign supplier and documenting, by lot, for each shipment, the method of manufacture and bulk density measurements.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[56 FR 40215, Aug. 13, 1991. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.9700 Monosubstituted alkoxyaminotrazines (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance monosubstituted alkoxyaminotrazines (PMN P–86–1043) is subject to reporting under this section for the significant new uses described in paragraph (a)(1)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* Requirements as specified in §721.63(a)(1) and (a)(3), (b) [concentration set at 0.1 percent], and (c).

(B) *Hazard communication program.* Requirements as specified in §721.72(b)(2), (d), (e) [concentration set at 0.1 percent], (f), and (g)(1)(iv), (g)(1)(vii), and (g)(1)(viii), (g)(2)(i) and (g)(2)(v), (g)(4)(xi), and (g)(5). The provisions of §721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under §721.72(a) and (c), respectively. The provision of §721.72(g) requiring placement of specific information on a MSDS does not apply when a MSDS is not required under §721.72(c).

(C) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(k).

(D) *Disposal.* Requirements as specified in §721.85(a)(1) and (a)(2) and (b)(1) and (b)(2).

(E) *Release to water.* Requirements as specified in §721.90(a)(4) [concern level of 10 ppb], (b)(4) [concern level of 10 ppb], and (c)(4)[concern level of 10 ppb].

(ii) [Reserved]

(2) The chemical substance monosubstituted alkoxyaminotrazines (PMN P–86–1044) is subject to reporting under this section for the significant new uses described in paragraph (a)(2)(i) of this section.

(i) The significant new uses are:

(A) *Protection in the workplace.* Requirements as specified in §721.63(a)(1), (a)(3), (a)(4), (a)(5)(iii) through (a)(5)(vii), and (a)(6)(i), (b) [concentration set at 0.1 percent], and (c).

(B) *Hazard communication program.* Requirements as specified in §721.72(b)(2), (d), (e) [concentration set at 0.1 percent], (f), and (g)(1)(iv), (g)(1)(vii), and (g)(1)(viii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v), (g)(4)(xi), and (5). The provisions of §721.72(d) requiring employees to be provided with information on the location and availability of a written hazard communication program and MSDSs do not apply when the written program and MSDS are not required under §721.72(a) and (c), respectively. The provision of §721.72(g) requiring placement of specific information on a MSDS does not apply when a MSDS in not required under §721.72(c).

(C) *Industrial, commercial, and consumer activities.* Requirements as specified in §721.80(k).

(D) *Disposal.* Requirements as specified in §721.85 (a)(1) and (a)(2) and (b)(1) and (b)(2).

(E) *Release to water.* Requirements as specified in §721.90(a)(4) [concern level of 1 ppb], (b)(4)[concern level of 1 ppb], and (c)(4)[concern level of 1 ppb].

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in §721.125(a) through (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of §721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of §721.1725(b)(1) apply to this section.

[55 FR 26108, June 26, 1990. Redesignated and amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### §721.9720 Disubstituted alkyl triazines (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substances identified generically as disubstituted alkyl triazines

(PMNs P–85–932 and P–85–933) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63 (a)(1), (a)(3), (a)(4), (a)(5)(iv), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b)(1), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(viii), (g)(2)(i), (g)(2)(ii), (g)(2)(iv), and (g)(2)(v). The provision of § 721.72(d) requiring that employees be provided with information on the location and availability of MSDSs does not apply when an MSDS is not required under § 721.72(c). The provision of § 721.72(g) requiring placement of specific information on an MSDS does not apply when an MSDS is not required under § 721.72(c).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(g).

(iv) *Release to water.* § 721.90(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (i) and (k).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 26101, June 26, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.9730 1,3,5-Triazin-2-amine, 4-dimethylamino-6-substituted-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances generically identified as 1,3,5-triazin-2-amine, 4-dimethylamino-6-substituted- (PMN Nos. P–92–343 and P–92–344) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(3), (a)(4), (a)(5)(i), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iii), (g)(1)(iv), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Disposal.* Requirements as specified in § 721.85 as thus amended: It is a significant new use to dispose of the process or use stream associated with any use of the substance or with any manner or method of manufacturing associated with any use of the substance by landfill.

(v) *Release to water.* Requirements as specified in § 721.90(a)(4) (where N = 1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[58 FR 32241, June 8, 1993, as amended at 58 FR 29946, May 24, 1993]

### § 721.9740 Brominated triazine derivative.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a brominated triazine derivative (PMN P–91–403) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(4), (a)(5)(iv), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72 (a),

(b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(iv), (g)(1)(vi), (g)(1)(vii), (g)(2)(iv), and (g)(5). The hazard communication requirements do not apply when the chemical substance is present in a plastic, elastomer, rubber matrix, or in solution.

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in section 721.80(q). Any amount of the PMN substance imported in a plastic, elastomer, rubber matrix, or in a solution, such that inhalation is precluded, shall not be included in the production limit calculations.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (d) and (f) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44075, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9750 2-Chloro-4,6-bis(substituted)-1,3,5-triazine, dihydrochloride.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as 2-chloro-4,6-bis(substituted)-1,3,5-triazine, dihydrochloride (PMN P–91–659) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(3)(i), (g)(3)(ii), (g)(4)(i), and (g)(5). The following additional statements shall appear on each label and MSDS required by this paragraph: This substance may be toxic to terrestrial organisms and plants. Notice to users: Release to water restrictions apply.

(ii) *Disposal.* Requirements as specified in § 721.85. A significant new use of this substance is any release of this substance to land.

(iii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 10 ppb).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a), (b), (c), (f), (g), (h), (j), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[59 FR 27485, May 27, 1994]

### § 721.9780 1,3,5-Triazine-2,4,6-triamine, hydrobromide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance 1,3,5-triazine-2,4,6-triamine, hydrobromide (PMN P–89–844) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* A significant new use of this substance is any manner or method of manufacture, import, or processing associated with any use of this substance without providing risk notification as follows:

(A) If as a result of the test data required under the section 5(e) consent order for this substance, the employer becomes aware that this substance may present a risk of injury to human health, the employer must incorporate this new information, and any information on methods for protecting against such risk, into a Material Safety Data Sheet (MSDS) as described in § 721.72(c) within 90 days from the time the employer becomes aware of the new information. If this substance is not being manufactured, imported, processed, or used in the employer's workplace, the employer must add the new information to an MSDS before the substance is reintroduced into the workplace.

(B) The employer must ensure that persons who have received, or will receive, this substance from the employer are provided an MSDS as described in § 721.72(c) containing the information required under paragraph (a)(2)(i)(A) of this section within 90 days from the time the employer becomes aware of the new information.

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (295,000 kg).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), (c), (h) and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39905, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.9800 Poly(substituted triazinyl) piperazine (generic name).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance poly(substituted triazinyl) piperazine (PMN P–88–436) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Hazard communication program.* Requirements as specified in § 721.72(b)(2),(c),(e), (f), (g)(1) (statement—health effects not fully determined), (g)(2)(i) through (iii) and (g)(5).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a) through (c), (g), and (h).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 32419, Aug. 9, 1990. Redesignated and amended at 58 FR 29946, 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9820 Substituted triazole.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance generically identified as a substituted triazole (PMN P–90–1731) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(i), (a)(5)(ii), (a)(5)(iii), (a)(6)(i), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(i), (g)(1)(iv), (g)(1)(v), (g)(1)(vi), (g)(1)(vii), (g)(1)(ix), (g)(2)(i), (g)(2)(ii), (g)(2)(iii), (g)(2)(iv), (g)(2)(v), (g)(3)(i), (g)(3)(ii), (g)(4)(i), (g)(4)(ii), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(iv) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 12).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44075, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9850 2,4,8,10-Tetraoxa-3,9-diphosphaspiro[5.5]undecane, 3,9-bis[2,4,6-tris(1,1-dimethylethyl)phenoxy]-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified as 2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane, 3,9-bis[2,4,6-tris(1,1-dimethyl-ethyl)phenoxy]- (PMN P–91–65; CAS number 126505–35–9) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (a)(4), (a)(5)(ii), (a)(5)(iv), (a)(5)(v), (a)(6)(i), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iii), (g)(1)(vi), (g)(1)(ix), (g)(2)(i) through (v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (h) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.1725(b)(1) apply to this section.

[57 FR 44075, Sept. 23, 1992, as amended at 58 FR 29946, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9870 Unsaturated organic compound.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance unsaturated organic compound (PMN P–84–358) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(b)(2), (c), (d), (e) (concentration set at 0.1 percent), (f), (g)(1)(vii), (g)(2)(i) through (g)(2)(iii), (g)(2)(v), (g)(4)(i) and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(k) (as component in industrial coatings) and (y)(1).

(iv) *Disposal.* Requirements as specified in 721.85(a)(1), (b)(1), and (c)(1) or (recycled to a permit holding commercial solvent recovery operation).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125 (a), (b), (c), (e), (f), and (h).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 39901, Sept. 28, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.9892 Alkylated urea.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an alkylated urea (PMN P–93–1649) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(3), (b) (concentration set at 1.0 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 1.0 percent), (f), (g)(1)(iii), (g)(1)(ix), (g)(2)(i), (g)(2)(iii), (g)(2)(v), and (g)(5).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(l) and (q).

(b) *Specific requirements.* The provisions of subpart A of this part apply to

this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.* The provisions of § 721.575(b)(1) apply to this section.

[60 FR 45085, Aug. 30, 1995]

### § 721.9900 Urea, condensate with poly[oxy(methyl-1,2-ethanediyl)]-α-(2-aminomethylethyl)-μ-(2-aminoethylethoxy) (generic name).

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance urea, condensate with poly[oxy(methyl-1,2-ethanediyl)]-α-(2-aminomethylethyl)-μ-(2-aminoethylethoxy) (PMN P–84–482) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(q).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: Recordkeeping requirements specified in § 721.125(a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

(3) *Determining whether a specific use is subject to this section.*The provisions of § 721.1725(b)(1) apply to this section.

[55 FR 26102, June 26, 1990. Redesignated and amended at 58 FR 29947, May 24, 1993; 58 FR 34204, June 23, 1993]

### § 721.9920 Urea, (hexahydro-6-methyl-2-oxopyrimidinyl)-.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance urea, (hexahydro-6-methyl-2oxopyrimidinyl)- (PMN P–89–303) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(p) (level set at 1,975,000 and 2,200,000 kg).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), (c), and (i).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this significant new use rule.

[55 FR 26102, June 26, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.9925 Aminoethylethylene urea methacrylamide.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as an aminoethylethylene urea methacrylamide (PMN P–89–1038) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are: (i) *Industrial, commercial and consumer activities.* Requirements as specified in § 721.80(f).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125(a) and (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[58 FR 51709, Oct. 4, 1993]

### § 721.9930 Urethane.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The

chemical substance urethane, CAS Number 51–79–6, is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new use is: Any use.

(b) *Special provisions.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Persons who must report.* Section 721.5 applies to this section except for § 721.5(a)(2). A person who intends to manufacture, import, or process for commercial purposes the substance identified in paragraph (a)(1) of this section and intends to distribute the substance in commerce must submit a significant new use notice.

(2) [Reserved]

[51 FR 9453, Mar. 19, 1986. Redesignated at 53 FR 2845, Feb. 2, 1988. Further redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.9940 Urethane acrylate.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance identified generically as urethane acrylate (PMN P–85–301) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), and (h)(2)(i)(D).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(iv) *Disposal.* Requirements as specified in § 721.85(a)(1), (b)(1), and (c)(1).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance: § 721.125(a) through (j).

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[55 FR 46003, Oct. 31, 1990. Redesignated at 58 FR 29947, May 24, 1993, as amended at 58 FR 34204, June 23, 1993]

### § 721.9957 N-Nitroso-N-methylurethane.

(a) *Chemical substance and significant new use subject to reporting.* (1) The chemical substance N-nitroso-N-methylurethane (CAS No. 615–53–2) is subject to reporting under this section for the significant new use described in paragraph (a)(2) of this section.

(2) The significant new use is: Manufacture, import, or processing of 10,000 pounds or more per year per facility for any use.

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* The following recordkeeping requirements are applicable to manufacturers, importers, and processors of this substance, as specified in § 721.125(a), (b), and (c).

(2) [Reserved]

[58 FR 63518, Dec. 1, 1993]

### § 721.9962 Trifunctional aliphatic blocked urethane cross-linker.

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substance identified generically as a trifunctional aliphatic blocked urethane cross-linker (PMN P–94–1009) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (where N = 1 ppb).

(ii) [Reserved]

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Recordkeeping requirements specified in

§ 721.125(a), (b), (c), and (k) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[60 FR 11045, Mar. 1, 1995]

### § 721.9975 Zirconium(IV), [2,2-bis[(2-propenyloxy)methyl]-1-butanolato-01,02]tris(2-propenoato-O-)-.

(a) *Chemical substances and significant new uses subject to reporting.* (1) The chemical substance zirconium(IV) 2,2-(bis-2-propenyloxy)methyl)-1-butanolato-01,02]tris 2-propenoato-*O*)-(PMN P–91–389) is subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(2)(iii), (a)(2)(iv), (a)(3), (a)(4), (a)(5)(xi), (a)(6)(i), (a)(6)(ii), (a)(6)(iv), (b) (concentration set at 0.1 percent), and (c).

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (e) (concentration set at 0.1 percent), (f), (h)(1)(i)(A), (h)(1)(i)(B), (h)(1)(i)(C), (h)(1)(vi), (h)(2)(i)(B), (h)(2)(i)(C), (h)(2)(i)(D), and (h)(2)(iii)(A).

(iii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(o).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping requirements.* Requirements as specified in § 721.125(a) through (i) are applicable to manufacturers, importers, and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[57 FR 44075, Sept. 23, 1992, as amended at 58 FR 34204, June 23, 1993]

# PART 723—PREMANUFACTURE NOTIFICATION EXEMPTIONS

## Subpart A—[Reserved]

## Subpart B—Specific Exemptions

Sec.
723.50 Chemical substances manufactured in quantities of 10,000 kilograms or less per year, and chemical substances with low environmental releases and human exposures.
723.175 Chemical substances used in or for the manufacture or processing of instant photographic and peel-apart film articles.
723.250 Polymers.

AUTHORITY: 15 U.S.C. 2604.

## Subpart A—[Reserved]

## Subpart B—Specific Exemptions

### § 723.50 Chemical substances manufactured in quantities of 10,000 kilograms or less per year, and chemical substances with low environmental releases and human exposures.

(a) *Purpose and scope.* (1) This section grants an exemption from the premanufacture notice requirements of section 5(a)(1)(A) of the Toxic Substances Control Act (15 U.S.C. 2604(a)(1)(A)) for the manufacture of:

(i) Chemical substances manufactured in quantities of 10,000 kilograms or less per year.

(ii) Chemical substances with low environmental releases and human exposures.

(2) To manufacture a new chemical substance under the terms of this exemption a manufacturer must:

(i) Submit a notice of intent to manufacture 30 days before manufacture begins, as required under paragraph (e) of this section.

(ii) Comply with all other provisions of this section.

(b) *Definitions.* The following definitions apply to this subpart.

(1) *Act* means the Toxic Substances Control Act (15 U.S.C. 2601 et seq).

(2) *Consumer* means a private individual who uses a chemical substance or any product containing the chemical substance in or around a permanent or temporary household or residence, during recreation, or for any personal use or enjoyment.

(3) *Environment* has the same meaning as in section 3 of the Act (15 U.S.C. 2602).

(4) *Environmental transformation product* means any chemical substance resulting from the action of environmental processes on a parent compound that changes the molecular identity of the parent compound.

(5) *Metabolite* means a chemical entity produced by one or more enzymatic or nonenzymatic reactions as a result of exposure of an organism to a chemical substance.

(6) *Serious acute effects* means human disease processes or other adverse effects that have short latency periods for development, result from short-term exposure, or are a combination of these factors and that are likely to result in death, severe or prolonged incapacitation, disfigurement, or severe or prolonged loss of the ability to use a normal bodily or intellectual function with a consequent impairment of normal activities.

(7) *Serious chronic effects* means human disease processes or other adverse effects that have long latency periods for development, result from long-term exposure, are long-term illnesses, or are a combination of these factors and that are likely to result in death, severe or prolonged incapacitation, disfigurement, or severe or prolonged loss of the ability to use a normal bodily or intellectual function with a consequent impairment of normal activities.

(8) *Significant environmental effects* means:

(i) Any irreversible damage to biological, commercial, or agricultural resources of importance to society;

(ii) Any reversible damage to biological, commercial, or agricultural resources of importance to society if the damage persists beyond a single generation of the damaged resource or beyond a single year; or

(iii) Any known or reasonably anticipated loss of members of an endangered or threatened species. Endangered or threatened species are those species identified as such by the Secretary of the Interior in accordance with the Endangered Species Act, as amended (16 U.S.C. 1531).

(9) *Site* means a contiguous property unit. Property divided only by a public right-of-way is one site. There may be more than one manufacturing plant on a single site.

(10) The terms *byproduct, EPA, importer, impurity, known to or reasonably ascertainable, manufacture, manufacturer, new chemical substance, person, possession or control, and test data* have the same meanings as in §720.3 of this chapter.

(c) *Exemption categories.* Except as provided in paragraph (d) of this section, this exemption applies to:

(1) Any manufacturer of a new chemical substance manufactured in quantities of 10,000 kilograms or less per year under the terms of this exemption.

(2) Any manufacturer of a new chemical substance satisfying all of the following low environmental release and low human exposure eligibility criteria:

(i) *Consumers and the general population.* For exposure of consumers and the general population to the new chemical substance during all manufacturing, processing, distribution in commerce, use, and disposal of the substance:

(A) No dermal exposure.

(B) No inhalation exposure (except as described in paragraph (c)(2)(iv) of this section.

(C) Exposure in drinking water no greater than a 1 milligram per year (estimated average dosage resulting from drinking water exposure in streams from the maximum allowable concentration level from ambient surface water releases established under paragraph (c)(2)(iii) of this section or a higher concentration authorized by EPA under paragraph (c)(2)(iii) of this section).

(ii) *Workers.* For exposure of workers to the new chemical substance during all manufacturing, processing, distribution in commerce, use and disposal of the substance:

(A) No dermal exposure (this criterion is met if adequate dermal exposure controls are used in accordance with applicable EPA guidance).

(B) No inhalation exposure (this criterion is considered to be met if adequate inhalation exposure controls are used in accordance with applicable EPA guidance).

(iii) *Ambient surface water.* For ambient surface water releases, no releases resulting in surface water concentrations above 1 part per billion, calculated using the methods prescribed in §§721.90 and 721.91, unless EPA has approved a higher surface water concentration supported by relevant and scientifically valid data submitted to EPA in a notice under paragraph (e) of this section on the substance or a close structural analogue of the substance which demonstrates that the new substance will not present an unreasonable risk of injury to aquatic species or human health at the higher concentration.

(iv) *Incineration.* For ambient air releases from incineration, no releases of the new chemical substance above 1 microgram per cubic meter maximum annual average concentration, calculated using the formula:

(kg/day of release after treatment) multiplied by (number of release days per year) multiplied by ($9.68 \times 10^{-6}$) micrograms per cubic meter.

(v) *Land or groundwater.* For releases to land or groundwater, no releases to groundwater, to land, or to a landfill unless the manufacturer has demonstrated to EPA's satisfaction in a notice under paragraph (e) of this section that the new substance has negligible groundwater migration potential.

(d) *Chemical substances that cannot be manufactured under this exemption.* A new chemical substance cannot be manufactured under this section, notwithstanding satisfaction of the criterion of paragraphs (c)(1) or (c)(2) of this section, if EPA determines, in accordance with paragraph (g) of this section, that the substance, any reasonably anticipated metabolites, environmental transformation products, or byproducts of the substance, or any reasonably anticipated impurities in the substance may cause, under anticipated conditions of manufacture, processing, distribution in commerce, use, or disposal of the new chemical substance:

(1) Serious acute (lethal or sublethal) effects.

(2) Serious chronic (including carcinogenic and teratogenic) effects.

(3) Significant environmental effects.

(e) *Exemption notice.* (1) A manufacturer applying for an exemption under either paragraph (c)(1) or (c)(2) of this section must submit an exemption notice to the EPA at least 30 days before manufacture of the new chemical substance begins. The notice must be sent in writing to: TSCA Document Control Officer, (7407), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. The date of submission will be the date on which the notice is received by the TSCA Document Control Officer. EPA will acknowledge the receipt of the notice by letter. The letter will identify the date on which the review period begins. The notice shall be submitted using EPA Form No. 7710–25 (''the PMN form''), which may be obtained from EPA by writing the Environmental Assistance Division, (7408), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC. 20460, or by calling the TSCA Assistance Information Service at (202) 554–1404; TDD (202) 554–0551; online service modem (202) 554–5603.

(2) The notice shall contain the information described below, pursuant to the referenced provisions of §720.45.

(i) Manufacturer identity.

(ii) Chemical identity (§720.45(a)).

(iii) Impurities (§720.45(b)).

(iv) Known synonyms or trade names (§720.45(c)).

(v) Byproducts (§720.45(d)).

(vi) Production volume (§720.45(e)). (A) Manufacturers submitting an exemption application under paragraph (c)(1) of this section will be assumed to be manufacturing at an annual production volume of 10,000 kilograms. Manufacturers who intend to manufacture an exempted substance at annual volumes of less than 10,000 kilograms and wish EPA to conduct its risk assessment based upon such lesser annual

production level rather than a 10,000–kilograms level, may so specify by writing the lesser annual production volume in the appropriate box on the PMN form and marking the adjacent binding option box. Manufacturers who opt to specify annual production levels below 10,000 kilograms and who mark the production volume binding option box shall not manufacture more than the specific annual amount of the exempted substance unless a new exemption notice for a higher (up to 10,000 kgs) manufacturing volume is submitted and approved pursuant to this section.

(B) Manufacturers submitting an exemption under paragraph (c)(2) of this section shall list the estimated maximum amount to be manufactured during the first year of production and the estimated maximum amount to be manufactured during any 12–month period during the first 3 years of production.

(vii) Description of intended categories of use. (§720.45(f)).

(viii) For manufacturer-controlled sites, the manufacturer shall supply identity of manufacturing sites, process descriptions, and worker exposure and environmental release information (§720.45(g)); for sites not controlled by the manufacturer, processing and use operation descriptions, estimated number of processing and use sites, and worker exposure/environmental release information (§720.45(h)). A manufacturer applying for an exemption under paragraph (c)(1) of this section need not provide information on worker exposure and environmental release referenced in paragraphs (e)(2)(viii) of this section if such information is not known or not readily available to the manufacturer. To assist in reporting this information, manufacturers may obtain a copy of EPA's Guidance for Reporting Occupational Exposure and Environmental Release Information under 40 CFR 723.50, available from the Environmental Assistance Division at the address listed in paragraph (e)(1) of this section. Where worker exposure and environmental release information is not supplied by the manufacturer, EPA will generally apply ''bounding estimates'' (i.e., exposure estimates higher than those incurred by persons in the population with the highest exposure) to account for uncertainties in actual exposure and release scenarios.

(ix) Type and category of notice. The manufacturer must clearly indicate on the first page of the PMN form that the submission is a ''TSCA section 5(h)(4) exemption notice,'' and must indicate whether the notice is being submitted under paragraph (c)(1) or (c)(2) of this section. Manufacturers of chemical substances that qualify for an exemption under both paragraph (c)(1) and (c)(2) of this section may apply for either exemption, but not both.

(x) Test data (§720.50).

(xi) Certification. In addition to the certifications required in EPA form 7710–25, the following certifications shall be included in notices under this section. The manufacturer must certify that:

(A) The manufacturer intends to manufacture or import the new chemical substance for commercial purposes, other than in small quantities solely for research and development, under the terms of this section.

(B) The manufacturer is familiar with the terms of this section and will comply with those terms.

(C) The new chemical substance for which the notice is submitted meets all applicable exemption conditions.

(D) For substances manufactured under paragraph (c)(1) of this section, the manufacturer intends to commence manufacture of the exempted substance for commercial purposes within 1 year of the date of the expiration of the 30–day review period.

(xii) Sanitized copy of notice. (A) The manufacturer must make all claims of confidentiality in accordance with paragraph (l) of this section. If any information is claimed confidential, the manufacturer must submit a second copy of the notice, with all information claimed as confidential deleted, in accordance with paragraph (l)(3) of this section.

(B) If the manufacturer does not provide the second copy, the submission will be considered incomplete.

(3) *Incomplete notices.* If EPA receives a submission which does not include all of the information required under this

paragraph (e) of this section, the submission will be determined to be incomplete by EPA. When a submission for a new chemical substance has been determined to be incomplete, a manufacturer reapplying for an exemption for the new chemical substance must submit a new exemption notice containing all the information required under this paragraph (e) of this section including a certification page containing an original dated signature; partial submissions sent to EPA to supplement notices declared incomplete will not be accepted. Photocopied pages from previously submitted exemption forms will be accepted provided that the certifications page contains an original dated signature.

(f) *Multiple exemption holders.* (1) A manufacturer who intends to manufacture a substance for which an exemption under this section was previously approved may apply for an exemption under paragraph (c)(1) or (c)(2) of this section; however, EPA will not approve any subsequent exemption application under paragraph (c)(1) of this section unless it can determine that the potential human exposure to, and environmental release of, the new chemical substance at the higher aggregate production volume will not present an unreasonable risk of injury to human health or the environment.

(2)(i) If EPA proposes to deny an exemption application for a substance for which another manufacturer currently holds an exemption, and that proposed denial is based exclusively on the cumulative human exposure or environmental release of the substance which precludes the EPA from determining that the subsequent applicant's activities will not present an unreasonable risk of injury to human health or the environment, the EPA will notify the first exemption holder that it must, within 21 days of its receipt of EPA's notice, either:

(A) Provide a new certification that it has commenced, or that it will commence, manufacture of the new chemical substance under this section within 1 year of the expiration of its exemption review period; or

(B) Withdraw its exemption for the new chemical substance.

(ii) If the first exemption holder does not respond to the EPA's notice under paragraph (f)(2)(i) of this section within the prescribed time period, EPA shall issue a notice of ineligibility to the first exemption holder under the provisions of paragraph (h)(2) of this section.

(g) *Review period.* (1) EPA will review the notice submitted under paragraph (e) of this section to determine whether manufacture of the new chemical substance is eligible for the exemption. The review period will end 30 days after receipt of the notice by the TSCA Document Control Officer. To provide additional time to address any unresolved issues concerning an exemption application, the exemption applicant may, at any time during the review period, request a suspension of the review period pursuant to the provisions of §720.75(b) of this chapter.

(2) Upon expiration of the 30–day review period, if EPA has taken no action, the manufacturer may consider its exemption approved and begin to manufacture the new chemical substance under the terms described in its notice and in this section.

(h) *Notice of ineligibility*—(1) *During the review period.* If the EPA determines during the review period that manufacture of the new chemical substance does not meet the terms of this section or that there are issues concerning toxicity or exposure that require further review which cannot be accomplished within the 30–day review period, EPA will notify the manufacturer by telephone that the substance is not eligible. This telephone notification will subsequently be confirmed by certified letter that identifies the reasons for the ineligibility determination. The manufacturer may not begin manufacture of the new chemical substance without complying with section 5(a)(1) of the Act or submitting a new notice under paragraph (e) of this section that satisfies EPA's concerns.

(2) *After the review period.* (i)(A) If at any time after the review period specified in paragraph (g) of this section the Assistant Administrator for the Office of Prevention, Pesticides, and Toxic Substances (''the Assistant Administrator'') makes a preliminary determination that manufacture of the new

chemical substance does not meet the terms of this section, the Assistant Administrator will notify the manufacturer by certified letter that EPA believes that the new chemical substance does not meet the terms of the section.

(B) The manufacturer may continue to manufacture, process, distribute in commerce, and use the substance after receiving the notice under paragraph (h)(2)(i)(A) of this section if the manufacturer was manufacturing, processing, distributing in commerce, or using the substance at the time of the notification and if the manufacturer submits objections or an explanation under paragraph (h)(2)(ii) of this section. Manufacturers not manufacturing, processing, distributing in commerce, or using the substance at the time of the notification may not begin manufacture until EPA makes its final determination under paragraph (h)(2)(iii) of this section.

(ii) A manufacturer who has received notice under paragraph (h)(2)(i)(A) of this section may submit, within 15 days of receipt of written notification, detailed objections to the determination or an explanation of its diligence and good faith efforts in attempting to comply with the terms of this section.

(iii) The Assistant Administrator will consider any objections or explanation submitted under paragraph (h)(2)(ii) of this section and will make a final determination. The Assistant Administrator will notify the manufacturer of the final determination by telephone within 15 days of receipt of the objections or explanation, and subsequently by certified letter.

(iv) If the Assistant Administrator determines that manufacture of the new chemical substance meets the terms of this section, the manufacturer may continue or resume manufacture, processing, distribution in commerce, and use in accordance with the terms of this section.

(v) If the Assistant Administrator determines that manufacture of the new chemical substance does not meet the terms of this section and that the manufacturer did not act with due diligence and in good faith to meet the terms of this section, the manufacturer must cease any continuing manufacture, processing, distribution in commerce, and use of the new chemical substance within 7 days of the written notification under paragraph (h)(2)(iii) of this section. The manufacturer may not resume manufacture, processing, distribution in commerce, and use of the new chemical substance until it submits a notice under section 5(a)(1) of the Act and part 720 of this chapter and the notice review period has ended.

(vi) If the Assistant Administrator determines that manufacture of the new chemical substance does not meet the terms of this section and that the manufacturer acted with due diligence and in good faith to meet the terms of this section, the manufacturer may continue manufacture, processing, distribution in commerce, and use of the new chemical substance if:

(A) It was actually manufacturing, processing, distributing in commerce, or using the chemical substance at the time it received the notification specified in paragraph (h)(2)(i)(A) of this section.

(B) It submits a notice on the new chemical substance under section 5(a)(1) of the Act and part 720 of this chapter within 15 days of receipt of the written notification under paragraph (h)(2)(iii) of this section. Such manufacture, processing, distribution in commerce, and use may continue unless EPA takes action under section 5(e) or 5(f) of the Act.

(3) Action under this paragraph does not preclude action under sections 7, 15, 16, or 17 of the Act.

(i) *Additional information*. If the manufacturer of a new chemical substance under the terms of this exemption obtains test data or other information indicating that the new chemical substance may not qualify under terms of this section, the manufacturer must submit these data or information to EPA within 15 working days of receipt of the information. If, during the notice review period specified in paragraph (g) of this section, the submitter obtains possession, control, or knowledge of new information that materially adds to, changes, or otherwise makes significantly more complete the information included in the notice, the submitter must send that information to the address listed on the notice form

within 10 days of receiving the new information, but no later than 5 days before the end of the notice review period. The new submission must clearly identify the submitter and the exemption notice to which the new information is related. If the new information becomes available during the last 5 days of the notice review period, the submitter must immediately inform its EPA contact for that notice by telephone.

(j) *Changes in manufacturing site, use, human exposure and environmental release controls, and certain manufacturing volumes.* (1) Except as provided in paragraph (j)(6) of this section, chemical substances manufactured under this section must be manufactured at the site or sites described, for the uses described, and under the human exposure and environmental release controls described in the exemption notice under paragraph (e) of this section.

(2) Where the manufacturer lists a specific physical form in which the new chemical substance will be manufactured, processed, and/or used, the manufacturer must continue manufacturing, processing, and/or using the new chemical substance in either the same physical form described in the notice under paragraph (e), or in a physical form which will not increase the human exposure to or environmental release of the new chemical substance over those exposures or releases resulting from the specified physical form (e.g., a manufacturer which specifies that the new chemical substance will be produced in a non-volatile liquid form generally may not change to a respirable powder form).

(3) The annual production volume of chemical substances manufactured under paragraph (c)(1) of this section for which the manufacturer designated a binding annual production volume pursuant to paragraph (e)(2)(vi) of this section must not exceed that designated volume.

(4) Any person who manufactures a new chemical substance under paragraph (c)(1) or (c)(2) of this section must comply with the provisions of this section, including submission of a new notice under paragraph (e) of this section, before:

(i) Manufacturing the new chemical substance at a site that was not approved in a previous exemption notice for the substance, except as provided in paragraph (j)(6) of this section.

(ii) Manufacturing the new chemical substance for a use that was not approved in a previous exemption notice for the substance.

(iii) Manufacturing the new chemical substance without employing the human exposure and environmental release controls approved in a previous exemption notice for the substance.

(iv) Manufacturing the new chemical substance in a physical form different than that physical form approved in a previous exemption notice for the substance and which form may increase the human exposure to, or environmental release of, the new chemical substance over those exposures or releases resulting from the physical form approved in the previous notice.

(v) Manufacturing the chemical substance in annual production volumes above any volume designated by the manufacturer as binding under paragraph (e)(2)(vi) of this section in a previous exemption notice for the substance.

(5) In an exemption notice informing EPA of a change in site, use, or worker protection, or environmental release controls, the manufacturer is not required to provide all of the same information submitted to EPA in a previous exemption notice for that chemical substance. The new exemption notice, however, must indicate the identity of the new chemical substance; the manufacturer's name; the name and telephone number of a technical contact; and location of the new site, new worker protection or environmental release controls, and new use information. The notice must also include the EPA-designated exemption number assigned to the previous notice and a new certification by the manufacturer, as described in paragraph (e)(2)(xi) of this section.

(6)(i) A manufacturer may, without submitting a new notice, manufacture the new chemical substance at a site not listed in its exemption application under the following conditions:

(A) the magnitude, frequency, and duration of exposure of individual

workers to the new chemical substance at the new manufacturing site is equal to, or less than, the magnitude, frequency, and duration of exposure of the individual workers to the new chemical substance at the manufacturing site for which the EPA performed its original risk-assessment pursuant to the original exemption notice; and

(B) Either (*1*) at the new manufacturing site, the manufacturer does not release to surface waters any of the new chemical substance, or any waste streams containing the new chemical substance; or (*2*) at the new manufacturing site, the manufacturer maintains surface water concentrations of the chemical substance, resulting from direct or indirect discharges from the manufacturing site, at or below 1 part per billion, or at or below an alternative concentration level approved by the Agency in writing or under the procedures described in paragraph (c)(2)(iii) of this section, using the water concentration calculation method described at §§721.90 and 721.91.

(ii) The manufacturer shall notify EPA of any new manufacturing site no later than 30 days after the commencement of manufacture of the new chemical substance under the exemption at the new manufacturing site as follows:

(A) The notification must contain the EPA-designated exemption number to which the notification applies, manufacturer identity, the street address of the new manufacturing site, the date on which manufacture commenced at the new site, the name and telephone number of a technical contact at the new site, any claim of confidentiality, and a statement that the notification is an amendment to the original exemption application under the terms of this section.

(B) The notification may be submitted on EPA form 7710–56 ''Notice of Commencement of Manufacture;'' however, the manufacturer must add the statement required under paragraph (j)(6)(ii)(A) of this section that the notification is an amendment to the original exemption.

(C) The notification must contain an original signature of an authorized official of the manufacturer.

(k) *Customer notification.* (1) Manufacturers of new chemical substances described in paragraphs (c)(1) and (c)(2) of this section must notify processors and industrial users that the substance can be used only for the uses specified in the exemption notice at paragraph (e) of this section. The manufacturer must also inform processors and industrial users of any controls specified in the exemption notice. The manufacturer may notify processors and industrial users by means of a container labeling system, written notification, or any other method that adequately informs them of use restrictions or controls.

(2) A manufacturer of a new chemical substance described in paragraph (c)(2) of this section may distribute the chemical substance only to other persons who agree in writing to not further distribute the substance until it has been reacted, incorporated into an article, or otherwise rendered into a physical form or state in which environmental releases and human exposures above the eligibility criteria in paragraph (c)(2) of this section are not likely to occur.

(3) If the manufacturer learns that a direct or indirect customer is processing or using the new substance in violation of use restrictions or without imposing prescribed worker protection or environmental release controls, the manufacturer must cease distribution of the substance to the customer or the customer's supplier immediately unless the manufacturer is able to document each of the following:

(i) That the manufacturer has, within 5 working days, notified the customer in writing that the customer has failed to comply with the conditions specified in this section and the exemption notice under paragraph (e) of this section.

(ii) That, within 15 working days of notifying the customer of the noncompliance, the manufacturer received from the customer, in writing, a statement of assurance that the customer is aware of the terms of this section and the exemption notice and will comply with those terms.

(4) If, after receiving a statement of assurance from a customer under paragraph (k)(3)(ii) of this section, the manufacturer obtains knowledge that the customer has again failed to comply with any of the conditions specified in this section or the exemption notice,

the manufacturer shall cease supplying the new chemical substance to that customer and shall report the failure to comply to EPA within 15 days of obtaining this knowledge. Within 30 days of its receipt of the report, EPA will notify the manufacturer whether, and under what conditions, distribution of the chemical substance to the customer may resume.

(l) *Confidentiality*. (1) If the manufacturer submits information to EPA under this section which the manufacturer claims to be confidential business information, the manufacturer must clearly identify the information at the time of submission to EPA by bracketing, circling, or underlining it and stamping it with ''CONFIDENTIAL'' or some other appropriate designation. Any information so identified will be treated in accordance with the procedures in part 2 of this chapter. Any information not claimed confidential at the time of submission may be made available to the public without further notice.

(2)(i) Any person who asserts a claim of confidentiality for chemical identity under this paragraph (l) must provide a generic chemical name that is only as generic as necessary to protect the confidential chemical identity of the particular chemical substance. The name should reveal the specific chemical identity to the maximum extent possible.

(ii) The generic name provided by the manufacturer will be subject to EPA review and approval in accordance with the procedures specified in §720.85(b)(6) of this chapter. The generic name provided by the submitter or an alternative selected by EPA under these procedures will be placed on a public list of substances exempt under this section.

(3) If any information is claimed confidential, the manufacturer must submit a second copy of the notice with all information claimed as confidential deleted. EPA will place the second copy in the public file.

(m) *Exemptions granted under superseded regulations.* Manufacturers holding exemptions granted under the superseded requirements of this section (as in effect on May 26, 1995) shall either continue to comply with those requirements (including the production volume limit) or apply for a new exemption pursuant to this section. EPA will not accept requests to amend exemptions granted under the superseded requirements; manufacturers wishing to amend such exemptions must submit a new exemption under paragraph (e) of this section. If a new exemption for a new chemical substance is granted under this exemption to the manufacturer holding an exemption under the superseded requirements, the exemption under the superseded requirements for such substance shall be void.

(n) *Submission of information*. Information submitted to EPA under this section must be sent in writing to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460.

(o) *Compliance* . (1) Failure to comply with any provision of this section is a violation of section 15 of the Act (15 U.S.C. 2614).

(2) Submitting materially misleading or false information in connection with the requirements of any provision of this section is a violation of this section and therefore a violation of section 15 of the Act (15 U.S.C. 2614).

(3) Violators may be subject to the civil and criminal penalties in section 16 of the Act (15 U.S.C. 2615) for each violation.

(4) EPA may seek to enjoin the manufacture or processing of a chemical substance in violation of this section, or act to seize any chemical substance manufactured or processed in violation of this section, or take other action under the authority of section 7 of the Act (15 U.S.C. 2606) or section 17 of the Act (15 U.S.C. 1616).

[60 FR 16346, Mar. 29, 1995, as amended at 60 FR 34465, July 3, 1995]

### § 723.175 Chemical substances used in or for the manufacture or processing of instant photographic and peel-apart film articles.

(a) *Purpose and scope.* (1) This section grants an exemption from the premanufacture notice requirements of section 5(a)(1)(A) of the Toxic Substances Control Act (15 U.S.C. 2604(a)(1)(A)) for the manufacture and

processing of new chemical substances used in or for the manufacture or processing of instant photographic and peel-apart film articles.

(2) To manufacture a new chemical substance under the terms of this exemption, a manufacturer of instant photographic or peel-apart film articles must:

(i) Submit an exemption notice when manufacture begins under paragraph (i) of this section.

(ii) Comply with certain requirements to limit exposure to the new chemical substance under paragraphs (e), (f), (g), and (h) of this section.

(iii) Comply with all recordkeeping requirements under paragraph (j) of this section.

(b) *Definitions.* (1) *Act* means the Toxic Substances Control Act (15 U.S.C. 2601 *et seq.*).

(2) An *article* is a manufactured item (i) which is formed to a specific shape or design during manufacture, (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use, and (iii) which has either no change of chemical composition during its end use or only those changes of composition which have no commercial purpose separate from that of the article and that may occur as described in § 710.2 of this chapter except that fluids and particles are not considered articles regardless of shape or design.

(3) The term *byproduct, EPA, impurities, person,* and *site* have the same meanings as in § 710.2 of this chapter.

(4) The term *category of chemical substances* has the same meaning as in section 26(c)(2) of the Act (15 U.S.C. 2625).

(5) The terms *chemical substance, distribute in commerce, distribution in commerce, environment, manufacture, new chemical substance,* and *process* have the same meanings as in section 3 of the Act (15 U.S.C. 2602).

(6) *Director of the Office of Pollution Prevention and Toxics* means the Director of the EPA Office of Pollution Prevention and Toxics or any EPA employee designated by the Office Director to carry out the Office Director's functions under this section.

(7) The term *exemption category* means a category of chemical substances for which a person(s) has applied for or been granted an exemption under section 5(h)(4) of the Act (15 U.S.C. 2604).

(8) The term *instant photographic film article* means a self-developing photographic film article designed so that all the chemical substances contained in the article, including the chemical substances required to process the film, remain sealed during distribution and use.

(9) *Intermediate* means any chemical substance which is consumed in whole or in part in a chemical reaction(s) used for the intentional manufacture of another chemical substance.

(10) *Known to or reasonably ascertainable* means all information in a person's possession or control, plus all information that a reasonable person similarly situated might be expected to possess, control, or know, our could obtain without unreasonable burden or cost.

(11) The term *peel-apart film article* means a self-developing photographic film article consisting of a positive image receiving sheet, a light sensitive negative sheet, and a sealed reagent pod containing a developer reagent and designed so that all the chemical substances required to develop or process the film will not remain sealed within the article during and after the development of the film.

(12) *Photographic article* means any article which will become a component of an instant photographic or peel-apart film article.

(13) *Special production area* means a demarcated area within which all manufacturing, processing, and use of a new chemical substance takes place, except as provided in paragraph (f) of this section, in accordance with the requirements of paragraph (e) of this section.

(14) *Test data* means:

(i) Data from a formal or informal study, test, experiment, recorded observation, monitoring, or measurement.

(ii) Information concerning the objectives, experimental methods and materials, protocols, results, data analyses (including risk assessments), and conclusions from a study, test, experiment, recorded observation, monitoring, or measurement.

(15) *Used in or for the manufacturing or processing of an instant photographic or peel-apart film article,* when used to describe activities involving a new chemical substance, means the new chemical substance (i) is included in the article, or (ii) is an intermediate to a chemical substance included in the article or is one of a series of intermediates used to manufacture a chemical substance included in the article.

(16) *Wet mixture* means a water or organic solvent-based suspension, solution, dispersion, or emulsion used in the manufacture of an instant photographic or peel-apart film article.

(c) *Exemption category*. The exemption category includes new chemical substances used in or for the manufacture or processing of instant photographic or peel-apart film articles which are manufactured and processed under the terms of this section.

(d) *Applicability*. This exemption applies only to manufacturers of instant photographic or peel-apart film articles who:

(1) Manufacture the new chemical substances used in or for the manufacture or processing of the instant photographic or peel-apart film articles.

(2) Limit manufacture and processing of a new chemical substance to the site(s) listed in the exemption notice for that new chemical substance submitted under paragraph (i) of this section.

(3) Comply with the requirements of paragraphs (e), (f), (g), (h), and (j) of this section.

(4) Do not distribute in commerce or use a peel-apart film article containing a new chemical substance until submission of a premanufacture notice under section 5(a)(1)(A) of the Act (15 U.S.C. 2604) and until the review period for the notice has ended without EPA action to prevent distribution or use.

(e) *Conditions of manufacture and processing in the special production area*. All manufacturing, processing, and use operations involving the new chemical substance must be performed in a special production area under the conditions set forth in this paragraph until the new chemical substance has been incorporated into a wet mixture, photographic article, or instant photographic or peel-apart film article.

(1) *Exposure limits*. In the special production area, the ambient air concentration of the new chemical substance during manufacture, processing, and use cannot exceed an 8-hour time weighted average (TWA) of 10 ppm for gases and vapors and 50 $\mu g/m^3$ for particulates, with an allowable TWA excursion of 50 percent above those concentrations for a duration of 30 minutes or less.

(2) *Respiratory protection*—(i) *Respirator requirement*. Except as specified in paragraph (e)(2)(ii) of this section, each person in the special production area must wear an appropriate respiratory protection device to protect against dusts, fumes, vapors, and other airborne contaminants, as described in 29 CFR 1910.134. Selection of an appropriate respirator must be made according to the guidance of American National Standard Practices for Respiratory Protection Z88.2–1969 and the NIOSH Certified Equipment List, U.S. Department of Health and Human Services, NIOSH publication No. 80–144.

(ii) *Waiver of respirator requirement*. Employees are not required to wear respirators if monitoring information collected and analyzed in accordance with paragraph (e)(3) of this section demonstrates that the ambient 8-hour TWA concentration of the new chemical substance in the area is less than 1 ppm for gases and vapors and 5 $\mu g/m^3$ for particulates with an allowable TWA excursion of 50 percent above these concentrations for a duration of 30 minutes or less.

(iii) *Quantitative fit test*. Each respirator must be issued to a specific individual for personal use. A quantitative fit test must be performed for each respirator before its first use by that person in a special production area.

(3) *Monitoring*—(i) *When to monitor*. (A) When suitable sampling and analytic methods exist, periodic monitoring in accordance with this paragraph must be done to ensure compliance with the exposure limits of paragraphs (e)(1) and (2)(ii) of this section.

(B) When suitable sampling and analytic methods do not exist, compliance with the exposure limits of paragraph

(e)(1) and the requirements of paragraph (e)(10) of this section must be determined by an evaluation of monitoring data developed for a surrogate chemical substance possessing comparable physical-chemical properties under similar manufacturing and processing conditions.

(ii) *Monitoring methods.* A suitable air sampling method must permit personal or fixed location sampling by conventional collection methods. A suitable analytic method must have adequate sensitivity for the volume of sample available and be specific for the new chemical substance being monitored. If chemical-specific monitoring methods are not available, nonspecific methods may be used if the concentration of the new chemical substance is assumed to be the total concentration of chemical substances monitored.

(iii) *Monitoring frequency.* (A) When suitable air sampling and analytical procedures are available, monitoring must be done in each special production area during the first three 8-hour work shifts involving the manufacture or processing of each new chemical substance. Thereafter, monitoring must be done in each special production area for at least one 8-hour period per month, during a production run in which the new chemical substance is manufactured or processed. Samples must be of such frequency and pattern as to represent with reasonable accuracy the mean level and maximum 30-minute level of employee exposure during an 8-hour work shift. In monitoring for an 8-hour work shift or the equivalent, samples must be collected periodically or continuously for the duration of the 8-hour work shift. Samples must be taken during a period which is likely to represent the maximum employee exposure.

(B) If the manufacturer demonstrates compliance with the exposure limits for 3 consecutive months, further monitoring of the identical process must be performed only every 6 months thereafter, unless there is a significant change in the process, process design, or equipment. If there is such a change, the manufacturer must begin monitoring again according to the schedule in paragraph (e)(3)(iii)(A) of this section.

(iv) *Location of monitoring.* Air samples must be taken so as to ensure that the samples adequately represent the ambient air concentration of a new chemical substance present in each worker's breathing zone.

(4) *Engineering controls and exposure safeguards.* Engineering controls such as, but not limited to, isolation, enclosure, local exhaust ventilation, and dust collection must be used to ensure compliance with the exposure limits prescribed in paragraphs (e)(1) or (e)(2)(ii) of this section.

(5) *Training, hygiene, and work practices*—(i) *Training.* No employee may enter a special production area before the completion of a training program. The training program must be adapted to the individual circumstances of the manufacturer and must address: The known physical-chemical and toxicological properties of the chemical substances handled in the area; procedures for using and maintaining respirators and other personal safeguards; applicable principles of hygiene; special handling procedures designed to limit personal exposure to, and inadvertent release of, chemical substances; and procedures for responding to emergencies or spills.

(ii) *Hygiene.* Appropriate standards of hygiene must be observed by all employees handling a new chemical substance in manufacturing, processing, or transfer operations. The manufacturer must provide appropriate facilities for employee changing and wash-up. Food, beverages, tobacco products, and cosmetics must not be allowed in special production areas.

(iii) *Work practices.* Operating procedures such as those related to chemical weighing and filtering, or the charging, discharging and clean-up of process equipment, must be designed and conducted to ensure compliance with the exposure limits prescribed in paragraph (e)(1) or (e)(2)(ii) of this section. Written procedures and all materials necessary for responding to emergency situations must be immediately accessible to all employees in a special production area. Any spill or unanticipated emission must be controlled by specially trained personnel using the

equipment and protective clothing described in paragraph (e)(6) of this section.

(6) *Personal protection devices.* All workers engaged in the manufacture and processing of a new chemical substance in the special production area must wear suitable protective clothing or equipment, such as chemical-resistant coveralls, protective eyewear, and gloves.

(7) *Caution signs.* Each special production area must be clearly posted with signs identifying the area as a special production area where new chemical substances are manufactured and processed under controlled conditions. Each sign must clearly restrict entry into the special production area to qualified personnel who are properly trained and equipped with appropriate personal exposure safeguards.

(8) *Removal for storage or transportation.* A new chemical substance that is not incorporated into a wet mixture, photographic article, or instant photographic or peel-apart film article may be removed from the special production area for purposes of storage between operational steps or for purposes of transportation to another special production area. Such storage or transportation must be conducted in a manner that limits worker and environmental exposure through the use of engineering controls, training, hygiene, work practices, and personal protective devices appropriate to the chemical substance in question.

(9) *Labeling.* (i) Any new chemical substance removed from a special production area or stored or transported between operational steps must be clearly labeled. The label must show the identity of the new chemical substance or an appropriate identification code, a statement of any known hazards associated with it, a list of special handling instructions, first aid information, spill control directions, and where applicable, the appropriate U.S. Department of Transportation notations.

(ii) No label is required if the new chemical substance has been incorporated into a photographic article, or if it is contained in a sealed reaction vessel or pipeline, or if it has been incorporated into an instant photographic or peel-apart film article.

(10) *Areas immediately adjacent to the special production area.* The ambient air concentration of the new chemical substance in areas immediately adjacent to the special production area must not exceed the exposure limit established in paragraph (e)(2)(ii) of this section for waiver of respirator protection within the special production area. Periodic monitoring in accordance with paragraph (e)(3) of this section must be performed in immediately adjacent areas where it is reasonable to expect a risk of inhalation exposure.

(f) *Conditions of processing outside the special production area.* A wet mixture may be incorporated into a photographic article or an instant photographic or peel-apart film article outside the special production area under the conditions listed in this paragraph:

(1) *Engineering controls and exposure safeguards.* Engineering controls must limit the exposure to a new chemical substance contained in a wet mixture.

(2) *Training, hygiene and work practices*—(i) *Training.* Training of employees involved in the handling of wet mixtures containing a new chemical substance must be adapted to the individual circumstances of the employees' activities and must address: Procedures for using personal exposure safeguards, applicable principles of hygiene, handling procedures designed to limit personal exposure, and procedures for responding to emergencies and spills.

(ii) *Hygiene.* Appropriate standards of hygiene that limit exposure must be observed by all employees handling wet mixtures that contain new chemical substances.

(iii) *Work practices.* Work practices and operating procedures must be designed to limit exposure to any new chemical substance contained in wet mixtures. Any spills or unanticipated releases of a wet mixture must be controlled by trained personnel wearing appropriate protective clothing or equipment such as gloves, eye protection, and, where necessary, respirators or chemically imprevious clothing.

(3) *Personal protection devices.* All workers engaged in the processing of a wet mixture containing a new chemical

substance must wear suitable protective clothing or equipment such as coveralls, protective eyewear, respirators, and gloves.

(g) *Incorporation of photographic articles into instant photographic and peel-apart film articles.* A photographic article may be incorporated into the instant photographic or peel-apart film article outside the special production area. The manufacturer must take measures to limit worker and environmental exposure to new chemcial substances during these operations using engineering controls, training, hygiene, work practices, and personal protective devices.

(h) *Environmental release and waste treatment*—(1) *Release to land.* Process waste from manufacturing and processing operations in the special production area that contain a new chemical substance are considered to be hazardous waste and must be handled in accordance with the requirements of Parts 262 through 267 and Parts 122 and 124 of this chapter.

(2) *Release to water.* All wastewater or discharge which contain the new chemcial subtance must be appropriately pretreated before release to a Publicly Owned Treatment Works (POTW) or other receiving body of water. In the case of release to a POTW, the pretreatment must prevent structural damage to, obstruction of, or interference with the operation of the POTW. The treatment of direct release to a receiving body of water must be appropriate for the new chemical substance's physical-chemical properties and potential toxicity.

(3) *Release to air.* All process emissions released to the air which contain the new chemical substance must be vented through control devices appropriate for the new chemical substance's physical-chemical properties and potential toxicity.

(i) *Exemption notice.* An exemption notices must be submitted to EPA when manufacture of the new chemical substance begins.

(1) *Contents of exemption notice.* The exemption notice must include the following information:

(i) *Manufacturer and sites.* The notice must identify the manufacturer and the sites and locations where the new chemical substance and the instant photographic or peel-apart film articles will be manufactured and processed.

(ii) *Chemical identification.* The notice must identify the new chemical substance as follows:

(A) *Class 1 substances.* For chemical substances whose composition can be represented by a definite structural disagram (Class 1 substances), the notice must provide the chemical name (preferably CAS or IUPAC nomenclature), the molecular formula, CAS Registry Number (if available), known synonyms (including trade names), and a structural diagram.

(B) *Class 2 substances.* For chemical substances that cannot be fully represented by a structural diagram, (Class 2 substances), the notice must provide the chemical name, the molecular formula, the CAS Registry Number (if available), and known synonyms (including trade names). The notice must identify the immediate precursors and reactants by name and CAS Registry Number (if available). The notice must include a partial or incomplete structural diagram, if available.

(C) *Polymers.* For a polymer, the notice must indentify monomers and other reactants used in the manufacture of the polymer by chemical name and CAS Registry Number. The notice must indicate the amount of each monomer used (by weight percent of total monomer); the maximum residual of each monomer present in the polymer; and a partial or incomplete structural diagram, if available. The notice must indicate the number average molecular weight of the polymer and characterize the anticipated low molecular weight species. The notice must include this information for each typical average molecular weight composition of the polymer to be manufactured.

(iii) *Impurities.* The notice must identify the impurities that can be reasonably anticipated to be present in the new chemcial substance when manufactured under the exemption by name and CAS Registry Number, by class of substances, or by process or source. The notice also must estimate the maximum percent (by weight) of each

impurity in the new chemical substance and the percent of unknown impurities present.

(iv) *Physical-chemical properties.* The notice must desribe the physical-chemical properties of the new chemical substance. Where specific physical-chemcial data are not available, reasonable estimates and the techniques used to develop these estimates must be provided.

(v) *Byproducts.* The notice must identify the name, CAS Registry number (if available), and the volume of each byproduct that would be manufactured during manufacture of the new chemical substance.

(vi) *Production volume.* The notice must include an estimate of the anticipated maximum annual production volume.

(vii) *Test data.* The notice must include all information and test data on the new chemical substance's health and environmental effects that are known to or reasonably ascertainable by the manufacturer.

(viii) *Identity of the article.* The notice must identify and describe the instant photographic film article(s) or peel-apart film article(s) that will contain the new chemical substance.

(ix) *Release to water.* The notice must include a description of the methods used to control and treat wastewater or discharge released to a POTW or other receiving body of water. The notice must also identify the POTW or receiving body of water.

(x) *Certification.* The manufacturer must certify in the notice that it is familiar with the terms of the exemption and that the manufacture, processing, distribution, use, and disposal of the new chemical substance will comply with those terms.

(2) *Duplication of information in premanufacture notice.* If a manufacturer who submits an exemption notice under this paragraph has already submitted, or simultaneously submits, a premanufacture notice under section 5(a)(1)(A) of the Act for the new chemical substance, it may, in lieu of submitting the information required by this paragraph, reference the required information to the extent it is included in the premanufacture notice. At a minimum, the exemption notice must identify the manufacturer and the new chemical substance, and contain the certification required by paragraph (i)(1)(x) of this section.

(3) *Address.* The exemption notice must be addressed to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460.

(j) *Recordkeeping.* (1) Manufacturers of a new chemical substance under this exemption must keep the following records for 30 years from the final date of manufacture.

(i) *Production records.* Each manufacturer must maintain records of the annual production volume of each new chemical substance manufactured under the terms of the exemption. This record must indicate when manufacture of the new chemical substance began.

(ii) *Exposure monitoring records.* Manufacturers must maintain an accurate record of all monitoring required by this section. Monitoring records may be adapted to the individual circumstances of the manufacturer but, at a minimum, must contain the following information: The chemical identity of the new chemical substance, date of the monitoring, the actual monitoring data for each monitoring location and sampling, and a reference to or description of the collection and analytic techniques. If the manufacturer does not monitor, the manufacturer must maintain a record of the reasons for not monitoring and the methods used to determine compliance with the exposure limits of paragraph (e)(1) of this section.

(iii) *Training and exposure records.* For each employee engaged in the manufacture or processing of a new chemical substance, the company must develop and maintain a record of the worker's participation in required training. This record must also demonstrate the regular use of personal exposure safeguards, including the results of any personal exposure monitoring, the results of the quantitative fit test for the worker's personal respirator, and any additional information related to the worker's occupational exposure.

(iv) *Treatment records.* Manufacturers who release treated wastewater or discharge containing a new chemical substance to a POTW or other receiving body of water must maintain records of the method of treatment.

(2) The manufacturer must make the records listed in paragraph (j)(1) of this section available to EPA upon written request by the Director of the Office of Pollution Prevention and Toxics. The manufacturer must provide these records within 15 working days of receipt of this request.

(k) *Confidentiality.* If the manufacturer submits information under paragraph (i) or (j) of this section which it claims to be confidential business information, the manufacturer must clearly identify the information at the time of submission to the Agency by bracketing, circling, or underlining it and stamping it with ''CONFIDENTIAL'' or some other appropriate designation. Any information so identified will be treated in accordance with the procedures in Part 2 of this chapter. Any information not claimed confidential at the time of submission will be made available to the public without further notice to the submitter.

(l) *Amendment and repeal.* (1) EPA may amend or repeal any term of this exemption if it determines that the manufacture, processing, distribution, use, and disposal of new chemical substances under the terms of the exemption may present an unreasonable risk of injury to health or the environment. EPA also may amend this exemption to enlarge the exemption category or to reduce the restrictions or conditions of the exemption.

(2) As required by section 5(h)(4) of the Act, EPA will amend or repeal the substantive terms of an exemption granted under this part only by the formal rulemaking procedures described in section 6(c)(2) and (3) of the Act (15 U.S.C. 2605(c)).

(m) *Prohibition of use of the exemption.* The Director of the Office of Pollution Prevention and Toxics may prohibit the manufacture, processing, distribution, use, or disposal of any new chemical substance under the terms of this exemption if he or she determines that the manufacture, processing, distribution in commerce, use, or disposal of the new chemical substance may present an unreasonable risk of injury to health or the environment.

(n) *Enforcement.* (1) A failure to comply with any provision of this part is a violation of section 15 of the Act (15 U.S.C. 2614).

(2) Submitting materially misleading or false information in connection with the requirements of any provision of this part is a violation of this regulation and therefore a violation of section 15 of the Act (15 U.S.C. 2614).

(3) Violators may be subject to the civil and criminal penalties in section 16 of the Act (15 U.S.C. 2615) for each violation.

(4) EPA may seek to enjoin the manufacture of a new chemical substance in violation of this exemption or act to seize any chemical substances manufactured in violation of the exemption under the authority of section 17 of the Act (15 U.S.C. 2616).

[47 FR 24317, June 4, 1982, as amended at 53 FR 12523, Apr. 15, 1988; 60 FR 34465, July 3, 1995]

### §723.250 Polymers.

(a) *Purpose and scope.* (1) This section grants an exemption from certain of the premanufacture notice requirements of section 5(a)(1)(A) of the Toxic Substances Control Act (15 U.S.C. 2604(a)(1)(A)) for the manufacture of certain polymers.

(2) To manufacture a new chemical substance under the terms of this section, a manufacturer must:

(i) Determine that the substance meets the definition of polymer in paragraph (b) of this section.

(ii) Determine that the substance is not specifically excluded by paragraph (d) of this section.

(iii) Ensure that the substance meets the exemption criteria of paragraph (e) of this section.

(iv) Submit a report as required under paragraph (f) of this section.

(v) Comply with the recordkeeping requirements of paragraph (j) of this section.

(b) *Definitions.* In addition to the definitions under section 3 of the Act, 15 U.S.C. 2602, the following definitions apply to this part.

*Act* means the Toxic Substances Control Act (15 U.S.C. 2601 et seq.).

*Biopolymer* means a polymer directly produced by living or once-living cells or cellular components.

*Category of chemical substances* has the same meaning as in section 26(c)(2) of the Act (15 U.S.C. 2625).

*Cationic polymer* means a polymer that contains a net positively charged atom(s) or associated groups of atoms covalently linked to its polymer molecule.

*Chemical substance, Director, EPA, importer, impurity, Inventory, known to or reasonably ascertainable, manufacture, manufacturer, mixture, new chemical, person, possession or control, process and test data* have the same meanings as in §720.3 of this chapter.

*Equivalent weight of a functional group* means the ratio of the molecular weight to the number of occurrences of that functional group in the molecule. It is the weight of substance that contains one formula-weight of the functional group.

*Internal monomer unit* means a monomer unit that is covalently bonded to at least two other molecules. Internal monomer units of polymer molecules are chemically derived from monomer molecules that have formed covalent bonds between two or more other monomer molecules or other reactants.

*Monomer* means a chemical substance that is capable of forming covalent bonds with two or more like or unlike molecules under the conditions of the relevant polymer-forming reaction used for the particular process.

*Monomer Unit* means the reacted form of the monomer in a polymer.

*Number-average molecular weight* means the arithmetic average (mean) of the molecular weight of all molecules in a polymer.

*Oligomer* means a polymer molecule consisting of only a few monomer units (dimer, trimer, tetramer)

*Other reactant* means a molecule linked to one or more sequences of monomer units but which, under the relevant reaction conditions used for the particular process, cannot become a repeating unit in the polymer structure.

*Polyester* means a chemical substance that meets the definition of polymer and whose polymer molecules contain at least two carboxylic acid ester linkages, at least one of which links internal monomer units together.

*Polymer* means a chemical substance consisting of molecules characterized by the sequence of one or more types of monomer units and comprising a simple weight majority of molecules containing at least 3 monomer units which are covalently bound to at least one other monomer unit or other reactant and which consists of less than a simple weight majority of molecules of the same molecular weight. Such molecules must be distributed over a range of molecular weights wherein differences in the molecular weight are primarily attributable to differences in the number of monomer units. In the context of this definition, sequence means that the monomer units under consideration are covalently bound to one another and form a continuous string within the molecule, uninterrupted by units other than monomer units.

*Polymer molecule* means a molecule which contains a sequence of at least 3 monomer units which are covalently bound to at least one other monomer unit or other reactant.

*Reactant* means a chemical substance that is used intentionally in the manufacture of a polymer to become chemically a part of the polymer composition.

*Reactive functional group* means an atom or associated group of atoms in a chemical substance that is intended or can reasonably be anticipated to undergo further chemical reaction.

*Reasonably anticipated* means that a knowledgeable person would expect a given physical or chemical composition or characteristic to occur based on such factors as the nature of the precursors used to manufacture the polymer, the type of reaction, the type of manufacturing process, the products produced in polymerization, the intended uses of the substance, or associated use conditions.

(c) *Applicability*. This section applies to manufacturers of new chemical substances that otherwise must submit a premanufacture notice to EPA under §720.22 of this chapter. New substances are eligible for exemption under this section if they meet the definition of

''polymer'' in paragraph (b) of this section, and the criteria in paragraph (e) of this section, and if they are not excluded from the exemption under paragraph (d) of this section.

(d) *Polymers that cannot be manufactured under this section*— (1) *Cationic polymers.* A polymer cannot be manufactured under this section if the polymer is a cationic polymer as defined under paragraph (b) of this section or if the polymer is reasonably anticipated to become a cationic polymer in a natural aquatic environment (e.g., rivers, lakes) unless:

(i) The polymer is a solid material that is not soluble or dispersible in water and will be used only in the solid phase (e.g., polymers that will be used as ion exchange beads), or

(ii) The combined (total) functional group equivalent weight of cationic groups in the polymer is equal to or greater than 5,000.

(2) *Elemental limitations.* (i) A polymer manufactured under this section must contain as an integral part of its composition at least two of the atomic elements carbon, hydrogen, nitrogen, oxygen, silicon, and sulfur.

(ii) A polymer cannot be manufactured under this section if it contains as an integral part of its composition, except as impurities, any elements other than the following:

(A) The elements listed in paragraph (d)(2)(i) of this section.

(B) Sodium, magnesium, aluminum, potassium, calcium, chlorine, bromine, and iodine as the monatomic counterions $Na^{+}$, $Mg^{+2}$, $Al^{+3}$, $K^{+}$, $Ca^{+2}$, $Cl^{-}$, $Br^{-}$, or $I^{-}$.

(C) Fluorine, chlorine, bromine, and iodine covalently bound to carbon.

(D) Less than 0.20 weight percent of any combination of the atomic elements lithium, boron, phosphorus, titanium, manganese, iron, nickel, copper, zinc, tin, and zirconium.

(3) *Polymers which degrade, decompose, or depolymerize.* A polymer cannot be manufactured under this section if the polymer is designed or is reasonably anticipated to substantially degrade, decompose, or depolymerize, including those polymers that could substantially decompose after manufacture and use, even though they are not actually intended to do so. For the purposes of this section, degradation, decomposition, or depolymerization mean those types of chemical change that convert a polymeric substance into simpler, smaller substances, through processes including but not limited to oxidation, hydrolysis, attack by solvents, heat, light, or microbial action.

(4) *Polymers manufactured or imported from monomers and reactants not on the TSCA Chemical Substance Inventory.* A polymer cannot be manufactured under this section if the polymer being manufactured or imported is prepared from monomers and/or other reactants (that are either charged to the reaction vessel or incorporated in the polymer at levels of greater than 2 weight percent) that are not already included on the TSCA Chemical Substance Inventory or manufactured under an applicable TSCA section 5 exemption.

(5) *Water absorbing polymers with number average molecular weight (MW) 10,000 and greater.* A polymer cannot be manufactured under this section if the polymer being manufactured or imported is a water absorbing polymer and has a number average MW greater than or equal to 10,000 daltons. For purposes of this section, a water-absorbing polymer is a polymeric substance that is capable of absorbing its weight of water.

(e) *Exemption criteria.* To be manufactured under this section, the polymer must meet one of the following criteria:

(1) *Polymers with number average MW greater than or equal to 1,000 and less than 10,000 daltons (and oligomer content less than 10 percent below MW 500 and less than 25 percent below MW 1,000).* (i) The polymer must have a number average MW greater than or equal to 1,000 and less than 10,000 daltons and contain less than 10 percent oligomeric material below MW 500 and less than 25 percent oligomeric material below MW 1,000.

(ii) The polymer cannot contain reactive functional groups unless it meets one of the following criteria:

(A) The polymer contains only the following reactive functional groups: carboxylic acid groups, aliphatic hydroxyl groups,unconjugated olefinic

groups that are considered ''ordinary,''(i.e., not specially activated either by being part of a larger functional group, such as a vinyl ether, or by other activating influences, e.g., strongly electron-withdrawing sulfone group with which the olefinic groups interact), butenedioic acid groups, those conjugated olefinic groups contained in naturally-occurring fats, oils, and carboxylic acids, blocked isocyanates (including ketoxime-blocked isocyanates), thiols, unconjugated nitrile groups, and halogens (except that reactive halogen-containing groups such as benzylic or allylichalides cannot be included).

(B) The polymer has a combined (total) reactive group equivalent weight greater than or equal to 1,000 for the following reactive functional groups: acidhalides; acid anhydrides; aldehydes, hemiacetals; methylolamides,- amines or,- ureas; alkoxysilanes with alkoxy greater than $C_2$-alkoxysilanes; allyl ethers; conjugated olefins;cyanates; epoxides; imines; or unsubstituted positions *ortho* or *para* to phenolic hydroxyl; or

(C) If any reactive functional groups not included in paragraph (e)(1)(ii)(A) and (B) of this section are present, the combined (total) reactive group equivalent weight, including any groups listed in paragraph (e)(1)(ii)(B), is greater than or equal to 5,000.

(2) *Polymers with number average MW greater than or equal to 10,000 (and oligomer content less than 2 percent below MW 500 and less than 5 percent below MW 1,000)* . The polymer must have a number average MW greater than or equal to 10,000 daltons and contain less than 2 percent oligomeric material below MW 500 and less than 5 percent oligomeric material below MW 1000.

(3) *Polyester polymers.* The polymer is a polyester as defined in paragraph (b) of this section and is manufactured solely from one or more of the reactants in the following Table 1:

TABLE 1.— LIST OF REACTANTS FROM WHICH POLYESTER MAY BE MADE

| Reactant | CAS No. |
|---|---|
| **Monobasic Acids and Natural Oils** | |
| Benzoic acid | 65–85–0 |
| Canola oil | 120962–03–0 |
| Coconut oil | 8001–31–8* |
| Corn oil | 8001–30–7* |
| Cottonseed oil | 8001–29–4* |
| Dodecanoic acid | 143–07–7 |
| Fats and glyceridic oils, anchovy | 128952–11–4* |
| Fats and glyceridic oils, babassu | 91078–92–1* |
| Fats and glyceridic oils, herring | 68153–06–0* |
| Fats and glyceridic oils, menhaden | 8002–50–4* |
| Fats and glyceridic oils, sardine | 93334–41–9* |
| Fats and glyceridic oils, oiticica | 8016–35–1* |
| Fatty acids,$C_{16-18}$ and $C_{18}$-unsatd. | 67701–08–0* |
| Fatty acids, castor-oil | 61789–44–4* |
| Fatty acids, coco | 61788–47–4* |
| Fatty acids, dehydrated castor-oil | 61789–45–5* |
| Fatty acids, linseed oil | 68424–45–3* |
| Fatty acids, safflower oil | |
| Fatty acids, soya | 68308–53–2* |
| Fatty acids, sunflower oil | 84625–38–7* |
| Fatty acids, sunflower-oil, conjugated | 68953–27–5* |
| Fatty acids, tall-oil | 61790–12–3* |
| Fatty acids, tall-oil, conjugated* | |
| Fatty acids, vegetable oil | 61788–66–7* |
| Glycerides, $C_{16-18}$ and $C_{18}$-unsatd. | 67701–30–8* |
| Heptanoic acid | 111–14–8 |
| Hexanoic acid | 142–62–1 |
| Hexanoic acid, 3,3,5-trimethyl- | 3302–10–1 |
| Linseed oil | 8001–26–1* |
| Linseed oil, oxidized | 68649–95–6* |
| Nonanoic acid | 112–05–0 |
| Oils, Cannabis* | |
| Oils, palm kernel | 8023–79–8* |
| Oils, perilla | 68132–21–8* |
| Oils, walnut | 8024–09–7 |
| Safflower oil | 8001–23–8* |
| Soybean oil | 8001–22–7* |

TABLE 1.— LIST OF REACTANTS FROM WHICH POLYESTER MAY BE MADE—Continued

| Reactant | CAS No. |
|---|---|
| Sunflower oil | 8001–21–6* |
| Tung oil | 8001–20–5* |
| Di and Tri Basic Acids:. | |
| 1,2-Benzenedicarboxylic acid | 88–99–3 |
| 1,3-Benzenedicarboxylic acid | 121–91–5 |
| 1,3-Benzenedicarboxylic acid, dimethyl ester | 1459–93–4 |
| 1,4-Benzenedicarboxylic acid | 100–21–0 |
| 1,4-Benzenedicarboxylic acid, diethyl ester | 636–09–9 |
| 1,4-Benzenedicarboxylic acid, dimethyl ester | 120–61–6 |
| 1,2,4-Benzenetricarboxylic acid | 528–44–9 |
| Butanedioic acid | 110–15–6 |
| Butanedioic acid, diethyl ester | 123–25–1 |
| Butanedioic acid, dimethyl ester | 106–65–0 |
| 2-Butenedioic acid (E)– | 110–17–8 |
| Decanedioic acid | 111–20–6 |
| Decanedioic acid, diethyl ester | 110–40–7 |
| Decanedioic acid, dimethyl ester | 106–79–6 |
| Dodecanedioic acid | 693–23–2 |
| Fatty acids, $C_{18}$-unsatd., dimers | 61788–89–4* |
| Heptanedioic acid | 111–16–0 |
| Heptanedioic acid, dimethyl ester | 1732–08–7 |
| Hexanedioic acid | 124–04–9 |
| Hexanedioic acid, dimethyl ester | 627–93–0 |
| Hexanedioic acid, diethyl ester | 141–28–6 |
| Nonanedioic acid | 123–99–9 |
| Nonanedioic acid, dimethyl ester | 1732–10–1 |
| Nonanedioic acid, diethyl ester | 624–17–9 |
| Octanedioic acid | (505–48–6) |
| Octanedioic acid, dimethyl ester | 1732–09–8 |
| Pentanedioic acid | (110–94–1) |
| Pentanedioic acid, dimethyl ester | 1119–40–0 |
| Pentanedioic acid, diethyl ester | 818–38–2 |
| Undecanedioic acid | 1852–04–6 |
| **Polyols** | |
| 1,3-Butanediol | 107–88–0 |
| 1,4-Butanediol | 110–63–4 |
| 1,4-Cyclohexanedimethanol | 105–08–8 |
| 1,2-Ethanediol | 107–21–1 |
| Ethanol, 2,2′-oxybis- | 111–46–6 |
| 1,6-Hexanediol | 629–11–8 |
| 1,3-Pentanediol, 2,2,4-trimethyl- | 144–19–4 |
| 1,2-Propanediol, | 57–55–6 |
| 1,3-Propanediol, 2,2-bis(hydroxymethyl)- | 115–77–5 |
| 1,3-Propanediol, 2,2-dimethyl- | 126–30–7 |
| 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- | 77–99–6 |
| 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- | 77–85–0 |
| 1,3-propanediol, 2-methyl | 2163–42–0 |
| 1,2,3-Propanetriol | 56–81–5 |
| 1,2,3-Propanetriol, homopolymer | 25618–55–7 |
| 2-Propen-1-ol, polymer with ethenylbenzene | 25119-62–4 |
| **Modifiers** | |
| Acetic acid, 2,2′-oxybis- | 110–99–6 |
| 1-Butanol | 71–36–3** |
| Cyclohexanol | 108–93–0 |
| Cyclohexanol, 4,4′-(1-methylethylidene)bis- | 80–04–6 |
| Ethanol, 2-(2-butoxyethoxy)- | 112–34–5 |
| 1-Hexanol | 111–27–3 |
| Methanol, hydrolysis products with trichlorohexylsilane and trichlorophenylsilane | 72318–84–4* |
| 1-Phenanthrenemethanol, tetradecahydro-1,4a-dimethyl-7-(1-methylethyl)- | 13393–93–6 |
| Phenol, 4,4′-(1-methylethylidene)bis-, polymer with 2,2′- [(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bis[oxirane]. | 25036-25–3 |
| Siloxanes and Silicones, di-Me, di-Ph, polymers with Ph silsesquioxanes, methoxy-terminated | 68440–65–3* |
| Siloxanes and Silicones, di-Me, methoxy Ph, polymers with Ph silsesquioxanes, methoxy-terminated | 68957–04–0* |
| Siloxanes and Silicones, Me Ph, methoxy Ph, polymers with Ph silsesquioxanes, methoxy- and Ph-terminated. | [1]68957–06–2* |
| Silsesquioxanes, Ph Pr | [1]68037–90–1* |

* Chemical substance of unknown or variable composition,complex reaction products, and biological materials (UVCB). The CAS Registry Numbers for UVCB substances are not used in CHEMICAL ABSTRACTS and its indexes.

** These substances may not be used in a substance manufactured from fumaric or maleic acid because of potential risks associated with esters, which may be formed by reaction of these reactants.

(f) *Exemption report for polymers manufactured under the terms of this section.* For substances exempt under paragraphs (e)(1), (e)(2), and (e)(3) of this section a report of manufacture or import must be submitted (postmarked) by January 31 of the year subsequent to initial manufacture. The notice must include:

(1) *Manufacturer's name.* This includes the name and address of the manufacturer and the name and telephone number of a technical contact.

(2) *Number of substances manufactured.* Number of substances manufactured. The manufacturer must identify the number of polymers manufactured under terms of the exemption for the first time in the year preceding the notice.

(g) *Chemical identity information.* For substances exempt under paragraph (e) of this section the manufacturer must to the extent known to or reasonably ascertainable by the manufacturer identify the following and maintain the records in accordance with paragraph (j) of this section:

(1) A specific chemical name and CAS Registry Number (or EPA assigned Accession Number) for each ''reactant,'' as that term is defined in paragraph (b) of this section, used at any weight in the manufacture of the polymer. For purposes of determining chemical identity, the manufacturer may determine whether a reactant is used at greater than two weight percent according to either the weight of the reactant charged to the reaction vessel or the weight of the chemically combined (incorporated) reactant in the polymer. Manufacturers who choose the ''incorporated'' method must have analytical data, or theoretical calculations (if it can be documented that an analytical determination cannot be made or is not necessary), to demonstrate compliance with this paragraph. Reactants that introduce into the polymer elements, properties, or functional groups that would render the polymer ineligible for the exemption are not allowed at any level.

(2) A representative structural diagram, if possible.

(h) *Certification.* To manufacture a substance under the terms of this section, a manufacturer must as of the date of first manufacture, make the following certification statements and maintain them in accordance with paragraph (j) of this section:

(1) The substance is manufactured or imported for a commercial purpose other than for research and development.

(2) All information in the certification is truthful.

(3) The new chemical substance meets the definition of a polymer, is not specifically excluded from the exemption in paragraph (d) of this section, and meets the conditions of the exemption in paragraph (e) of this section.

(i) *Exemptions granted under superseded regulations.* Manufacturers granted exemptions under the superseded requirements of §723.250 (as in effect on May 26, 1995) shall either continue to comply with those requirements or follow all procedural and recordkeeping requirements pursuant to this section. If an exemption holder continues to follow the superseded regulations, the Notice of Commencement requirements apply and the exempt polymer will continue to be listed on the Inventory with exclusion criteria and exemption category restrictions on residual monomer/reactant and low molecular weight species content limitations.

(j) *Recordkeeping.* (1) A manufacturer of a new polymer under paragraphs (e) of this section, must retain the records described in this paragraph at the manufacturing site for a period of 5 years from the date of commencement of manufacture or import.

(2) The records must include the following to demonstrate compliance with the terms of this section:

(i) Chemical identity information as required in paragraph (g) of this section.

(ii) Information to demonstrate that the new polymer is not specifically excluded from the exemption.

(iii) Records of production volume for the first 3 years of manufacture and the date of commencement of manufacture.

(iv) Information to demonstrate that the new polymer meets the exemption criteria in paragraphs (e)(1), (e)(2), or (e)(3) of this section.

(v) Analytical data, or theoretical calculations (if it can be documented that an analytical determination cannot be made or is not necessary), to demonstrate that the polymer meets the number-average MW exemption criteria in paragraphs (e)(1) or (e)(2) of this section.The analytical tests may include gel permeation chromatography (GPC).vapor pressure osmometry (VPO), or other such tests which will demonstrate that the polymer meets the number-average MW criterion.

(vi) Analytical data, or theoretical calculations (if it can be documented that an analytical determination cannot be made or is not necessary), to demonstrate that the polymer meets the criteria in paragraphs (e)(1) or (e)(2) of this section, meets the low MW content criteria in paragraphs (e)(1) or (e)(2) of this section.

(vii) If applicable, analytical data, or theoretical calculations (if it can be documented that an analytical determination cannot be made or is not necessary) required in paragraph (g) of this section for determining monomers or reactants charged to the reaction vessel at greater than 2 weight percent but incorporated at 2 weight percent or less in the manufactured polymer.

(viii) The certification statements as required under paragraph (h) of this section.

(3) The manufacturer must submit the records listed in paragraph (j)(2) of this section to EPA upon written request by EPA. The manufacturer must provide these records within 15 working days of receipt of this request. In addition, any person who manufactures a new chemical substance under the terms of this section, upon request of EPA, must permit such person at all reasonable times to have access to and to copy these records.

(k) *Submission of information.* Information submitted to EPA under this section must be sent in writing to: TSCA Document Control Officer, (7407), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460.

(l) *Compliance.* (1) A person who manufactures or imports a new chemical substance and fails to comply with any provision of this section is in violation of section 15 of the Act (15 U.S.C. 2614).

(2) Using for commercial purposes a chemical substance or mixture which a person knew or had reason to know was manufactured, processed, or distributed in commerce in violation of section 5 of the Act is a violation of section 15 of the Act (15 U.S.C. 2614).

(3) Failure or refusal to establish and maintain records or to permit access to or copying of records, as required by this section and section 11 of the Act, is a violation of section 15 of the Act (15 U.S.C. 2614).

(4) Failure or refusal to permit entry or inspection as required by section 11 of the Act is a violation of section 15 of the Act (15 U.S.C. 2614).

(5) Violators may be subject to the civil and criminal penalties insection 16 of the Act (15 U.S.C. 2615) for each violation. Persons who submit materially misleading or false information in connection with the requirements of any provision of this section may be subject to penalties calculated as if they never filed their notices.

(6) EPA may seek to enjoin the manufacture or processing of a chemical substance in violation of this section or act to seize any chemical substance manufactured or processed in violation of this section or take other actions under the authority of section 7 of the Act (15 U.S.C. 2606) or section 17 of the Act (15 U.S.C. 2616).

(m) *Inspections.* EPA will conduct inspections under section 11 ofthe Act to assure compliance with section 5 and this section, to verify that information submitted to EPA under this section is true and correct, and to audit data submitted to EPA under this section.

(n) *Confidentiality.* If a manufacturer submits information to EPA under this section which the manufacturer claims to be confidential business information, the manufacturer must clearly identify the information at the time of submission to EPA by bracketing, circling, or underlining it and stamping it with ''CONFIDENTIAL'' or some other appropriate designation. Any information so identified will be treated in accordance with the procedures in 40 CFR part 2. Any information not claimed confidential at the time of submission

may be made available to the public without further notice.

[60 FR 16332, Mar. 29, 1995]

# PART 745—LEAD-BASED PAINT POISIONING PREVENTION IN CERTAIN RESIDENTIAL STRUCTURES

## Subparts A—E [Reserved]

## Subpart F — Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards Upon Sale or Lease of Residential Property

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AUTHORITY: 15 U.S.C. 2615, 15 U.S.C. 2689, and 42 U.S.C. 4852d.

SOURCE: 61 FR 9085, Mar. 6, 1996, unless otherwise noted.

## Subparts A—E [Reserved]

## Subpart F—Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards Upon Sale or Lease of Residential Property

### § 745.100 Purpose.

This subpart implements the provisions of 42 U.S.C. 4852d, which impose certain requirements on the sale or lease of target housing. Under this subpart, a seller or lessor of target housing shall disclose to the purchaser or lessee the presence of any known lead-based paint and/or lead-based paint hazards; provide available records and reports; provide the purchaser or lessee with a lead hazard information pamphlet; give purchasers a 10-day opportunity to conduct a risk assessment or inspection; and attach specific disclosure and warning language to the sales or leasing contract before the purchaser or lessee is obligated under a contract to purchase or lease target housing.

### § 745.101 Scope and applicability.

This subpart applies to all transactions to sell or lease target housing, including subleases, with the exception of the following:

(a) Sales of target housing at foreclosure.

(b) Leases of target housing that have been found to be lead-based paint free by an inspector certified under the Federal certification program or under a federally accredited State or tribal certification program. Until a Federal certification program or federally accredited State certification program is in place within the State, inspectors shall be considered qualified to conduct an inspection for this purpose if they have received certification under any existing State or tribal inspector certification program. The lessor has the option of using the results of additional test(s) by a certified inspector to confirm or refute a prior finding.

(c) Short-term leases of 100 days or less, where no lease renewal or extension can occur.

(d) Renewals of existing leases in target housing in which the lessor has previously disclosed all information required under § 745.107 and where no new information described in § 745.107 has come into the possession of the lessor. For the purposes of this paragraph, renewal shall include both renegotiation of existing lease terms and/or ratification of a new lease.

### § 745.102 Effective dates.

The requirements in this subpart take effect in the following manner:

(a) For owners of more than four residential dwellings, the requirements shall take effect on September 6, 1996.

(b) For owners of one to four residential dwellings, the requirements shall take effect on December 6, 1996.

### § 745.103 Definitions.

The following definitions apply to this subpart.

*The Act* means the Residential Lead-Based Paint Hazard Reduction Act of 1992, 42 U.S.C. 4852d.

*Agent* means any party who enters into a contract with a seller or lessor, including any party who enters into a contract with a representative of the seller or lessor, for the purpose of selling or leasing target housing. This term does not apply to purchasers or any purchaser's representative who receives all compensation from the purchaser.

*Available* means in the possession of or reasonably obtainable by the seller or lessor at the time of the disclosure.

*Common area* means a portion of a building generally accessible to all residents/users including, but not limited to, hallways, stairways, laundry and recreational rooms, playgrounds, community centers, and boundary fences.

*Contract for the purchase and sale of residential real property* means any contract or agreement in which one party agrees to purchase an interest in real property on which there is situated one or more residential dwellings used or occupied, or intended to be used or occupied, in whole or in part, as the home or residence of one or more persons.

*EPA* means the Environmental Protection Agency.

*Evaluation* means a risk assessment and/or inspection.

*Foreclosure* means any of the various methods, statutory or otherwise, known in different jurisdictions, of enforcing payment of a debt, by the taking and selling of real property.

*Housing for the elderly* means retirement communities or similar types of housing reserved for households composed of one or more persons 62 years of age or more at the time of initial occupancy.

*HUD* means the U.S. Department of Housing and Urban Development.

*Inspection* means:

(1) A surface-by-surface investigation to determine the presence of lead-based paint as provided in section 302(c) of the Lead-Based Paint Poisoning and Prevention Act [42 U.S.C. 4822], and

(2) The provision of a report explaining the results of the investigation.

*Lead-based paint* means paint or other surface coatings that contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight.

*Lead-based paint free housing* means target housing that has been found to be free of paint or other surface coatings that contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight.

*Lead-based paint hazard* means any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or lead-contaminated paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as established by the appropriate Federal agency.

*Lessee* means any entity that enters into an agreement to lease, rent, or sublease target housing, including but not limited to individuals, partnerships, corporations, trusts, government agencies, housing agencies, Indian tribes, and nonprofit organizations.

*Lessor* means any entity that offers target housing for lease, rent, or sublease, including but not limited to individuals, partnerships, corporations, trusts, government agencies, housing agencies, Indian tribes, and nonprofit organizations.

*Owner* means any entity that has legal title to target housing, including but not limited to individuals, partnerships, corporations, trusts, government agencies, housing agencies, Indian tribes, and nonprofit organizations, except where a mortgagee holds legal title to property serving as collateral for a mortgage loan, in which case the owner would be the mortgagor.

*Purchaser* means an entity that enters into an agreement to purchase an interest in target housing, including but not limited to individuals, partnerships, corporations, trusts, government agencies, housing agencies, Indian tribes, and nonprofit organizations.

*Reduction* means measures designed to reduce or eliminate human exposure to lead-based paint hazards through methods including interim controls and abatement.

*Residential dwelling* means:

(1) A single-family dwelling, including attached structures such as porches and stoops; or

(2) A single-family dwelling unit in a structure that contains more than one separate residential dwelling unit, and in which each such unit is used or occupied, or intended to be used or occupied, in whole or in part, as the residence of one or more persons.

*Risk assessment* means an on-site investigation to determine and report the existence, nature, severity, and location of lead-based paint hazards in residential dwellings, including:

(1) Information gathering regarding the age and history of the housing and occupancy by children under age 6;

(2) Visual inspection;

(3) Limited wipe sampling or other environmental sampling techniques;

(4) Other activity as may be appropriate; and

(5) Provision of a report explaining the results of the investigation.

*Secretary* means the Secretary of Housing and Urban Development.

*Seller* means any entity that transfers legal title to target housing, in whole or in part, in return for consideration, including but not limited to individuals, partnerships, corporations, trusts, government agencies, housing agencies, Indian tribes, and nonprofit organizations. The term ''seller'' also includes:

(1) An entity that transfers shares in a cooperatively owned project, in return for consideration; and

(2) An entity that transfers its interest in a leasehold, in jurisdictions or circumstances where it is legally permissible to separate the fee title from the title to the improvement, in return for consideration.

*Target housing* means any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing) or any 0-bedroom dwelling.

*TSCA* means the Toxic Substances Control Act, 15 U.S.C. 2601.

*0-bedroom dwelling* means any residential dwelling in which the living area is not separated from the sleeping area. The term includes efficiencies, studio apartments, dormitory housing, military barracks, and rentals of individual rooms in residential dwellings.

**§ 745.107 Disclosure requirements for sellers and lessors.**

(a) The following activities shall be completed before the purchaser or lessee is obligated under any contract to purchase or lease target housing that is not otherwise an exempt transaction pursuant to § 745.101. Nothing in this section implies a positive obligation on the seller or lessor to conduct any evaluation or reduction activities.

(1) The seller or lessor shall provide the purchaser or lessee with an EPA-approved lead hazard information pamphlet. Such pamphlets include the EPA document entitled *Protect Your Family From Lead in Your Home* (EPA #747-K-94-001) or an equivalent pamphlet that has been approved for use in that State by EPA.

(2) The seller or lessor shall disclose to the purchaser or lessee the presence of any known lead-based paint and/or lead-based paint hazards in the target housing being sold or leased. The seller or lessor shall also disclose any additional information available concerning the known lead-based paint and/or lead-based paint hazards, such as the basis for the determination that lead-based paint and/or lead-based paint hazards exist, the location of the lead-based paint and/or lead-based paint hazards, and the condition of the painted surfaces.

(3) The seller or lessor shall disclose to each agent the presence of any known lead-based paint and/or lead-based paint hazards in the target housing being sold or leased and the existence of any available records or reports pertaining to lead-based paint and/or lead-based paint hazards. The seller or lessor shall also disclose any additional information available concerning the known lead-based paint and/or lead-based paint hazards, such as the basis for the determination that lead-based paint and/or lead-based paint hazards exist, the location of the lead-based paint and/or lead-based paint hazards, and the condition of the painted surfaces.

(4) The seller or lessor shall provide the purchaser or lessee with any records or reports available to the seller or lessor pertaining to lead-based paint and/or lead-based paint hazards in the target housing being sold or

leased. This requirement includes records or reports regarding common areas. This requirement also includes records or reports regarding other residential dwellings in multifamily target housing, provided that such information is part of an evaluation or reduction of lead-based paint and/or lead-based paint hazards in the target housing as a whole.

(b) If any of the disclosure activities identified in paragraph (a) of this section occurs after the purchaser or lessee has provided an offer to purchase or lease the housing, the seller or lessor shall complete the required disclosure activities prior to accepting the purchaser's or lessee's offer and allow the purchaser or lessee an opportunity to review the information and possibly amend the offer.

EFFECTIVE DATE NOTE: At 61 FR 9087, March 6, 1996, § 745.107 was added. This section contains information collection requirements and will not become effective until approval has been given by the Office of Management and Budget. A notice will be published in the FEDERAL REGISTER once approval has been obtained.

### § 745.110 Opportunity to conduct an evaluation.

(a) Before a purchaser is obligated under any contract to purchase target housing, the seller shall permit the purchaser a 10-day period (unless the parties mutually agree, in writing, upon a different period of time) to conduct a risk assessment or inspection for the presence of lead-based paint and/or lead-based paint hazards.

(b) Not withstanding paragraph (a) of this section, a purchaser may waive the opportunity to conduct the risk assessment or inspection by so indicating in writing.

EFFECTIVE DATE NOTE: At 61 FR 9087, March 6, 1996, § 745.110 was added. This section contains information collection requirements and will not become effective until approval has been given by the Office of Management and Budget. A notice will be published in the FEDERAL REGISTER once approval has been obtained.

### § 745.113 Certification and acknowledgment of disclosure.

(a) *Seller requirements.* Each contract to sell target housing shall include an attachment containing the following elements, in the language of the contract (e.g., English, Spanish):

(1) A Lead Warning Statement consisting of the following language:

Every purchaser of any interest in residential real property on which a residential dwelling was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in residential real property is required to provide the buyer with any information on lead-based paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any known lead-based paint hazards. A risk assessment or inspection for possible lead-based paint hazards is recommended prior to purchase.

(2) A statement by the seller disclosing the presence of known lead-based paint and/or lead-based paint hazards in the target housing being sold or indicating no knowledge of the presence of lead-based paint and/or lead-based paint hazards. The seller shall also provide any additional information available concerning the known lead-based paint and/or lead-based paint hazards, such as the basis for the determination that lead-based paint and/or lead-based paint hazards exist, the location of the lead-based paint and/or lead-based paint hazards, and the condition of the painted surfaces.

(3) A list of any records or reports available to the seller pertaining to lead-based paint and/or lead-based paint hazards in the housing that have been provided to the purchaser. If no such records or reports are available, the seller shall so indicate.

(4) A statement by the purchaser affirming receipt of the information set out in paragraphs (a)(2) and (a)(3) of this section and the lead hazard information pamphlet required under 15 U.S.C. 2696.

(5) A statement by the purchaser that he/she has either:

(i) Received the opportunity to conduct the risk assessment or inspection required by § 745.110(a); or

(ii) Waived the opportunity.

(6) When one or more agents are involved in the transaction to sell target housing on behalf of the seller, a statement that:

(i) The agent has informed the seller of the seller's obligations under 42 U.S.C. 4852d; and

(ii) The agent is aware of his/her duty to ensure compliance with the requirements of this subpart.

(7) The signatures of the sellers, agents, and purchasers certifying to the accuracy of their statements to the best of their knowledge, along with the dates of signature.

(b) *Lessor requirements.* Each contract to lease target housing shall include, as an attachment or within the contract, the following elements, in the language of the contract (e.g., English, Spanish):

(1) A Lead Warning Statement with the following language:

Housing built before 1978 may contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Lead exposure is especially harmful to young children and pregnant women. Before renting pre-1978 housing, lessors must disclose the presence of lead-based paint and/or lead-based paint hazards in the dwelling. Lessees must also receive a federally approved pamphlet on lead poisoning prevention.

(2) A statement by the lessor disclosing the presence of known lead-based paint and/or lead-based paint hazards in the target housing being leased or indicating no knowledge of the presence of lead-based paint and/or lead-based paint hazards. The lessor shall also disclose any additional information available concerning the known lead-based paint and/or lead-based paint hazards, such as the basis for the determination that lead-based paint and/or lead-based paint hazards exist, the location of the lead-based paint and/or lead-based paint hazards, and the condition of the painted surfaces.

(3) A list of any records or reports available to the lessor pertaining to lead-based paint and/or lead-based paint hazards in the housing that have been provided to the lessee. If no such records or reports are available, the lessor shall so indicate.

(4) A statement by the lessee affirming receipt of the information set out in paragraphs (b)(2) and (b)(3) of this section and the lead hazard information pamphlet required under 15 U.S.C. 2696.

(5) When one or more agents are involved in the transaction to lease target housing on behalf of the lessor, a statement that:

(i) The agent has informed the lessor of the lessors obligations under 42 U.S.C. 4852d; and

(ii) The agent is aware of his/her duty to ensure compliance with the requirements of this subpart.

(6) The signatures of the lessors, agents, and lessees, certifying to the accuracy of their statements, to the best of their knowledge, along with the dates of signature.

(c) *Retention of Certification and Acknowledgment Information.*

(1) The seller, and any agent, shall retain a copy of the completed attachment required under paragraph (a) of this section for no less than 3 years from the completion date of the sale. The lessor, and any agent, shall retain a copy of the completed attachment or lease contract containing the information required under paragraph (b) of this section for no less than 3 years from the commencement of the leasing period.

(2) This recordkeeping requirement is not intended to place any limitations on civil suits under the Act, or to otherwise affect a lessee's or purchaser's rights under the civil penalty provisions of 42 U.S.C. 4852d(b)(3).

(d) The seller, lessor, or agent shall not be responsible for the failure of a purchaser's or lessee's legal representative (where such representative receives all compensation from the purchaser or lessee) to transmit disclosure materials to the purchaser or lessee, provided that all required parties have completed and signed the necessary certification and acknowledgment language required under paragraphs (a) and (b) of this section.

EFFECTIVE DATE NOTE: At 61 FR 9087, March 6, 1996, § 745.113 was added. This section contains information collection requirements and will not become effective until approval has been given by the Office of Management and Budget. A notice will be published in the FEDERAL REGISTER once approval has been obtained.

### § 745.115 Agent responsibilities.

(a) Each agent shall ensure compliance with all requirements of this subpart. To ensure compliance, the agent shall:

(1) Inform the seller or lessor of his/her obligations under §§745.107, 745.110, and 745.113.

(2) Ensure that the seller or lessor has performed all activities required under §§ 745.107, 745.110, and 745.113, or personally ensure compliance with the requirements of §§ 745.107, 745.110, and 745.113.

(b) If the agent has complied with paragraph (a)(1) of this section, the agent shall not be liable for the failure to disclose to a purchaser or lessee the presence of lead-based paint and/or lead-based paint hazards known by a seller or lessor but not disclosed to the agent.

EFFECTIVE DATE NOTE: At 61 FR 9088, March 6, 1996, § 745.115 was added. This section contains information collection requirements and will not become effective until approval has been given by the Office of Management and Budget. A notice will be published in the FEDERAL REGISTER once approval has been obtained.

### § 745.118 Enforcement.

(a) Any person who knowingly fails to comply with any provision of this subpart shall be subject to civil monetary penalties in accordance with the provisions of 42 U.S.C. 3545 and 24 CFR part 30.

(b) The Secretary is authorized to take such action as may be necessary to enjoin any violation of this subpart in the appropriate Federal district court.

(c) Any person who knowingly violates the provisions of this subpart shall be jointly and severally liable to the purchaser or lessee in an amount equal to 3 times the amount of damages incurred by such individual.

(d) In any civil action brought for damages pursuant to 42 U.S.C. 4852d(b)(3), the appropriate court may award court costs to the party commencing such action, together with reasonable attorney fees and any expert witness fees, if that party prevails.

(e) Failure or refusal to comply with § 745.107 (disclosure requirements for sellers and lessors), § 745.110 (opportunity to conduct an evaluation), § 745.113 (certification and acknowledgment of disclosure), or § 745.115 (agent responsibilities) is a violation of 42 U.S.C. 4852d(b)(5) and of TSCA section 409 (15 U.S.C. 2689).

(f) Violators may be subject to civil and criminal sanctions pursuant to TSCA section 16 (15 U.S.C. 2615) for each violation. For purposes of enforcing this subpart, the penalty for each violation applicable under 15 U.S.C. 2615 shall be not more than $10,000.

### § 745.119 Impact on State and local requirements.

Nothing in this subpart shall relieve a seller, lessor, or agent from any responsibility for compliance with State or local laws, ordinances, codes, or regulations governing notice or disclosure of known lead-based paint or lead-based paint hazards. Neither HUD nor EPA assumes any responsibility for ensuring compliance with such State or local requirements.

# PART 747—METALWORKING FLUIDS

## Subpart A—[Reserved]

## Subpart B—Specific Use Requirements for Certain Chemical Substances

747.115 Mixed mono and diamides of an organic acid.
747.195 Triethanolamine salt of a substituted organic acid.
747.200 Triethanolamine salt of tricarboxylic acid.

AUTHORITY: 15 U.S.C. 2604 and 2605.

## Subpart A—[Reserved]

## Subpart B—Specific Use Requirements for Certain Chemical Substances

### § 747.115 Mixed mono and diamides of an organic acid.

This section identifies activities with respect to a chemical substance which are prohibited and requires that warnings and instructions accompany the substance when distributed in commerce.

(a) *Chemical substance subject to this section.* The following chemical substance, referred to by its

premanufacture notice number and generic chemical name, is subject to this section: P–84–529, mixed mono and diamides of an organic acid.

(b) *Definitions.* Definitions in section 3 of the Act, 15 U.S.C. 2602, apply to this section unless otherwise specified in this paragraph. In addition, the following definitions apply:

(1) The terms *Act, article, chemical substance, commerce, importer, impurity, Inventory, manufacturer, person, process, processor,* and *small quantities solely for research and development* have the same meaning as in § 720.3 of this chapter.

(2) *Metalworking fluid* means a liquid of any viscosity or color containing intentionally added water used in metal machining operations for the purpose of cooling, lubricating, or rust inhibition.

(3) *Nitrosating agent* means any substance that has the potential to transfer a nitrosyl group (–NO) to a primary, secondary, or tertiary amine to form the corresponding nitrosamine.

(4) *Process or distribute in commerce solely for export* means to process or distribute in commerce solely for export from the United States under the following restrictions on domestic activity:

(i) Processing must be performed at sites under the control of the processor.

(ii) Distribution in commerce is limited to purposes of export.

(iii) The processor or distributor may not use the substance except in small quantities solely for research and development.

(c) *Use limitations.* (1) Any person producing a metalworking fluid, or a product which could be used in or as a metalworking fluid, which includes as one of its components P–84–529, is prohibited from adding any nitrosating agent to the metalworking fluid or product.

(2) Any person using as a metalworking fluid a product containing P–84–529 is prohibited from adding any nitrosating agent to the product.

(d) *Warnings and instructions.* (1) Any person who distributes in commerce P–84–529 in a metalworking fluid, or in any form in which it could be used as a component of a metalworking fluid, must send to each recipient of P–84–529 and confirm receipt in writing prior to the first shipment to that person:

(i) A letter that includes the following statements:

A substance, identified generically as mixed mono and diamides of an organic acid, contained in the product (*insert distributor's other identifier for product containing P–84–529*) has been regulated by the Environmental Protection Agency, at 40 CFR 747.115, as published in the FEDERAL REGISTER of September 20, 1984. A copy of the regulation is enclosed. The regulation prohibits the addition of any nitrosating agent, including nitrites, to the mixed mono and diamides of an organic acid, when the substance is or could be used in metalworking fluids. The addition of nitrites or other nitrosating agents to this substance leads to formation of a substance known to cause cancer in laboratory animals. The mixed mono and diamides of an organic acid has been specifically designed to be used without nitrites. Consult the enclosed regulation for further information.

(ii) A copy of this § 747.115.

(2)(i) Any person who distributes in commerce a metalworking fluid containing P–84–529 must affix a label to each container containing the fluid.

(ii) The label shall contain a warning statement which shall consist only of the following language:

WARNING! Do Not Add Nitrites to This Metalworking Fluid under Penalty of Federal Law. Addition of nitrites leads to formation of a substance known to cause cancer. This product is designed to be used without nitrites.

(iii) The first work of the warning statement shall be capitalized, and the type size for the first word shall be no smaller than six point type for a label five square inches or less in area, ten point type for a label above five but below ten square inches in area, twelve point type for a label above ten but below fifteen square inches in area, fourteen point type for a label above fifteen but below thirty square inches in area, or eighteen point type for a label over thirty square inches in area. The type size of the remainder of the warning statement shall be no smaller than six point type. All required label text shall be of sufficient prominence, and shall be placed with such conspicuousness relative to other label text and graphic material, to insure that the warning statement is read and understood by the ordinary individual under

customary conditions of purchase and use.

(e) *Liability and determining whether a chemical substance is subject to this section.* (1) If a manufacturer or importer of a chemical substance which is described by the generic chemical name in paragraph (a) of this section makes an inquiry under § 710.7(g) of this chapter or § 720.25(b) of this chapter as to whether the specific substance is on the Inventory and EPA informs the manufacturer or importer that the substance is on the Inventory, EPA will also inform the manufacturer or importer whether the substance is subject to this section.

(2) Except for manufacturers and importers of P–84–529, no processor, distributor, or user of P–84–529 will be in violation of this section unless that person has received a letter specified in paragraph (d)(1) of this section or a container with the label specified in paragraph (d)(2) of this section.

(f) *Exemptions.* A person identified in paragraphs (c) and (d) of this section is not subject to the requirements of those paragraphs if:

(1) The person manufactures, imports, processes, distributes in commerce, or uses the substance only in small quantities solely for research and development and in accordance with section 5(h)(3) of the Act.

(2) The person manufactures, imports, processes, distributes in commerce, or uses the substance only as an impurity.

(3) The person imports, processes, distributes in commerce, or uses the substance only as part of an article.

(4) The person processes or distributes the substance in commerce solely for export and, when distributing in commerce, lables the substance in accordance with section 12(a)(1)(B) of the Act.

(g) *Enforcement.* (1) Failure to comply with any provision of this section is a violation of section 15 of the Act [15 U.S.C. 2614].

(2) Failure or refusal to permit access to or copying of records, as required under section 11 of the Act, is a violation of section 15 of the Act [15 U.S.C. 2614].

(3) Failure or refusal to permit entry or inspection, as required under section 11 of the Act, is a violation of section 15 of the Act [15 U.S.C. 2614].

(4) Violators may be subject to the civil and criminal penalties in section 16 of the Act [15 U.S.C. 2615] for each violation.

(5) EPA may seek to enjoin the processing, distribution in commerce, or use of a chemical substance in violation of this section; act to seize any chemical substance processed, distributed in commerce, or used in violation of this section; or take other actions under the authority of sections 7 and 17 of the Act [15 U.S.C. 2605 and 2616].

[49 FR 36855, Sept. 20, 1984]

### § 747.195 Triethanolamine salt of a substituted organic acid.

This section identifies activities with respect to a chemical substance which are prohibited and requires that warnings and instructions accompany the substance when distributed in commerce.

(a) *Chemical substance subject to this section.* The following chemical substance, referred to by its premanufacture notice number and generic chemical name, is subject to this section: P–84–310, triethanolamine salt of a substituted organic acid.

(b) *Definitions.* Definitions in section 3 of the Act, 15 U.S.C. 2602, apply to this section unless otherwise specified in this paragraph. In addition, the following definitions apply:

(1) The terms *Act*, *article*, *chemical substance*, *commerce*, *importer*, *impurity*, *Inventory*, *manufacturer*, *person*, *process*, *processor*, and *small quantities solely for research and development*, have the same meaning as in § 720.3 of this chapter.

(2) *Metalworking fluid* means a liquid of any viscosity or color containing intentionally added water used in metal machining operations for the purpose of cooling, lubricating, or rust inhibition.

(3) *Nitrosating agent* means any substance that has the potential to transfer a nitrosyl group (—NO) to a primary, secondary, or tertiary amine to form the corresponding nitrosamine.

(4) *Process or distribute in commerce solely for export* means to process or distribute in commerce solely for export

from the United States under the following restrictions on domestic activity:

(i) Processing must be performed at sites under the control of the processor.

(ii) Distribution in commerce is limited to purposes of export.

(iii) The processor or distributor may not use the substance except in small quantities solely for research and development.

(c) *Use limitations.* (1) Any person producing a metalworking fluid, or a product which could be used in or as a metalworking fluid, which includes as one of its components P–84–310, is prohibited from adding any nitrosating agent to the metalworking fluid or product.

(2) A person using as a metalworking fluid a product containing P–84–310 is prohibited from adding any nitrosating agent to the product.

(d) *Warnings and instructions.* (1) Any person who distributes in commerce P–84–310 in a metalworking fluid, or in any form in which it could be used as a component of a metalworking fluid, must send to each recipient of P–84–310 and confirm receipt in writing prior to the first shipment to that person:

(i) A letter that includes the following statements: A substance, identified generically as a triethanolamine salt of a substituted organic acid, contained in the product (*insert distributor's trade name or other identifier for product containing P–84–310*) has been regulated by the Environmental Protection Agency, at 40 CFR 747.195, as published in the FEDERAL REGISTER of June 14, 1984. A copy of the regulation is enclosed. The regulation prohibits the addition of any nitrosating agent, including nitrites, to the triethanolamine salt of a substituted organic acid, when the substance is or could be used in metalworking fluids. The addition of nitrites or other nitrosating agents to this substance leads to formation of a substance known to cause cancer in laboratory animals. The triethanolamine salt of a substituted organic acid has been specifically designed to be used without nitrites. Consult the enclosed regulation for further information.

(ii) A copy of this § 747.195.

(2)(i) Any person who distributes in commerce a metalworking fluid containing P–84–310 must affix a label to each container containing the fluid.

(ii) The label shall contain a warning statement which shall consist only of the following language:

WARNING! Do Not Add Nitrites to This Metalworking Fluid under Penalty of Federal Law. Addition of nitrites leads to formation of a substance known to cause cancer. This product is designed to be used without nitrites.

(iii) The first word of the warning statement shall be capitalized, and the type size for the first word shall be no smaller than six point type for a label five square inches or less in area, ten point type for a label above five but below ten square inches in area, twelve point type for a label above ten but below fifteen square inches in area, fourteen point type for a label above fifteen but below thirty square inches in area, or eighteen point type for a label over thirty square inches in area. The type size of the remainder of the warning statement shall be no smaller than six point type. All required label text shall be of sufficient prominence, and shall be placed with such conspicuousness relative to other label text and graphic material, to insure that the warning statement is read and understood by the ordinary individual under customary conditions of purchase and use.

(e) *Liability and determining whether a chemical substance is subject to this section.* (1) If a manufacturer or importer of a chemical substance which is described by the generic chemical name in paragraph (a) of this section makes an inquiry under § 710.7(g) of this chapter or § 720.25(b) of this chapter as to whether the specific substance is on the Inventory and EPA informs the manufacturer or importer that the substance is on the Inventory, EPA will also inform the manufacturer or importer whether the substance is subject to this section.

(2) Except for manufacturers and importers of P–84–310, no processor, distributor, or user of P–84–310 will be in violation of this section unless that person has received a letter specified in paragraph (d)(1) of this section or a container with the label specified in paragraph (d)(2) of this section.

(f) *Exemptions.* A person identified in paragraphs (c) and (d) of this section is not subject to the requirements of those paragraphs if:

(1) The person manufactures, imports, processes, distributes in commerce, or uses the substance only in small quantities solely for research and development and in accordance with section 5(h)(3) of the Act.

(2) The person manufactures, imports, processes, distributes in commerce, or uses the substance only as an impurity.

(3) The person imports, processes, distributes in commerce, or uses the substance only as part of an article.

(4) The person processes or distributes the substance in commerce solely for export, and when distributing in commerce, labels the substance in accordance with section 12(a)(1)(B) of the Act.

(g) *Enforcement.* (1) Failure to comply with any provision of this section is a violation of section 15 of the Act (15 U.S.C. 2614).

(2) Failure or refusal to permit access to or copying of records, as required under section 11 of the Act, is a violation of section 15 of the Act (15 U.S.C. 2614).

(3) Failure or refusal to permit entry or inspection, as required under section 11 of the Act, is a violation of section 15 of the Act (15 U.S.C. 2614).

[49 FR 24668, June 14, 1984]

### § 747.200 Triethanolamine salt of tricarboxylic acid.

This section identifies activities with respect to two chemical substances which are prohibited and requires that warnings and instructions accompany the substances when distributed in commerce.

(a) *Chemical substances subject to this section.* The following chemical substances, referred to by their premanufacture notice numbers and generic chemical names, are subject to this section:

P–83–1005, triethanolamine salt of tricarboxylic acid; and

P–83–1062, tricarboxylic acid.

(b) *Definitions.* Definitions in section 3 of the Act, 15 U.S.C. 2602, apply to this section unless otherwise specified in this paragraph. In addition, the following definitions apply:

(1) The terms *Act, article, byproducts, chemical substance, commerce, imported, impurity, Inventory, manufacture or import for commercial purposes, manufacture solely for export, manufacturer, new chemical substance, person, process, processor,* and *small quantities solely for research and development* have the same meaning as in § 720.3 of this chapter.

(2) *Metalworking fluid* means a liquid of any viscosity or color containing intentionally added water used in metal machining operations for the purpose of cooling or lubricating.

(3) *Nitrosating agent* means any substance that has the potential to transfer a nitrosyl group (—NO) to a secondary or tertiary amine to form the corresponding nitrosamine.

(c) *Use limitations.* (1) Any person producing a metalworking fluid, or a product which could be used in or as a metalworking fluid, which includes as one of its components P–83–1005 is prohibited from adding any nitrosating agent to the metalworking fluid or product.

(2) Any person using as metalworking fluid a product containing P–83–1005 is prohibited from adding any nitrosating agent to the product.

(d) *Warnings and instructions.* (1) Any person who distributes in commerce P–83–1005 in a metalworking fluid, or in any form in which it could be used as a component of a metalworking fluid, must sent to each recipient of P–83–1005 and confirm receipt prior to the first shipment to that person:

(i) A letter that includes the following statements:

A substance, identified generically as triethanolamine salt, of tricarboxylic acid, contained in the product (*insert distributor's trade name or other identifier for product containing P–83–1005*) has been regulated by the Environmental Protection Agency, at 40 CFR 747.200, as published in the FEDERAL REGISTER of January 23, 1984. A copy of the regulation is enclosed. The regulation prohibits the addition of any nitrosating agent, including nitrites, to the triethanolamine salt of tricarboxylic acid, when the substance is or could be used in metalworking fluids. The addition of nitrites or other nitrosating agents to this substance leads to formation of a substance known to cause cancer in laboratory animals. The triethanolamine salt of the tricarboxylic acid, has been specifically designed to be used without nitrites. Consult

the enclosed regulation for further information.

(ii) A copy of this rule.

(2) Any person who distributes in commerce a metalworking fluid containing P–83–1005 must affix to each container containing the fluid a label that includes, in letters no smaller than ten point type, the following statement:

WARNING! Do Not Add Nitrites to This Metalworking Fluid under Penalty of Federal Law. Addition of nitrite leads to formation of a substance known to cause cancer. This product is designed to be used without nitrites.

(3) Any person who distributes in commerce P–83–1062 in any form in which it could be combined with water and triethanolamine to produce P–83–1005 must send to each recipient of P–83–1062, and confirm receipt prior to the first shipment to that person:

(i) A letter that includes the following statements:

A substance, identified generically as tricarboxylic acid, contained in the product (*insert distributor's trade name or other identifier for product containing P–83–1062*) has been regulated by the Environmental Protection Agency (40 CFR 747.200 published in the FEDERAL REGISTER of January 23, 1984. A copy of the regulation is enclosed. Combining tricarboxylic acid with water and the triethanolamine produces a substance, identified generically as the triethanolamine salt of the tricarboxylic acid. The regulation prohibits the addition of nitrosating agents, including nitrites, to the triethanolamine salt of tricarboxylic acid, when that substance is or could be used in metalworking fluids. The addition of nitrites or other nitrosating agents to that substance leads to formation of a substance known to cause cancer in laboratory animals. Consult the enclosed regulation for further information.

(ii) A copy of this rule.

(e) *Liability and determining whether a chemical substance is subject to this section.* (1) If a manufacturer or importer of a chemical substance which is described by one of the generic names in paragraph (a) of this section makes an inquiry under § 710.7(g) of this chapter or § 720.25(b) of this chapter as to whether the specific substance is on the Inventory and EPA informs the manufacturer or importer that the substance is on the Inventory, EPA will also inform the manufacturer or importer whether the substance is subject to this section.

(2) Except for manufacturers and importers of P–83–1005 and P–83–1062, no processor, distributor, or user of P–83–1005 or P–83–1062 will be in violation of this section unless that person has received a letter specified in paragraph (d)(1) or (3) of this section or a container with the label specified in paragraph (d)(2) of this section.

(f) *Exemptions and exclusions.* The chemical substances identified in paragraph (a) of this section are not subject to the requirements of paragraphs (c) and (d) of this section, if:

(1) The substance is manufactured, imported, processed, distributed in commerce, and used only in small quantities solely for research and development, and if the substance is manufactured, imported, processed, distributed in commerce, and used in accordance with section 5(h)(3) of the Act.

(2) The substance is manufactured, imported, processed, distributed in commerce, or used only as an impurity.

(3) The substance is imported, processed, distributed in commerce, or used only as part of an article.

(4) The substance is manufactured solely for export.

(g) *Enforcement.* (1) Failure to comply with any provision of this section is a violation of section 15 of the Act (15 U.S.C. 2614).

(2) Failure or refusal to permit access to or copying of records, as required under section 11 of the Act, is a violation of a section 15 of the Act (15 U.S.C. 2614).

(3) Failure or refusal to permit entry or inspection, as required under section 11 of the Act, is a violation of section 15 of the Act (15 U.S.C. 2614).

(4) Violators may be subject to the civil and criminal penalties in section 16 of the Act (15 U.S.C 2615) for each violation.

(5) EPA may seek to enjoin the processing, distribution in commerce, or use of a chemical substance in violation of this section, act to seize any chemical substance, processed, distributed in commerce, or used in violation of this section or take other actions

under the authority of section 7 or 17 of the Act (15 U.S.C. 2605 or 2616).

[49 FR 2772, Jan. 23, 1984]

# PART 749—WATER TREATMENT CHEMICALS

## Subparts A–C—[Reserved]

## Subpart D—Air Conditioning and Cooling Systems

Sec.
749.68 Hexavalent chromium-based water treatment chemicals in cooling systems.

AUTHORITY: 15 U.S.C. 2605 and 2607.

## Subpart A–C—[Reserved]

## Subpart D—Air Conditioning and Cooling Systems

### § 749.68 Hexavalent chromium-based water treatment chemicals in cooling systems.

(a) *Chemicals subject to this section.* Hexavalent chromium-based water treatment chemicals that contain hexavalent chromium, usually in the form of sodium dichromate (CAS No. 10588–01–9), are subject to this section. Other examples of hexavalent chromium compounds that can be used to treat water are: Chromic acid (CAS No. 7738–94–5), chromium trioxide (CAS No. 1333–83–0), dichromic acid (CAS No.13530–68–2), potassium chromate (CAS No. 7789–00–6), potassium dichromate (CAS No. 7778–50–9), sodium chromate (CAS No. 7775–11–3), zinc chromate (CAS No. 13530–65–9), zinc chromate hydroxide (CAS No. 153936–94–6), zinc dichromate (CAS No. 14018–95–2), and zinc potassium chromate (CAS No. 11103–86–9).

(b) *Purpose.* The purpose of this section is to impose certain requirements on activities involving hexavalent chromium-based water treatment chemicals to prevent unreasonable risks associated with human exposure to air emissions of hexavalent chromium from comfort cooling towers.

(c) *Applicability.* This section is applicable to use of hexavalent chromium-based water treatment chemicals in comfort cooling towers and to distribution in commerce of hexavalent chromium-based water treatment chemicals for use in cooling systems.

(d) *Definitions.* Definitions in section 3 of the Toxic Substances Control Act, 15 U.S.C. 2602, apply to this section unless otherwise specified in this paragraph. In addition, the following definitions apply:

(1) *Act* means the Toxic Substances Control Act, 15 U.S.C. 2601 *et seq.*

(2) *Chilled water loop* means any closed cooling water system that transfers heat from air handling units or refrigeration equipment to a refrigeration machine, or chiller.

(3) *Closed cooling water system* means any configuration of equipment in which heat is transferred by circulating water that is contained within the equipment and not discharged to the air; chilled water loops are included.

(4) *Comfort cooling towers* means cooling towers that are dedicated exlusively to and are an integral part of heating, ventilation, and air conditioning or refrigeration systems.

(5) *Container* means any bag, barrel, bottle, box, can, cylinder, drum, or the like that holds hexavalent chromium-based water treatment chemicals for use in cooling systems.

(6) *Cooling tower* means an open water recirculating device that uses fans or natural draft to draw or force ambient air through the device to cool warm water by direct contact.

(7) *Cooling system* means any cooling tower or closed cooling water system.

(8) *Distributor* means any person who distributes in commerce water treatment chemicals for use in cooling systems.

(9) *EPA* means the Environmental Protection Agency.

(10) Hexavalent chromium means the oxidation state of chromium with an oxidation number of +6; a coordination number of 4 and tetrahedral geometry.

(11) Hexavalent chromium-based water treatment chemicals means any chemical containing hexavalent chromium which can be used to treat water, either alone or in combination with other chemicals, where the mixture can be used to treat water.

(12) *Industrial cooling tower* means any cooling tower used to remove heat

from industrial processes, chemical reactions, or plants producing electrical power.

(13) *Label* means any written, printed, or graphic material displayed on or affixed to containers of hexavalent chromium-based water treatment chemicals that are to be used in cooling systems.

(14) *Person* means any natural person, firm, company, corporation, joint venture, partnership, sole proprietorship, association, or any other business entity; any State or political subdivision thereof; any municipality; any interstate body; and any department, agency, or instrumentality of the Federal Government.

(15) *Shipment* means the act or process of shipping goods by any form of conveyance.

(16) *Water treatment chemicals* means any combination of chemical substances used to treat water in cooling systems and can include corrosion inhibitors, antiscalants, dispersants, and any other chemical substances except biocides.

(e) *Prohibition of distribution in commerce and commercial use.* (1) All persons are prohibited from distributing in commerce hexavalent chromium-based water treatment chemicals for use in comfort cooling towers.

(2) All persons are prohibited from commercial use of hexavalent chromium-based water treatment chemicals in comfort cooling towers.

(3) Distribution in commerce of hexavalent chromium-based water treatment chemicals for use in, and commercial use of hexavalent chromium-based water treatment chemicals in, industrial cooling towers and closed cooling water systems are not prohibited.

(f) *Effective dates.* (1) The prohibition described in paragraph (e)(1) of this section against distributing in commerce hexavalent chromium-based water treatment chemicals for use in comfort cooling towers is effective February 20, 1990.

(2) The prohibition described in paragraph (e)(2) of this section against using hexavalent chromium-based water treatment chemicals in comfort cooling towers is effective May 18, 1990.

(g) *Labeling.* (1) Each person who distributes in commerce hexavalent chromium-based water treatment chemicals for use in cooling systems after February 20, 1990, shall affix a label or keep affixed an existing label in accordance with this paragraph, to each container of the chemicals. The label shall consist of the following language:

WARNING: This product contains hexavalent chromium. Inhalation of hexavalent chromium air emissions increases the risk of lung cancer. Federal Law prohibits use of this substance in comfort cooling towers, which are towers that are open water recirculation devices and that are dedicated exclusively to, and are an integral part of, heating, ventilation, and air conditioning or refrigeration systems.

(2) The first word of the warning statement shall be capitalized, and the type size for the first word shall be no smaller than 10-point type for a label less than or equal to 10 square inches in area, 12-point type for a label above 10 but less than or equal to 15 square inches in area, 14-point type for a label above 15 but less than or equal to 30 square inches in area, or 18-point type for a label above 30 square inches in area. The type size of the remainder of the warning statement shall be no smaller than 6-point type. All required label text shall be in English and of sufficient prominence and shall be placed with such conspicuousness, relative to other label text and graphic material, to ensure that the warning statement is read and understood by the ordinary individual under customary conditions of purchase and use.

(h) *Recordkeeping.* (1) Each person who distributes in commerce any hexavalent chromium-based water treatment chemicals for use in cooling systems after February 20, 1990, shall retain in one location at the headquarters of the distributor documentation showing:

(i) The name, address, contact, and telephone number of the cooling system owners/operators to whom the chemicals were shipped.

(ii) The chemicals included in the shipment, the amount of each chemical shipped, and the location(s) at which the chemicals will be used.

(2) The information described in paragraph (h)(1) of this section shall be

retained for 2 years from the date of shipment.

(i) *Reporting.* (1) Each person who distributes in commerce any hexavalent chromium-based water treatment chemicals for use in cooling systems shall report to the Regional Administrator of the EPA Region in which the distibutor headquarters is located. The report shall be postmarked not later than February 20, 1990, or 30 days after the person first begins the distribution in commerce of hexavalent chromium-based water treatment chemicals, whichever is later, and shall include:

(i) For the headquarters, the distributor name, address, telephone number, and the name of a contact.

(ii) For the shipment offices through which hexavalent chromium-based water treatment chemicals are sold for use in cooling systems, the distributor name, address, telephone number, and the name of a contact.

(2) The report identified in paragraph (i)(1) of this section shall be updated as changes occur in the distributor headquarters or shipment office information. The updated report shall be submitted to the Regional Administrator and postmarked no later than 10 calendar days after the change occurs.

(3) A person may assert a claim of confidentiality for any information submitted to EPA in connection with this rule. Any claim of confidentiality must accompany the information when submitted to EPA. Persons claiming information as confidential should do so by circling, bracketing, or underlining it and marking it with ''CONFIDENTIAL.'' EPA will disclose information subject to a claim of confidentiality only to the extent permitted by section 14 of TSCA and 40 CFR part 2, subpart B. If a person does not assert a claim of confidentiality for information at the time it is submitted to EPA, EPA may make the information public without further notice to that person.

(j) *Enforcement.* (1) Failure to comply with any provision of this section is a violation of section 15 of the Act (15 U.S.C. 2614).

(2) Failure or refusal to establish and maintain records or to permit access to or copying of records, as required by the Act, is a violation of section 15 of the Act (15 U.S.C. 2614).

(3) Failure or refusal to permit entry or inspection as required by section 11 of the Act (15 U.S.C. 2610) is a violation of section 15 of the Act (15 U.S.C. 2614).

(4) Violators may be subject to the civil and criminal penalties in section 16 of the Act (15 U.S.C. 2615) for each violation.

(k) *Inspections.* EPA will conduct inspections under section 11 of the Act (15 U.S.C. 2610) to ensure compliance with this section.

[55 FR 240, Jan. 3, 1990, as amended at 59 FR 42773, Aug. 19, 1994]

# PART 750—PROCEDURES FOR RULEMAKING UNDER SECTION 6 OF THE TOXIC SUBSTANCES CONTROL ACT

## Subpart A—Procedures for Rulemaking Under Section 6 of the Toxic Substances Control Act

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## Subpart C—Interim Procedural Rules for Processing and Distribution in Commerce Exemptions

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750.41 Final rule.

AUTHORITY: 15 U.S.C. 2605.

## Subpart A—Procedures for Rulemaking Under Section 6 of the Toxic Substances Control Act

SOURCE: 42 FR 61259, Dec. 2, 1977, unless otherwise noted.

### § 750.1 Applicability.

This part applies to all rulemakings under authority of section 6 of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2605.

### § 750.2 Notice of proposed rulemaking.

(a) Each rulemaking becomes subject to this part with the publication of a Notice of Proposed Rulemaking in the FEDERAL REGISTER. A proceeding under section 6 of the Toxic Substances Control Act may begin, as appropriate, with the publication in the FEDERAL REGISTER of a Notice of Proposed Rulemaking, an Advance Notice of Proposed Rulemaking, or notice of other action, such as a formal regulatory investigation designed to lead to issuance of rules within a reasonable time.

(b) Each such notice shall contain:

(1) A draft finding that there is a reasonable basis to conclude that the manufacture, processing, distribution in commerce, use or disposal of the chemical substance(s) or mixture(s) at issue, or any combination of such activities, presents or will present an unreasonable risk of injury to health or the environment.

(2) A Notice of Proposed Rulemaking stating with particularity the reasons for the proposed rule together with a statement why the proposed rule protects adequately against the risk(s) involved using the least burdensome requirements authorized by TSCA.

(3) Either the draft text of the proposed rule (which may include alternative approaches among which a final choice has not yet been made) or a description of the approaches and provisions being considered for inclusion in the rule, or some combination of the above.

(4) Except for rules published under authority of section 6(e), a draft statement with respect to:

(i) The effects of the substance(s) or mixture(s) at issue on health and the magnitude of the exposure of human beings to such substance(s) or mixture(s);

(ii) The effects of the substace(s) or mixture(s) at issue on the environment and the magnitude of the exposure of the environment to such substance(s) or mixture(s).

(iii) The benefits of the substance(s) or mixture(s) at issue for various uses and the availability of substitutes for such uses; and

(iv) The reasonably ascertainable economic consequences of the rule, after consideration of the effect on the national economy, small business, technological innovation, the environment, and public health.

(v) Major impacts of alternatives to the proposed rule shall also be analyzed.

(5) In cases where the administrator, in his or her discretion, determines that a risk of injury to health or the environment could be eliminated or reduced to a sufficient extent by actions taken under a Federal law (or laws) other than TSCA administered in whole or in part by the Administrator, a finding that it is in the public interest to proceed against such risk under TSCA. Any such finding shall be accompanied by a brief statement discussing:

(i) All relevant aspects of the risk;

(ii) A comparison of the estimated costs of complying with actions taken under TSCA and under such other law (or laws); and

(iii) The relative efficiency of actions under TSCA and under such other law (or laws) to protect against risk of injury.

Two or more or all of the statements required above may be combined in the same narrative for efficiency of exposition as long as each of the required points is discussed. Any statement required by this paragraph may reference other documents which are not published in the FEDERAL REGISTER. All

such referenced documents shall be included in the rulemaking record. Either the statements required by this paragraph or the documents they reference shall contain a discussion of the factual, analytical, policy and legal considerations behind the agency decision to issue the proposed rule in the form chosen. A brief summary of these considerations shall be included in the preamble in any case. All factual materials and each analytical methodology seriously considered shall be fully disclosed. Significant areas of uncertainty known to the Agency under each heading shall be identified, and the manner in which the Agency intends to deal with them shall be specified.

(c) In addition to the material required under paragraph (b) of this section, each notice of proposed rulemaking shall contain:

(1) A statement of the time and place at which the informal hearing required by section 6(c)(2)(C) of TSCA shall begin, or, to the extent these are not specified, a statement that they will be specified later in a separate FEDERAL REGISTER notice *Provided,* That FEDERAL REGISTER notice of the date and city at which any informal hearing shall begin shall be given at least 30 days in advance;

(2) A statement identifying the place at which the official record of the rulemaking is located, the hours during which it will be open for public inspection, the documents contained in it as of the date the notice of proposed rulemaking was issued, and a statement of the approximate times at which additional materials such as public comments, hearing transcripts, and agency studies in progress will be added to the record. If any material other than public comments or material generated by a hearing is added to the record after publication of the notice required by this section, and notice of its future addition was not given at the time of that initial publication, a separate FEDERAL REGISTER notice announcing its addition to the record and inviting comment shall be published;

(3) The due date for public comments, which shall be at least two weeks prior to the informal hearing for main comments and no more than two weeks after the informal hearing for reply comments;

(4) The name, address and office telephone number of the Record and Hearing Clerk for the rulemaking in question; and

(5) A nonbinding target date for issuing the final rule.

[42 FR 61259, Dec. 1977, as amended at 54 FR 21623, May 19, 1989]

### § 750.3 Record.

(a) No later than the date of proposal of a rule subject to this part, a rulemaking record for that rule shall be established. It shall consist of a separate identified filing space containing:

(1) All documents required by § 750.2(b);

(2) All documents cited in the documents required by § 750.2(b);

(3) all public comments timely received;

(4) All public hearing transcripts;

(5) All material received during an informal hearing and accepted for the record of that hearing; and

(6) Any other information which the Administrator considers to be relevant to such rule and which the Administrator identified, on or before the date of the promulgation of the rule, in a notice published in the FEDERAL REGISTER.

All material in the record shall be appropriately indexed. Each record shall be available for public inspection during normal Agency business hours. Appropriate arrangements allowing members of the public to copy record materials that do not risk the permanent loss of such materials shall be made. All material required to be included in the record shall be added to the record as soon as feasible after its receipt by the Agency.

(b) The Record and Hearing Clerk for each rulemaking shall be responsible for Agency compliance with the requirements of paragraph (a) of this section.

### § 750.4 Public comments.

(a) Main comments shall be postmarked or received no later than the time specified in the Notice of Proposed Rulemaking and shall contain all comments on and criticisms of that

Notice by the commenting person, based on information which is or reasonably could have been available to that person at the time.

(b) Reply comments shall be postmarked or received no later than two weeks after the close of all informal hearings on the proposed rule and shall be restricted to comments on:

(1) Other comments;

(2) Material in the hearing record; and

(3) Material which was not and could not reasonably have been available to the commenting party a sufficient time before main comments were due.

(c) Extensions of the time for filing comments may be granted in writing by the Record and Hearing Clerk. Application for an extension shall be made in writing. Comments submitted after the comment period and all extensions of it have expired need not be added to the rulemaking record and need not be considered in decisions concerning the rule. Unless the Notice of Proposed Rulemaking states otherwise, four copies of all comments shall be submitted.

### § 750.5 Subpoenas.

(a) Where necessary, subpoenas requiring the production of documentary material, the attendance of persons at the hearing, or responses to written questions may be issued. Subpoenas may be issued either upon request as provided in paragraph (b) of this section or by EPA on its own motion.

(b) All subpoena requests shall be in writing. Hearing participants may request the issuance of subpoenas as follows:

(1) Subpoenas for the attendance of persons, and for the production of documents or responses to questions at the legislative hearing may be requested at any time up to the deadline for filing main comments.

(2) Subpoenas for production of documents or answers to questions after the legislative hearing may be requested at any time between the beginning of the legislative hearing and the deadline for submitting reply comments.

(c) EPA will rule on all subpoena requests filed under paragraph (b)(1) of this section no later than the beginning of the legislative hearing. Such requests may be granted, denied, or deferred. EPA will rule on all subpoena requests filed under paragraph (b)(2) of this section and all deferred subpoena requests filed under paragraph (b)(1) of this section no later than the promulgation of the final rule. Such requests shall be either granted or denied.

### § 750.6 Participation in informal hearing.

(a) Each person or organization desiring to participate in the informal hearing required by section 6(c)(2)(C) of TSCA shall file a written request to so participate with the Record and Hearing Clerk which shall be postmarked or received no later than three weeks prior to the scheduled start of such hearing. The request shall include:

(1) A brief statement of the interest of the person or organization in the proceeding;

(2) A brief outline of the points to be addressed;

(3) An estimate of the time required; and

(4) If the request comes from an organization, a nonbinding list of the persons to take part in the presentation. Organizations are requested to bring with them, to the extent possible, employees with individual expertise in and responsibility for each of the areas to be addressed. No organization not filing main comments in the rulemaking will be allowed to participate at the hearing, unless a waiver of this requirement is granted in writing by the Record and Hearing Clerk or the organization is appearing at the request of EPA or under subpoena.

(b) No later than one week prior to the start of the hearing, the Record and Hearing Clerk shall make a hearing schedule publicly available and mail or deliver it to each of the persons who requested to appear at the hearing. This schedule shall be subject to change during the course of the hearing at the discretion of those presiding over it.

(c) Opening statements should be brief, and restricted either to points that could not have been made in main comments, or to emphasizing points which are made in main comments, but which the participant believes can be

more forcefully urged in the hearing context.

**§750.7 Conduct of legislative hearing.**

(a) A panel of EPA employees shall preside at each hearing conducted under section 6(c)(2)(C) of TSCA. In appropriate cases other Executive Branch employees may also sit with and assist the panel. The membership of the panel may change as different topics arise during the hearing. In general, the panel membership will consist of agency employees with special responsibility for the final rule or special expertise in the topics under discussion. One member of the panel shall be named to chair the proceedings and shall attend throughout the hearing, unless unavoidably prevented by sickness or similar personal circumstances.

(b) The panel may question any individual or group participating in the hearing on any subject relating to the rulemaking. Cross-examination by others will normally not be permitted at this stage. It may be granted in compelling circumstances at the sole discretion of the hearing panel. However, persons in the hearing audience may submit questions in writing for the hearing panel to ask the participants, and the hearing panel may, at their discretion, ask these questions.

(c) Participants in the hearing may submit additional material for the hearing record and shall submit such additional material as the hearing panel may request. All such submissions shall become part of the record of the hearing. A verbatim transcript of the hearing shall be made.

**§750.8 Cross-examination.**

(a) After the close of the legislative hearing conducted under §750.7, any participant in that hearing may submit a written request for cross-examination. The request shall be received by EPA within one week after a full transcript of the legislative hearing becomes available and shall specify:

(1) The disputed issue(s) of material fact as to which cross-examination is requested. This shall include an explanation of why the questions at issue are ''factual'', rather than of an analytical or policy nature, the extent to which they are in ''dispute'' in the light of the record made thus far, and the extent to which and why they can reasonably be considered ''material'' to the decision on the final rule; and

(2) The person(s) the participant desires to cross-examine, and an estimate of the time necessary. This shall include a statement by the cross-examination requested can be expected to result in ''full and true disclosure'' resolving the issue of material fact involved.

(b) Within one week after receipt of all requests for cross-examination under paragraph (a) of this section the hearing panel shall rule on them. The ruling shall be served by the Record and Hearing Clerk on all participants who have requested cross-examination and shall be inserted in the record. Written notice of the ruling shall be given to all persons requesting cross-examination and all persons to be cross-examined. The ruling shall specify:

(1) The issues as to which cross-examination is granted,

(2) The persons to be cross-examined on each issue,

(3) The persons to be allowed to conduct cross-examination, and

(4) Time limits for the examination of each witness by each cross-examiner.

In issuing this ruling, the panel may determine that one or more participants who have requested cross-examination have the same or similar interests and should be required to choose a single representative for purposes of cross-examination. In such a case the order shall simply assign time for cross-examination by that single representative without identifying the representative further. Subpoenas for witnesses may be issued where necessary.

(c) Within one week after the insertion into the record of the ruling under paragraph (b) of this section, the hearing at which the cross-examination will be conducted shall commence. One or more members of the original panel shall preside for the Agency. The panel shall have authority to conduct cross-examination on behalf of any participant, although as a general rule this right will not be exercised. The panel shall also have authority to modify the

governing ruling in any respect and to make new rulings on group representation under section 6(c)(3)(C) of TSCA. A verbatim transcript of the hearing shall be made.

(d)(1) No later than the time set for requesting cross-examination, a hearing participant may request that other alternative methods of clarifying the record (such as informal conferences or the submittal of additional information) be used. Such requests may be submitted either in lieu of cross-examination requests, or in conjunction with them.

(2) The panel in passing on a cross-examination request may as a precondition to ruling on its merits require that alternative means of clarifying the record be used whether or not that has been requested under paragraph (d)(1) of this section. In such a case the results of the use of such alternative means shall be made available to the person requesting cross-examination of a one-week comment period, and the panel shall make a final ruling on cross-examination within one week thereafter.

(e) Waivers or extensions of any deadline in this section applicable to persons other than EPA may be granted on the record of the hearing by the person chairing it or in writing by the Record and Hearing Clerk.

### § 750.9 Final rule.

(a) As soon as feasible after the deadline for submittal of reply comments, the Agency shall issue a final rule. Final versions of the statements required by paragraph (b) of § 750.2 shall be published in the FEDERAL REGISTER together with the final rule. The Agency shall also publish at that time:

(1) A list of all material added to the record (other than public comments and material from the hearng record) which has not previously been listed in a FEDERAL REGISTER document, and

(2) The effective date of the rule.

(b) [Reserved]

APPENDIX A TO SUBPART A

To assist in reading the regulations set forth above, this appendix sets forth the principal stages through which rules promulgated under section 6 of TSCA will pass.

The second column gives the relationship that one date bears to another whenever that relationship is specified in the regulations, and cites the governing provision. The third column contains estimates of the time that a typical rulemaking is likely to require to reach and complete each stage of these proceedings. In drawing up this third column, we have assumed that 60 days will be allowed for the submission of main comments; that the legislative phase of the informal hearing will take two weeks, and that cross-examination will take four days. Since these are only estimates, in any given rulemaking shorter or longer times may actually be required for each of these stages.

| Stage | Timing in relation to other stages | Estimated total time elapsed (days) |
|---|---|---|
| Proposed regulation | Sec. 750.2. | |
| Requests to participate in informal hearing due. | 3 weeks prior to beginning of hearing (§ 750.2(a)). | 53 |
| Main comments due | 2 weeks prior to beginning of hearing (§ 750.2(c)(3)). | 60 |
| Begin informal hearing. | ..... | 74 |
| End legislative hearing. | ..... | 88 |
| Requests for cross-examination due. | 1 week after end of legislative hearing (§ 750.8(a)). | 95 |
| Ruling on cross-examination requests. | 1 week after requests are due (§ 750.8(b)). | 102 |
| Cross-examination begins. | 1 week afer ruling on cross-examination requests (§ 750.8(c)). | 109 |
| Cross-examination ends; informal hearing ends. | ..... | 113 |
| Reply comments due | 2 weeks after end of informal hearing (§ 750.4(b)). | 127 |

## Subpart B—Interim Procedural Rules for Manufacturing Exemptions

SOURCE: 43 FR 50905, Nov. 1, 1978, unless otherwise noted.

### § 750.10 Applicability.

Sections 750.10–750.21 apply to all rulemakings under authority of section 6(e)(3)(B) of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2605(e)(3)(B) with respect to petitions filed pursuant to § 750.11(a) of this part.

### § 750.11 Filing of petitions for exemption.

(a) *Who may file.* Any person seeking an exemption from the PCB manufacturing ban imposed by section 6(e)(3)(A) of TSCA may file a petition

for exemption. Petitions must be submitted on an individual basis for each manufacturer or individual affected by the 1979 manufacturing ban.

(b) *Where to file.* All petitions must be submitted to the following location: OPPT Document Control Officer (7407), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460.

(c) *Content of petition.* Each petition shall contain the following:

(1) Name, address and telephone number of petitioner.

(2) Description of PCB ban exemption requested, including items to be manufactured and nature of manufacturing process—such as smelting.

(3) Location(s) of manufacturing sites requiring exemption.

(4) Length of time requested for exemption (maximum length of exemption is 1 year).

(5) Amount of PCB chemical substance or PCB mixture (by pounds and/or volume) to be manufactured or used during requested exemption period and the manner of release of PCB's into the environment associated with such manufacture or use.

(6) The basis for the petitioner's contention that under section 6(e)(3)(B)(i) of TSCA ''an unreasonable risk of injury to health or environment would not result'' from the granting of his petition for exemption.

(7) The basis for the petitioner's contention that he meets the criterion of section 6(e)(3)(B)(ii) of TSCA concerning substitutes for PCB's.

(8) Quantification of the reasonably ascertainable economic consequences of denial of the petition for exemption from the 1979 manufacturing ban and an explanation of the manner of computation.

(d) *Request for further information.* The Agency reserves the right to request further information as to each petition prior to or after publication of the notice of proposed rulemaking required by §750.13.

(e) *Renewal requests.* (1) Any petitioner who has been granted an exemption under section 6(e)(3)(B) of TSCA, on or after May 25, 1994, and who seeks to renew that exemption without changing its terms, must submit a letter by certified mail to EPA requesting that the exemption be granted for the following year.

(i) This letter must contain a certification by the petitioner that the type of activities, the procedures for handling the PCBs, the amount of PCBs handled, and any other aspect of the exemption have not changed from the original exemption petition request.

(ii) This letter must be received by EPA at least 6 months prior to the expiration of the existing exemption.

(iii) If a petitioner fails to make a submission or the submission is not timely under this section, the exemption will expire 1 year from the effective date of granting that exemption.

(iv) EPA will address a timely submission of a renewal request by rulemaking and either grant or deny the request.

(2) Any petitioner who has been granted an exemption on or after May 25, 1994, and who seeks to increase the amount of PCBs handled or to change the type of activities, the procedures for handling the PCBs, and any other aspect of their existing exemption must submit a new exemption petition to EPA. The existing exemption activity may continue until the new submission is addressed by rulemaking, provided the activity conforms to the terms of the current exemption approved by EPA, and the petitioner complies with the conditions of paragraph (e)(1) of this section.

(3) Any petitioner who has been granted a TSCA section 6(e)(3)(B) exemption in a rule prior to May 25, 1994, and who seeks to increase the amount of PCBs handled or to change the type of activities, the procedures for handling the PCBs, and any other aspect of their existing exemption must submit a new exemption petition to EPA. The existing exemption activity may continue until the new submission is addressed by rulemaking, provided the activity conforms to the terms of the original exemption approved by EPA.

[43 FR 50905, Nov. 1, 1978, as amended at 53 FR 12524, Apr. 15, 1988; 59 FR 16998, Apr. 11, 1994]

### § 750.12 Consolidation of rulesmakings.

All petitions received pursuant to §750.11(a) will be consolidated into one

rulemaking with one informal hearing held on all petitions.

### § 750.13 Notice of proposed rulemaking.

Rulemaking for PCB exemptions filed pursuant to § 750.11(a) shall begin with the publication of a notice of proposed rulemaking in the FEDERAL REGISTER. The notice shall state in summary form the required information described in § 750.11(c). Due to time constraints, the notice need not indicate what action EPA proposes to take on the exemption petitions. The notice shall also be subject to § 750.2(c) with the exceptions (1) that the clause ''in addition to the material required under paragraph (b)'' is eliminated; and (2) that § 750.2(c)(3) is changed to read:

> The due date for public comments, which shall be (1) thirty days after publication of the notice of proposed rulemaking for main comments and (2) one week after the close of the informal hearing for reply comments.

[43 FR 50905, Nov. 1, 1978, as amended at 59 FR 16998, Apr. 11, 1994]

### § 750.14 Record.

Section 750.3 shall be applicable with the exception that the words ''§ 750.11(c)'' are substituted for ''§ 750.2(b)'' in § 750.3(a)(1) and (2).

[43 FR 50905, Nov. 1, 1978, as amended at 59 FR 16998, Apr. 11, 1994]

### § 750.15 Public comments.

Section 750.4 shall be applicable with the exception that the time period in § 750.4(b) is shortened to 1 week.

### § 750.16 Confidentiality.

The Agency encourages the submission of nonconfidential information by petitioners and commenters. The Agency does not wish to have unnecessary restrictions on access to the rulemaking record. However, if a petitioner or commenter believes that he can only state his position through the use of information claimed to be confidential, he may submit it. Such information must be separately submitted for the rulemaking record and marked ''confidential'' by the submitter. For the information claimed to be confidential, the Agency will list only the date and the name and address of the petitioner or commenter in the public file, noting that the petitioner or commenter has requested confidential treatment. The information claimed to be confidential will be placed in a confidential file. A petitioner must also file a nonconfidential petition with a nonconfidential summary of the confidential information to be placed in the public file. Similarly, a commenter must supply a nonconfidential summary of the information claimed to be confidential to be placed in the public file. Any information not marked as confidential will be placed in the public file. Information marked confidential will be treated in accordance with the procedures in part 2, subpart B of this title.

### § 750.17 Subpoenas.

Section 750.5 shall be applicable.

### § 750.18 Participation in informal hearing.

(a) Each person or organization desiring to participate in the informal hearing required by section 6(c)(2)(C) of TSCA shall file a written request to so participate with the record and hearing clerk which shall be received no later than 7 days prior to the scheduled start of the hearing. The hearing shall begin 7 days after the close of the 30-day comment period or as soon thereafter as practicable.

(b) With the exception of the first sentence in § 750.6(a), § 750.6 shall be applicable with the further exception that the time period in § 750.6(b) is shortened to no later than 3 days prior to the start of the hearing.

### § 750.19 Conduct of informal hearing.

Section 750.7 shall be applicable with the addition of the following sentence at the end of § 750.7(c):

> Participants shall be allowed to designate testimony from prior EPA informal rulemaking hearings concerning PCB's under TSCA. The hearing panel may reject repetative testimony previously presented at such hearings.

### § 750.20 Cross-examination.

Section 750.8 shall be applicable.

### § 750.21 Final rule.

(a) As soon as feasible after the deadline for submittal of reply comments,

the Agency shall issue a final rule. The Agency shall also publish at that time:

(1) A list of all material added to the record (other than public comments and material from the hearing record) which has not previously been listed in a FEDERAL REGISTER document, and

(2) The effective date of the rule.

(b) The Administrator hereby delegates final Agency authority to grant or deny petitions under section 6(e)(3)(B) of TSCA submitted pursuant to § 750.11 of these rules to the Assistant Administrator for Prevention, Pesticides and Toxic Substances. The Assistant Administrator shall act on such petitions subsequent to opportunity for an informal hearing pursuant to these rules.

(c) In determining whether to grant an exemption to the PCB ban, the Agency shall apply the two standards enunciated in section 6(e)(3)(B) of TSCA.

## Subpart C—Interim Procedural Rules for Processing and Distribution in Commerce Exemptions

SOURCE: 44 FR 31560, Mar. 31, 1979, unless otherwise noted.

### § 750.30 Applicability.

Sections 750.30–750.41 apply to all rulemakings under authority of section 6(e)(3)(B) of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2605(e)(3)(B) with respect to petitions for PCB processing and distribution in commerce exemptions filed pursuant to § 750.31(a) of this part.

### § 750.31 Filing of petitions for exemption.

(a) *Who may file.* Any person seeking an exemption from the PCB processing and distribution in commerce prohibitions imposed by section 6(e)(3)(A)(ii) of TSCA may file a petition for exemption. Petitions must be submitted on an individual basis for each processor, distributor, seller or individual affected by the 1979 processing and distribution in commerce prohibitions, except as described in paragraphs (a)(1) through (9) of this section.

(1) *Processing and distribution in commerce of PCB-contaminated transformer dielectric fluid.* Persons who process or distribute in commerce dielectric fluid containing 50 ppm or greater PCB (but less than 500 ppm PCB) for use in PCB-Contaminated Transformers may submit a single consolidated petition on behalf of any number of petitioners. The name and address of each petitioner must be stated in the petition.

(2) *Contaminated substances and mixtures—processing.* Persons who process the same chemical substance or the same mixture containing 50 ppm or greater PCB as an impurity or contaminant may submit a consolidated petition if the chemical substance or mixture is processed for the same use by each person represented by the petition. For example, persons who process a PCB-contaminated pigment into printing inks may combine their petitions into one petition. The name and address of each petitioner must be stated in the petition.

(3) *Contaminated substances and mixtures—distribution in commerce.* Persons who distribute in commerce the same chemical substance or the same mixture containing 50 ppm or greater PCB as an impurity or contaminant may submit a consolidated petition if the chemical substance or mixture is distributed in commerce for a common use. Such a petition is not required to name each person who distributes in commerce the chemical substance or mixture.

(4) *PCB capacitor distribution for purposes of repair.* Persons who distribute in commerce PCB capacitors for servicing (repair) of PCB Equipment may submit a single consolidated petition on behalf of any number of petitioners engaged in such distribution in commerce for purposes of repair. The name of each petitioner need not be stated in the petition.

(5) *Small quantities for research and development.* Persons who process or distribute in commerce small quantities of PCBs for research and development may submit a single consolidated petition. The name and address of each petitioner must be stated in the petition.

(6) *Microscopy.* Persons who process or distribute in commerce PCBs for use as a mounting medium in microscopy

may submit a single consolidated petition on behalf of any number of petitioners. The name and address of each petitioner must be stated in the petition.

(7) *Processing of PCB Articles into PCB Equipment.* A person who processes (incorporates) PCB Articles (such as small PCB Capacitors) into PCB Equipment may submit a petition on behalf of himself and all persons who further process or distribute in commerce PCB Equipment built by the petitioner. For example, a builder of motors who places small PCB Capacitors in the motors may submit a petition on behalf of all persons who process or incorporate motors built by the petitioner into other pieces of PCB Equipment and all those who sell the equipment. Such a petition is not required to identify the persons who distribute in commerce or further process the PCB Equipment. A separate petition must be filed, however, by each processor of PCB Articles into PCB Equipment.

(8) *Processing of PCB Equipment into other PCB Equipment.* A person who processes (incorporates) PCB Equipment into other PCB Equipment may submit a petition on behalf of himself and all persons who further process or distribute in commerce PCB Equipment built by the petitioner. Such a petition is not required to identify the persons who distribute in commerce or further process the PCB Equipment. If a petition has been filed under paragraph (a)(7) of this section by the builder of the original PCB Equipment, no other petition is required.

(9) *Distribution of PCB Equipment.* Distributors in commerce of PCB Equipment may submit a consolidated petition on behalf of persons who distribute in commerce PCB Equipment of one type (such as air conditioners). The petition is not required to name the persons who distribute in commerce the affected PCB Equipment.

(b) *Where to file.* All petitions must be submitted to the following location: OPPT Document Control Officer (7407), East Tower, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460.

(c) *Content of petition.* Each petition must contain the following:

(1) Name, address and telephone number of petitioner. See also paragraphs (a)(1) through (9) of this section for additional identification requirements applicable to certain consolidated petitions.

(2) Description of PCB processing or distribution in commerce exemption requested, including a description of the chemical substances, mixtures or items to be processed or distributed in commerce and, if processing is involved, the nature of the processing.

(3) For processing petitions, location(s) of sites requiring exemption.

(4) Length of time requested for exemption (maximum length of exemption is one year).

(5) Estimated amount of PCBs (by pound and/or volume) to be processed, distributed in commerce, or used during requested exemption period and the manner of release of PCBs into the environment associated with such processing, distribution in commerce, or use. Where the PCB concentration is less than 500 ppm, both the total liquid volume and the total PCB volume must be provided.

(6) The basis for the petitioner's contention that under section 6(e)(3)(B)(i) of TSCA ''an unreasonable risk of injury to health or environment would not result'' from the granting of the petition for exemption.

(7) The basis for the petitioner's contention that under section 6(e)(3)(B)(ii) ''good faith efforts have been made to develop a chemical substance which does not present an unreasonable risk of injury to health or the environment and which may be substituted for'' the PCB.

(8) Quantification of the reasonably ascertainable economic consequences of denying the petition for exemption and an explanation of the manner of computation.

(9) In addition to the information in paragraphs (d)(1) through (8) of this section, certain petitions must contain additional information as follows:

(i) Persons who process or distribute in commerce dielectric fluids containing 50 ppm or greater PCB for use in PCB Transformers, railroad transformers, or PCB electromagnets must also state the expected number of PCB

Transformers, railroad transformers, or PCB electromagnets to be serviced under the exemption. In addition, a person must identify all the facilities which he owns or operates where he services PCB transformers, railroad transformers, or PCB electromagnets.

(ii) Persons filing petitions under paragraph (a)(1) of this section (Processing and Distribution in Commerce of PCB-Contaminated Transformer Dielectric Fluid) must also provide the expected number of PCB-Contaminated Transformers to be serviced under the requested exemption and the expected method of disposal of waste dielectric fluid. In addition, a person must identify all the facilities which he owns or operates where he services PCB-Contaminated Transformers. This information, as well as the information required by paragraphs (d)(1), (3) and (5) of this section, must be provided for each person represented by the petition. All other information may be provided on a group basis.

(iii) Persons filing petitions under paragraphs (a)(2) (Contaminated Substances and Mixtures-Processing) and (a)(3) (Contaminated Substances and Mixtures-Distribution in Commerce) must also provide a justification for the class grouping selected and a description of the uses and the human and environmental exposure associated with each use of the PCB-contaminated chemical substance or mixture for which an exemption is sought. Information may be provided on a group basis, except that the information required by paragraphs (d)(1), (3) and (5) of this section, must be provided for each person represented by a petition under paragraph (a)(2) of this section.

(iv) Persons filing petitions under paragraph (a)(4) of this section (PCB Capacitor Distribution for Purposes of Repair) must also provide an estimate of the expected total number of PCB Capacitors to be distributed in commerce under the requested exemption. All information may be provided on a group basis.

(v) Persons filing petitions under paragraphs (a) (7) and (8) of this section (Processing of PCB Articles into PCB Equipment and Processing of PCB Equipment into Other PCB Equipment) must provide a description of each type of PCB Equipment (including the amount of PCBs by poundage and/or volume in the PCB Equipment) to be processed and/or distributed in commerce under the exemption, the number of each type of equipment expected to be processed and/or distributed in commerce, and the approximate number of distributors or further processors covered by the petition. All information may be provided on a group basis. However, in the case of a petition under paragraph (a)(7) of this section, the processor of PCB Articles into PCB Equipment must be identified in the petition. In the case of a petition under paragraph (a)(8) of this section, the processor of PCB Equipment who files the petition must be identified.

(vi) Persons filing petitions under paragraph (a)(9) of this section (Distribution of PCB Equipment) must provide a description of each type of PCB Equipment (including the amount of PCBs by poundage and/or volume in the PCB Equipment) to be distributed in commerce under the exemption, the number of each type of equipment to be distributed in commerce, and the approximate number of distributors covered by the petition. All information may be provided on a group basis.

(vii) Persons filing petitions under paragraphs (a)(5) and (6) of this section must provide the information required by paragraphs (d)(1) through (8) of this section for each petitioner named in the petition.

(d) EPA reserves the right to request further information as to each petition where necessary to determine whether the petition meets the statutory tests of section 6(e)(3)(B) of TSCA prior to or after publication of the notice of proposed rulemaking required by § 750.33 of these rules.

(e) *Renewal requests.* (1) Any petitioner who has been granted an exemption under 40 CFR 761.80, except paragraph (g) of 40 CFR 761.80, on or after May 25, 1994, and who seeks to renew that exemption without changing its terms, must submit a letter by certified mail to EPA requesting that the exemption be granted for the following year.

(i) This letter must contain a certification by the petitioner that the type

of activities, the procedures for handling the PCBs, the amount of PCBs handled, and any other aspect of the exemption have not changed from the original exemption petition request.

(ii) This letter must be received by EPA at least 6 months prior to the expiration of the existing exemption.

(iii) If a petitioner fails to make a submission or the submission is not timely under this section, the exemption will expire 1 year from the effective date of granting that exemption.

(iv) EPA will address a timely submission of a renewal request by rulemaking and either grant or deny the request.

(2) Any petitioner who has been granted an exemption on or after May 25, 1994, and who seeks to increase the amount of PCBs handled or to change the type of activities, the procedures for handling the PCBs, and any other aspect of their existing exemption must submit a new exemption petition to EPA. The existing exemption activity may continue until the new submission is addressed by rulemaking, provided the activity conforms to the terms of the current exemption approved by EPA, and the petitioner complies with the conditions of paragraph (e)(1) of this section.

(3) Any petitioner who has been granted a TSCA section 6(e)(3)(B) exemption in a rule prior to May 25, 1994, and who seeks to increase the amount of PCBs handled or to change the type of activities, the procedures for handling the PCBs, and any other aspect of their existing exemption must submit a new exemption petition to EPA. The existing exemption activity may continue until the new submission is addressed by rulemaking, provided the activity conforms to the terms of the original exemption approved by EPA.

[44 FR 31560, Mar. 31, 1979, as amended at 53 FR 12524, Apr. 15, 1988; 59 FR 16998, Apr. 11, 1994]

### § 750.32 Consolidation of rulemaking.

All petitions received pursuant to § 750.31(a) will be consolidated into one rulemaking with one informal hearing held on all petitions.

### § 750.33 Notice of proposed rulemaking.

Rulemaking for PCB processing and distribution in commerce exemptions filed pursuant to § 750.31(a) will begin with the publication of a Notice of Proposed Rulemaking in the FEDERAL REGISTER. Each notice will contain:

(a) A summary of the information required in §750.31(d);

(b) A statement of the time and place at which the informal hearing required by section 6(c)(2)(C) of TSCA shall begin, or, to the extent these are not specified, a statement that they will be specified later in a separate FEDERAL REGISTER notice provided that FEDERAL REGISTER notice of the date and city at which any informal hearing shall begin will be given at least 30 days in advance;

(c) A statement identifying the place at which the official record of the rulemaking is located, the hours during which it will be open for public inspection, the documents contained in it as of the date the Notice of Proposed Rulemaking was issued, and a statement of the approximate times at which additional materials such as public comments, hearing transcripts, and Agency studies in progress will be added to the record. If any material other than public comments or material generated by a hearing is added to the record after publication of the notice required by this action, and notice of its future addition was not given at the time of that initial publication, a separate FEDERAL REGISTER notice announcing its addition to the record and inviting comment will be published;

(d) The due date for public comments, which will be (1) 30 days after publication of the notice of proposed rulemaking for main comments and (2) one week after the informal hearing for reply comments;

(e) The name, address, and office telephone number of the Record Clerk and the Hearing Clerk for the rulemaking in question; and

(f) A nonbinding target date for issuing the final rule.

**§ 750.34 Record.**

(a) No later than the date of proposal of a rule subject to this subpart, a rulemaking record for that rule will be established. It will consist of a separate identified filing space containing:

(1) All documents required by § 750.31(d);

(2) All public comments timely received;

(3) All public hearing transcripts;

(4) All material received during an informal hearing and accepted for the record of that hearing; and

(5) Any other information that the Assistant Administrator for Prevention, Pesticides and Toxic Substances considers to be relevant to such rule and that the Assistant Administrator identified, on or before the date of the promulgation of the rule, in a notice published in the FEDERAL REGISTER.

(b) All material in the record will be appropriately indexed. Each record will be available for public inspection during normal EPA business hours. Appropriate arrangements allowing members of the public to copy record materials that do not risk the permanent loss of such materials will be made. All material required to be included in the record will be added to the record as soon as feasible after its receipt by EPA.

(c) The Record Clerk for each rulemaking will be responsible for EPA compliance with the requirements of paragraph (a) of this section.

**§ 750.35 Public comments.**

(a) Main comments must be postmarked or received no later than the time specified in the Notice of Proposed Rulemaking and must contain all comments on and criticisms of that Notice by the commenting person, based on information which is or reasonably could have been available to that person at the time.

(b) Reply comments must be postmarked or received no later than one week after the close of all informal hearings on the proposed rule and must be restricted to comments on:

(1) Other comments;

(2) Material in the hearing record; and

(3) Material which was not and could not reasonably have been available to the commenting party a sufficient time before main comments were due.

(c) Extensions of the time for filing comments may be granted in writing by the Hearing Chairman. Application for an extension must be made in writing. Comments submitted after the comment period and all extensions of it have expired need not be added to the rulemaking record and need not be considered in decisions concerning the rule.

(d) Unless the Notice of Proposed Rulemaking states otherwise, four copies of all comments must be submitted.

**§ 750.36 Confidentiality.**

EPA encourages the submission of non-confidential information by petitioners and commentors. EPA does not wish to have unnecessary restrictions on access to the rulemaking record. However, if a petitioner or commentor believes that he can only state his position through the use of information claimed to be confidential, he may submit it. Such information must be separately submitted for the rulemaking record and marked ''confidential'' by the submitter. For the information claimed to be confidential, EPA will list only the date and the name and address of the petitioner or commentor in the public file, noting that the petitioner or commentor has requested confidential treatment. The information claimed to be confidential will be placed in a confidential file. A petitioner must also file a non-confidential petition with a non-confidential summary of the confidential information to be placed in the public file. Similarly, a commentor must supply a non-confidential summary of the information claimed to be confidential to be placed in the public file. Any information not marked as confidential will be placed in the public file. Information marked confidential will be treated in accordance with the procedures in Part 2, subpart B of this title.

**§ 750.37 Subpoenas.**

(a) Where necessary, subpoenas requiring the production of documentary material, the attendance of persons at the hearing, or responses to written questions may be issued. Subpoenas may be issued either upon request as

provided in paragraph (b) of this section or by EPA on its own motion.

(b) All subpoena requests must be in writing. Hearing participants may request the issuance of subpoenas as follows:

(1) Subpoenas for the attendance of persons or for the production of documents or responses to questions at the legislative hearing may be requested at any time up to the deadline for filing main comments.

(2) Subpoenas for production of documents or answers to questions after the legislative hearing may be requested at any time between the beginning of the legislative hearing and the deadline for submitting reply comments.

(c) EPA will rule on all subpoena requests filed under paragraph (b)(1) of this section no later than the beginning of the informal hearing. Such requests may be granted, denied, or deferred. EPA will rule on all subpoena requests filed under paragraph (b)(2) of this section and all deferred subpoena requests filed under paragraph (b)(1) of this section no later than the promulgation of the final rule. Such requests will be either granted or denied.

### § 750.38 Participation in informal hearing.

(a) Each person or organization desiring to participate in the informal hearing required by section 6(c)(2)(C) of TSCA must file a written request to participate with the Hearing Clerk. This request must be received no later than seven days prior to the scheduled start of the hearing. The hearing will begin seven days after the close of the thirty day comment period or as soon thereafter as practicable. The request must include:

(1) A brief statement of the interest of the person or organization in the proceeding;

(2) A brief outline of the points to be addressed;

(3) An estimate of the time required; and

(4) If the request comes from an organization, a nonbinding list of the persons to take part in the presentation. Organizations are requested to bring with them, to the extent possible, employees with individual expertise in and responsibility for each of the areas to be addressed. No organization not filing main comments in the rulemaking will be allowed to participate at the hearing, unless a waiver of this requirement is granted in writing by the Hearing Chairman or the organization is appearing at the request of EPA or under subpoena.

(b) No later than three days prior to the start of the hearing, the Hearing Clerk will make a hearing schedule publicly available and mail or deliver it to each of the persons who requested to appear at the hearing. This schedule will be subject to change during the course of the hearing at the discretion of those presiding over it.

(c) Opening statements should be brief, and restricted either to points that could not have been made in main comments or to emphasizing points which are made in main comments, but which the participant believes can be more forcefully urged in the hearing context.

### § 750.39 Conduct of informal hearing.

(a) A panel of EPA employees shall preside at each hearing conducted under section 6(c)(2)(C) of TSCA. In appropriate cases, other Executive Branch employees may also sit with and assist the panel. The membership of the panel may change as different topics arise during the hearing. In general, the panel membership will consist of EPA employees with special responsibility for the final rule or special expertise in the topics under discussion. One member of the panel will be named to chair the proceedings and will attend throughout the hearing, unless unavoidably prevented by sickness or similar personal circumstances.

(b) The panel may question any individual or group participating in the hearing on any subject relating to the rulemaking. Cross-examination by others will normally not be permitted at this stage. It may be granted in compelling circumstances at the sole discretion of the hearing panel. However, persons in the hearing audience may submit questions in writing for the hearing panel to ask the participants, and the hearing panel may, at their discretion, ask these questions.

(c) Participants in the hearing may submit additional material for the

hearing record and shall submit such additional material as the hearing panel may request. All such submissions will become part of the record of the hearing. A verbatim transcript of the hearing shall be made. Participants will be allowed to designate testimony from prior EPA informal rulemaking hearings concerning PCBs under TSCA. The hearing panel may reject repetitive testimony previously presented at such hearings.

**§ 750.40 Cross-examination.**

(a) After the close of the informal hearing conducted under § 750.39, any participant in that hearing may submit a written request for cross-examination. The request must be received by EPA within one week after a full transcript of the informal hearing becomes available and must specify:

(1) The disputed issue(s) of material fact as to which cross-examination is requested. This must include an explanation of why the questions at issue are ''factual'', rather than of an analytical or policy nature, the extent to which they are in ''dispute'' in the light of the record made thus far, and the extent to which and why they can reasonably be considered ''material'' to the decision on the final rule; and

(2) The person(s) the participant desires to cross-examine, and an estimate of the time necessary. This must include a statement as to how the cross-examination requested can be expected to result in ''full and true disclosure'' resolving the issue of material fact involved.

(b) Within one week after receipt of all requests for cross-examination under paragraph (a), the hearing panel will rule on them. The ruling will be served by the Hearing Clerk on all participants who have requested cross-examination and will be inserted in the record. Written notice of the ruling will be given to all persons requesting cross-examination and all persons to be cross-examined. The ruling will specify:

(1) The issues as to which cross-examination is granted;

(2) The persons to be cross-examined on each issue;

(3) The persons to be allowed to conduct cross-examination; and

(4) Time limits for the examination of each witness by each cross-examiner.

(c) In issuing this ruling, the panel may determine that one or more participants who have requested cross-examination have the same or similar interests and should be required to choose a single representative for purposes of cross-examination by that single representative without identifying the representative further. Subpoenas for witnesses may be issued where necessary.

(d) Within one week after the insertion into the record of the ruling under paragraph (b) of this section, the hearing at which the cross-examination will be conducted will begin. One or more members of the original panel will preside for EPA. The panel will have authority to conduct cross-examination on behalf of any participant, although as a general rule this right will not be exercised. The panel will also have authority to modify the governing ruling in any respect and to make new rulings on group representation under section 6(c)(3)(C) of TSCA. A verbatim transcript of the hearing will be made.

(e)(1) No later than the time set for requesting cross-examination, a hearing participant may request that other alternative methods of clarifying the record (such as informal conferences or the submittal of additional information) be used. Such requests may be submitted either in lieu of cross-examination requests, or in conjunction with them.

(2) The panel in passing on a cross-examination request may, as a precondition to ruling on its merits, require that alternative means of clarifying the record be used whether or not that has been requested under paragraph (e)(1) of this section. In such a case, the results of the use of such alternative means will be made available to the person requesting cross-examination for a one-week comment period, and the panel will make a final ruling on cross-examination within one week thereafter.

(f) Waivers or extensions of any deadline in this section applicable to persons other than EPA may be granted

on the record of the hearing by the person chairing it or in writing by the Hearing Chairman.

**§ 750.41 Final rule.**

(a) As soon as feasible after the deadline for submittal of reply comments, EPA will issue a final rule. EPA will also publish at that time:

(1) A list of all material added to the record (other than public comments and material from the hearing record) which has not previously been listed in a FEDERAL REGISTER document, and

(2) The effective date of the rule.

(b) Pursuant to the delegation of authority made in the Preamble to the Final Regulation for the PCB Manufacturing, Processing, Distribution in Commerce and Use Prohibitions, the Assistant Administrator for Prevention, Pesticides and Toxic Substances will grant or deny petitions under section 6(e)(3)(B) of TSCA submitted pursuant to § 750.31. The Assistant Administrator will act on such petitions subsequent to opportunity for an informal hearing pursuant to this rule.

(c) In determining whether to grant an exemption to the PCB ban, EPA will apply the two standards enunciated in section 6(e)(3)(B) of TSCA.

# PART 761—POLYCHLORINATED BIPHENYLS (PCBs) MANUFACTURING, PROCESSING, DISTRIBUTION IN COMMERCE, AND USE PROHIBITIONS

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AUTHORITY: 15 U.S.C. 2605, 2607, 2611, 2614, and 2616.

## Subpart A—General

### §761.1 Applicability.

(a) This part establishes prohibitions of, and requirements for, the manufacture, processing, distribution in commerce, use, disposal, storage, and marking of PCBs and PCB Items.

(b) This part applies to all persons who manufacture, process, distribute in commerce, use, or dispose of PCBs or PCB Items. Substances that are regulated by this rule include, but are not limited to, dielectric fluids, contaminated solvents, oils, waste oils, heat transfer fluids, hydraulic fluids, paints, sludges, slurries, dredge spoils, soils, materials contaminated as a result of spills, and other chemical substances or combination of substances, including impurities and byproducts and any byproduct, intermediate or impurity manufactured at any point in a process. Most of the provisions of this part apply to PCBs only if PCBs are present in concentrations above a specified level. For example, subpart D applies generally to materials at concentrations of 50 parts per million (ppm) and above. Also certain provisions of subpart B apply to PCBs inadvertently generated in manufacturing processes at concentrations specified in the definition of ''PCB'' under §761.3. No provision specifying a PCB concentration may be avoided as a result of any dilution, unless otherwise specifically provided.

(c) Definitions of the terms used in these regulations are in subpart A. The basic requirements applicable to disposal and marking of PCBs and PCB Items are set forth in subpart D—Disposal of PCBs and PCB Items and in subpart C—Marking of PCBs and PCB Items. Prohibitions applicable to PCB activities are set forth in subpart B—Manufacture, Processing, Distribution in Commerce, and Use of PCBs and PCB Items. Subpart B also includes authorizations from the prohibitions. Subparts C and D set forth the specific requirements for disposal and marking of PCBs and PCB Items.

(d) Section 15 of the Toxic Substances Control Act (TSCA) states that failure to comply with these regulations is unlawful. Section 16 imposes liability for civil penalties upon any person who violates these regulations, and the Administrator can establish appropriate remedies for any violations subject to any limitations included in section 16 of TSCA. Section 16 also subjects a person to criminal prosecution for a violation which is knowing or willful. In addition, section 17 authorizes Federal district courts to enjoin activities prohibited by these regulations, compel the taking of actions required by these regulations, and issue orders to seize PCBs and PCB Items manufactured, processed or distributed in violation of these regulations.

(e) These regulations do not preempt other more stringent Federal statutes and regulations.

(f) Unless and until superseded by any new more stringent regulations issued under EPA authorities, or any permits or any pretreatment requirements issued by EPA, a state or local government that affect release of PCBs to any particular medium:

(1) Persons who inadvertently manufacture or import PCBs generated as unintentional impurities in excluded manufacturing processes, as defined in §761.3, are exempt from the requirements of subpart B of this part, provided that such persons comply with subpart J of this part, as applicable.

(2) Persons who process, distribute in commerce, or use products containing PCBs generated in excluded manufacturing processes defined in §761.3 are exempt from the requirements of subpart B provided that such persons comply with subpart J of this part, as applicable.

(3) Persons who process, distribute in commerce, or use products containing recycled PCBs defined in §761.3, are exempt from the requirements of subpart B of this part, provided that such persons comply with subpart J of this part, as applicable.

(4) Except as provided in §761.20 (d) and (e), persons who process, distribute in commerce, or use products containing excluded PCB products as defined in §761.3, are exempt from the requirements of subpart B of this part.

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605)

[44 FR 31542, May 31, 1979, as amended at 49 FR 28189, July 10, 1984; 53 FR 24220, June 27, 1988]

**§ 761.3 Definitions.**

For the purpose of this part:

*Administrator* means the Administrator of the Environmental Protection Agency, or any employee of the Agency to whom the Administrator may either herein or by order delegate his authority to carry out his functions, or any person who shall by operation of law be authorized to carry out such functions.

*Agency* means the United States Environmental Protection Agency.

*Annual document log* means the detailed information maintained at the facility on the PCB waste handling at the facility.

*Annual report* means the written document submitted each year by each disposer and commercial storer of PCB waste to the appropriate EPA Regional Administrator. The annual report is a brief summary of the information included in the annual document log.

*Basel Convention* means the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal as entered into force on May 5, 1992.

*Byproduct* means a chemical substance produced without separate commercial intent during the manufacturing or processing of another chemical substance(s) or mixture(s).

*Capacitor* means a device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric. Types of capacitors are as follows:

(1) *Small capacitor* means a capacitor which contains less than 1.36 kg (3 lbs.) of dielectric fluid. The following assumptions may be used if the actual weight of the dielectric fluid is unknown. A capacitor whose total volume is less than 1,639 cubic centimeters (100 cubic inches) may be considered to contain less than 1.36 kgs (3 lbs.) of dielectric fluid and a capacitor whose total volume is more than 3,278 cubic centimeters (200 cubic inches) must be considered to contain more than 1.36 kg (3 lbs.) of dielectric fluid. A capacitor whose volume is between 1,639 and 3,278 cubic centimeters may be considered to contain less then 1.36 kg (3 lbs.) of dielectric fluid if the total weight of the capacitor is less than 4.08 kg (9 lbs.).

(2) *Large high voltage capacitor* means a capacitor which contains 1.36 kg (3 lbs.) or more of dielectric fluid and which operates at 2,000 volts (a.c. or d.c.) or above.

(3) *Large low voltage capacitor* means a capacitor which contains 1.36 kg (3 lbs.) or more of dielectric fluid and which operates below 2,000 volts (a.c. or d.c.).

*Certification* means a written statement regarding a specific fact or representation that contains the following language:

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

*Chemical substance*, (1) except as provided in paragraph (2) of this definition, means any organic or inorganic substance of a particular molecular identity, including: Any combination of such substances occurring in whole or part as a result of a chemical reaction or occurring in nature, and any element or uncombined radical.

(2) Such term does not include: Any mixture; any pesticide (as defined in the Federal Insecticide, Fungicide, and Rodenticide Act) when manufactured, processed, or distributed in commerce for use as a pesticide; tobacco or any tobacco product; any source material, special nuclear material, or byproduct material (as such terms are defined in the Atomic Energy Act of 1954 and regulations issued under such Act); any article the sale of which is subject to the tax imposed by section 4181 of the Internal Revenue Code of 1954 (determined without regard to any exemptions from such tax provided by section 4182 or section 4221 or any provisions of such Code); and any food, food additive, drug, cosmetic, or device (as such terms are defined in section 201 of the Federal Food, Drug, and Cosmetic Act) when manufactured, processed, or distributed in commerce for use as a food, food additive, drug, cosmetic, or device.

*Chemical waste landfill* means a landfill at which protection against risk of injury to health or the environment from migration of PCBs to land, water, or the atmosphere is provided from PCBs and PCB Items deposited therein by locating, engineering, and operating the landfill as specified in § 761.75.

*Commerce* means trade, traffic, transportation, or other commerce:

(1) Between a place in a State and any place outside of such State, or

(2) Which affects trade, traffic, transportation, or commerce described in paragraph (1) of this definition.

*Commercial storer of PCB waste* means the owner or operator of each facility which is subject to the PCB storage facility standards of § 761.65, and who engages in storage activities involving PCB waste generated by others, or PCB waste that was removed while servicing the equipment owned by others and brokered for disposal. The receipt of a fee or any other form of compensation for storage services is not necessary to qualify as a commercial storer of PCB waste. It is sufficient under this definition that the facility stores PCB waste generated by others or the facility removed the PCB waste while servicing equipment owned by others. A generator who stores only the generator's own waste is subject to the storage requirements of § 761.65, but is not required to seek approval as a commercial storer. If a facility's storage of PCB waste at no time exceeds 500 liquid gallons of PCBs, the owner or operator is not required to seek approval as a commercial storer of PCB waste.

*Designated facility* means the off-site disposer or commercial storer of PCB waste designated on the manifest as the facility that will receive a manifested shipment of PCB waste.

*Disposal* means intentionally or accidentally to discard, throw away, or otherwise complete or terminate the useful life of PCBs and PCB Items. Disposal includes spills, leaks, and other uncontrolled discharges of PCBs as well as actions related to containing, transporting, destroying, degrading, decontaminating, or confining PCBs and PCB Items.

*Disposer of PCB waste,* as the term is used in subparts J and K of this part, means any person who owns or operates a facility approved by EPA for the disposal of PCB waste which is regulated for disposal under the requirements of subpart D of this part.

*Distribute in commerce* and *Distribution in Commerce* when used to describe an action taken with respect to a chemical substance, mixture, or article containing a substance or mixture means to sell, or the sale of, the substance, mixture, or article in commerce; to introduce or deliver for introduction into commerce, or the introduction or delivery for introduction into commerce of the substance, mixture, or article; or to hold or the holding of, the substance, mixture, or article after its introduction into commerce.

*Emergency Situation* for continuing use of a PCB Transformer exists when:

(1) Neither a non-PCB Transformer nor a PCB-Contaminated transformer is currently in storage for reuse or readily available (i.e., available within 24 hours) for installation.

(2) Immediate replacement is necessary to continue service to power users.

*EPA identification number* means the 12-digit number assigned to a facility by EPA upon notification of PCB waste activity under § 761.205.

*Excluded manufacturing process* means a manufacturing process in which quantities of PCBs, as determined in accordance with the definition of inadvertently generated PCBs, calculated as defined, and from which releases to products, air, and water meet the requirements of paragraphs (1) through (5) of this definition, or the importation of products containing PCBs as unintentional impurities, which products meet the requirements of paragraphs (1) and (2) of this definition.

(1) The concentration of inadvertently generated PCBs in products leaving any manufacturing site or imported into the United States must have an annual average of less than 25 ppm, with a 50 ppm maximum.

(2) The concentration of inadvertently generated PCBs in the components of detergent bars leaving the manufacturing site or imported into the United States must be less than 5 ppm.

(3) The release of inadvertently generated PCBs at the point at which

emissions are vented to ambient air must be less than 10 ppm.

(4) The amount of inadvertently generated PCBs added to water discharged from a manufacturing site must be less than 100 micrograms per resolvable gas chromatographic peak per liter of water discharged.

(5) Disposal of any other process wastes above concentrations of 50 ppm PCB must be in accordance with subpart D of this part.

*Excluded PCB products* means PCB materials which appear at concentrations less than 50 ppm, including but not limited to:

(1) Non-Aroclor inadvertently generated PCBs as a byproduct or impurity resulting from a chemical manufacturing process.

(2) Products contaminated with Aroclor or other PCB materials from historic PCB uses (investment casting waxes are one example).

(3) Recycled fluids and/or equipment contaminated during use involving the products described in paragraphs (1) and (2) of this definition (heat transfer and hydraulic fluids and equipment and other electrical equipment components and fluids are examples).

(4) Used oils, provided that in the cases of paragraphs (1) through (4) of this definition:

(i) The products or source of the products containing < 50 ppm concentration PCBs were legally manufactured, processed, distributed in commerce, or used before October 1, 1984.

(ii) The products or source of the products containing < 50 ppm concentrations PCBs were legally manufactured, processed, distributed in commerce, or used, i.e., pursuant to authority granted by EPA regulation, by exemption petition, by settlement agreement, or pursuant to other Agency-approved programs;

(iii) The resulting PCB concentration (i.e. below 50 ppm) is not a result of dilution, or leaks and spills of PCBs in concentrations over 50 ppm.

*Fluorescent light ballast* means a device that electrically controls fluorescent light fixtures and that includes a capacitor containing 0.1 kg or less of dielectric.

*Generator of PCB waste* means any person whose act or process produces PCBs that are regulated for disposal under subpart D of this part, or whose act first causes PCBs or PCB Items to become subject to the disposal requirements of subpart D of this part, or who has physical control over the PCBs when a decision is made that the use of the PCBs has been terminated and therefore is subject to the disposal requirements of subpart D of this part. Unless another provision of this part specifically requires a site-specific meaning, ''generator of PCB waste'' includes all of the sites of PCB waste generation owned or operated by the person who generates PCB waste.

*Importer* means any person defined as an ''importer'' at § 720.3(l) of this chapter who imports PCBs or PCB Items and is under the jurisdiction of the United States.

*Impurity* means a chemical substance which is unintentionally present with another chemical substance.

*In or Near Commercial Buildings* means within the interior of, on the roof of, attached to the exterior wall of, in the parking area serving, or within 30 meters of a non-industrial non-substation building. Commercial buildings are typically accessible to both members of the general public and employees, and include: (1) Public assembly properties, (2) educational properties, (3) institutional properties, (4) residential properties, (5) stores, (6) office buildings, and (7) transportation centers (e.g., airport terminal buildings, subway stations, bus stations, or train stations).

*Incinerator* means an engineered device using controlled flame combustion to thermally degrade PCBs and PCB Items. Examples of devices used for incineration include rotary kilns, liquid injection incinerators, cement kilns, and high temperature boilers.

*Industrial building* means a building directly used in manufacturing or technically productive enterprises. Industrial buildings are not generally or typically accessible to other than workers. Industrial buildings include buildings used directly in the production of power, the manufacture of products, the mining of raw materials, and the storage of textiles, petroleum products, wood and paper products, chemicals, plastics, and metals.

*Laboratory* means a facility that analyzes samples for PCBs and is unaffiliated with any entity whose activities involve PCBs.

*Leak* or *leaking* means any instance in which a PCB Article, PCB Container, or PCB Equipment has any PCBs on any portion of its external surface.

*Manifest* means the shipping document EPA form 8700–22 and any continuation sheet attached to EPA form 8700–22, originated and signed by the generator of PCB waste in accordance with the instructions included with the form and subpart K of this part.

*Manned Control Center* means an electrical power distribution control room where the operating conditions of a PCB Transformer are continuously monitored during the normal hours of operation (of the facility), and, where the duty engineers, electricians, or other trained personnel have the capability to deenergize a PCB Transformer completely within 1 minute of the receipt of a signal indicating abnormal operating conditions such as an overtemperature condition or overpressure condition in a PCB Transformer.

*Manufacture* means to produce, manufacture, or import into the customs territory of the United States.

*Manufacturing process* means all of a series of unit operations operating at a site, resulting in the production of a product.

*Mark* means the descriptive name, instructions, cautions, or other information applied to PCBs and PCB Items, or other objects subject to these regulations.

*Marked* means the marking of PCB Items and PCB storage areas and transport vehicles by means of applying a legible mark by painting, fixation of an adhesive label, or by any other method that meets the requirements of these regulations.

*Market/Marketers* means the processing or distributing in commerce, or the person who processes or distributes in commerce, used oil fuels to burners or other marketers, and may include the generator of the fuel if it markets the fuel directly to the burner.

*Mineral Oil PCB Transformer* means any transformer originally designed to contain mineral oil as the dielectric fluid and which has been tested and found to contain 500 ppm or greater PCBs.

*Mixture* means any combination of two or more chemical substances if the combination does not occur in nature and is not, in whole or in part, the result of a chemical reaction; except that such term does include any combination which occurs, in whole or in part, as a result of a chemical reaction if none of the chemical substances comprising the combination is a new chemical substance and if the combination could have been manufactured for commercial purposes without a chemical reaction at the time the chemical substances comprising the combination were combined.

*Municipal solid wastes* means garbage, refuse, sludges, wastes, and other discarded materials resulting from residential and non-industrial operations and activities, such as household activities, office functions, and commercial housekeeping wastes.

*Non-PCB Transformer* means any transformer that contains less than 50 ppm PCB; except that any transformer that has been converted from a PCB Transformer or a PCB-Contaminated Transformer cannot be classified as a non-PCB Transformer until reclassification has occurred, in accordance with the requirements of § 761.30(a)(2)(v).

*On site* means within the boundaries of a contiguous property unit.

*PCB* and *PCBs* means any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance. Refer to § 761.1(b) for applicable concentrations of PCBs. PCB and PCBs as contained in PCB items are defined in § 761.3. For any purposes under this part, inadvertently generated non-Aroclor PCBs are defined as the total PCBs calculated following division of the quantity of monochlorinated biphenyls by 50 and dichlorinated biphenyls by 5.

*PCB Article* means any manufactured article, other than a PCB Container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. ''PCB Article'' includes capacitors, transformers, electric motors,

pumps, pipes and any other manufactured item (1) which is formed to a specific shape or design during manufacture, (2) which has end use function(s) dependent in whole or in part upon its shape or design during end use, and (3) which has either no change of chemical composition during its end use or only those changes of composition which have no commercial purpose separate from that of the PCB Article.

*PCB Article Container* means any package, can, bottle, bag, barrel, drum, tank, or other device used to contain PCB Articles or PCB Equipment, and whose surface(s) has not been in direct contact with PCBs.

*PCB Container* means any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB Articles and whose surface(s) has been in direct contact with PCBs.

*PCB-Contaminated Electrical Equipment* means any electrical equipment, including but not limited to transformers (including those used in railway locomotives and self-propelled cars), capacitors, circuit breakers, reclosers, voltage regulators, switches (including sectionalizers and motor starters), electromagnets, and cable, that contain 50 ppm or greater PCB, but less than 500 ppm PCB. Oil-filled electrical equipment other than circuit breakers, reclosers, and cable whose PCB concentration is unknown must be assumed to be PCB-Contaminated Electrical Equipment. (See §761.30(a) and (h) for provisions permitting reclassification of electrical equipment containing 500 ppm or greater PCBs to PCB-Contaminated Electrical Equipment).

*PCB Equipment* means any manufactured item, other than a PCB Container or a PCB Article Container, which contains a PCB Article or other PCB Equipment, and includes microwave ovens, electronic equipment, and fluorescent light ballasts and fixtures.

*PCB Item* is defined as any PCB Article, PCB Article Container, PCB Container, or PCB Equipment, that deliberately or unintentionally contains or has a part of it any PCB or PCBs.

*PCB Transformer* means any transformer that contains 500 ppm PCB or greater.

*PCB waste(s)* means those PCBs and PCB Items that are subject to the disposal requirements of subpart D of this part.

*Person* means any natural or judicial person including any individual, corporation, partnership, or association; any State or political subdivision thereof; any interstate body; and any department, agency, or instrumentality of the Federal Government.

*Posing an exposure risk to food or feed* means being in any location where human food or animal feed products could be exposed to PCBs released from a PCB Item. A PCB Item poses an exposure risk to food or feed if PCBs released in any way from the PCB Item have a potential pathway to human food or animal feed. EPA considers human food or animal feed to include items regulated by the U.S. Department of Agriculture or the Food and Drug Administration as human food or animal feed; this includes direct additives. Food or feed is excluded from this definition if it is used or stored in private homes.

*Process* means the preparation of a chemical substance or mixture, after its manufacture, for distribution in commerce:

(1) In the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such substance or mixture, or

(2) As part of an article containing the chemical substance or mixture.

*Qualified incinerator* means one of the following:

(1) An incinerator approved under the provisions of § 761.70. Any level of PCB concentration can be destroyed in an incinerator approved under § 761.70.

(2) A high efficiency boiler which complies with the criteria of § 761.60(a)(2)(iii)(A), and for which the operator has given written notice to the appropriate EPA Regional Administrator in accordance with the notification requirements for the burning of mineral oil dielectric fluid under § 761.60(a)(2)(iii)(B).

(3) An incinerator approved under section 3005(c) of the Resource Conservation and Recovery Act (42 U.S.C. 6925(c)) (RCRA).

(4) Industrial furnaces and boilers which are identified in 40 CFR 260.10 and 40 CFR 279.61(a)(1) and (2) when operating at their normal operating temperatures (this prohibits feeding fluids, above the level of detection, during either startup or shutdown operations).

*Quantifiable Level/Level of Detection* means 2 micrograms per gram from any resolvable gas chromatographic peak, i.e. 2 ppm.

*Recycled PCBs* means those PCBs which appear in the processing of paper products or asphalt roofing materials from PCB-contaminated raw materials. Processes which recycle PCBs must meet the following requirements:

(1) There are no detectable concentrations of PCBs in asphalt roofing material products leaving the processing site.

(2) The concentration of PCBs in paper products leaving any manufacturing site processing paper products, or in paper products imported into the United States, must have an annual average of less than 25 ppm with a 50 ppm maximum.

(3) The release of PCBs at the point at which emissions are vented to ambient air must be less than 10 ppm.

(4) The amount of Aroclor PCBs added to water discharged from an asphalt roofing processing site must at all times be less than 3 micrograms per liter (μg/L) for total Aroclors (roughly 3 parts per billion (3 ppb)). Water discharges from the processing of paper products must at all times be less than 3 micrograms per liter (μg/L) for total Aroclors (roughly 3 ppb), or comply with the equivalent mass-based limitation.

(5) Disposal of any other process wastes at concentrations of 50 ppm or greater must be in accordance with subpart D of this part.

*Retrofill* means to remove PCB or PCB-contaminated dielectric fluid and to replace it with either PCB, PCB-contaminated, or non-PCB dielectric fluid.

*Rupture of a PCB Transformer* means a violent or non-violent break in the integrity of a PCB Transformer caused by an overtemperature and/or overpressure condition that results in the release of PCBs.

*Sale for purposes other than resale* means sale of PCBs for purposes of disposal and for purposes of use, except where use involves sale for distribution in commerce. PCB Equipment which is first leased for purposes of use any time before July 1, 1979, will be considered sold for purposes other than resale.

*Small quantities for research and development* means any quantity of PCBs (1) that is originally packaged in one or more hermetically sealed containers of a volume of no more than five (5.0) milliliters, and (2) that is used only for purposes of scientific experimentation or analysis, or chemical research on, or analysis of, PCBs, but not for research or analysis for the development of a PCB product.

*Storage for disposal* means temporary storage of PCBs that have been designated for disposal.

*Totally enclosed manner* means any manner that will ensure no exposure of human beings or the environment to any concentration of PCBs.

*Transfer facility* means any transportation-related facility including loading docks, parking areas, and other similar areas where shipments of PCB waste are held during the normal course of transportation. Transport vehicles are not transfer facilities under this definition, unless they are used for the storage of PCB waste, rather than for actual transport activities. Storage areas for PCB waste at transfer facilities are subject to the storage facility standards of § 761.65, but such storage areas are exempt from the approval requirements of § 761.65(d) and the recordkeeping requirements of § 761.180, unless the same PCB waste is stored there for a period of more than 10 consecutive days between destinations.

*Transporter of PCB waste* means, for the purposes of subpart K of this part, any person engaged in the transportation of regulated PCB waste by air, rail, highway, or water for purposes other than consolidation by a generator.

*Transport vehicle* means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (e.g., trailer, railroad freight car) is a separate transport vehicle.

*Treatability Study* means a study in which PCB waste is subjected to a treatment process to determine:

(1) Whether the waste is amenable to the treatment process;

(2) What pretreatment (if any) is required;

(3) The optimal process conditions needed to achieve the desired treatment;

(4) The efficiency of a treatment process for the specific type of waste (i.e., soil, sludge, liquid, etc.); or,

(5) The characteristics and volumes of residuals from a particular treatment process. A ''treatability study'' is not a mechanism to commercially treat or dispose of PCB waste. Treatment is a form of disposal under this part.

*Waste Oil* means used products primarily derived from petroleum, which include, but are not limited to, fuel oils, motor oils, gear oils, cutting oils, transmission fluids, hydraulic fluids, and dielectric fluids.

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605)

[49 FR 25239, June 20, 1984, as amended at 49 FR 28189, July 10, 1984; 49 FR 29066, July 18, 1984; 49 FR 44638, Nov. 8, 1984; 50 FR 29199, July 17, 1985; 50 FR 32176, Aug. 9, 1985; 53 FR 24220, June 27, 1988; 53 FR 27327, July 19, 1988; 54 FR 52745, Dec. 21, 1989; 55 FR 26205, June 27, 1990; 58 FR 32061, June 8, 1993; 61 FR 11106, Mar. 18, 1996]

## § 761.19 References.

(a) [Reserved]

(b) *Incorporations by reference.* The following material is incorporated by reference, and is available for inspection at the Office of the Federal Register Information Center, 800 North Capitol Street, NW., suite 700, Washington, DC. These incorporations by reference were approved by the Director of the Office of the Federal Register. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the FEDERAL REGISTER. Copies of the incorporated material may be obtained from the TSCA Non-Confidential Information Center (NCIC) (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room B–607 NEM, 401 M Street, SW., Washington, DC, 20460, between the hours of 12 p.m. and 4 p.m. weekdays excluding legal holidays, or from the American Society for Testing and Merials (ASTM), 1916 Race Street, Philadelphia, PA 19103..

| References | CFR Citation |
|---|---|
| ASTM D 93 – 90 Standard Test Methods for Flash Point by Pensky-Martens Closed Tester.. | § 761.60(a)(3)(iii)(B)(*6*); § 761.75(b)(8)(iii) |
| ASTM D 129–64 (Reapproved 1978) Standard Test Method for Sulfur in Petroleum Products (General Bomb Method).. | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 240–87 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuel by Bomb Calorimeter. | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 482–87 Standard Test Method for Ash from Petroleum Products. | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 524–88 Standard Test Method for Ramsbottom Carbon Residue of Petroleum Products. | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 808–87 Standard Test Method for Chlorine in New and Used Petroleum Products (Bomb Method). | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 923–86 Standard Test Method for Sampling Electrical Insulating Liquids. | § 761.60(g)(1)(ii); (g)(2)(ii) |
| ASTM D 923–89 Standard Methods of Sampling Electrical Insulating Liquids. | § 761.60(g)(1)(ii); (g)(2)(ii) |
| ASTM D 1266–87 Standard Test Method for Sulfur in Petroleum Products (Lamp Method). | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 1796–83 (Reapproved 1990) Standard Test Method for Water and Sediment in Fuel Oils by the Centrifuge Method (Laboratory Procedure). | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 2158–89 Standard Test Method for Residues in Liquified Petroleum (LP) Gases. | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 2709–88 Standard Test Method for Water and Sediment in Distillate Fuels by Centrifuge. | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 2784–89 Standard Test Method for Sulfur in Liquified Petroleum Gases (Oxy-hydrogen Burner or Lamp). | § 761.60(a)(3)(iii)(B)(*6*) |
| ASTM D 3178–84 Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coke and Coal. | § 761.60(a)(3)(iii)(B)(*6*) |

| References | CFR Citation |
|---|---|
| ASTM D 3278–89 Standard Test Methods for Flash Point of Liquids by Setaflash Closed-Cup Apparatus. | § 761.75(b)(8)(iii) |
| ASTM E 258–67 (Reapproved 1987) Standard Test Method for Total Nitrogen Inorganic Material by Modified KJELDAHL Method. | § 761.60(a)(3)(iii)(B)(*6*) |

[47 FR 22098, May 21, 1982, as amended at 49 FR 29067, July 18, 1984; 49 FR 36648, Sept. 19, 1984; 53 FR 10391, Mar. 31, 1988; 53 FR 12524, Apr. 15, 1988; 53 FR 21641, June 9, 1988; 57 FR 13323, Apr. 16, 1992; 59 FR 33697, June 30, 1994; 60 FR 34465, July 3, 1995]

## Subpart B—Manufacturing, Processing, Distribution in Commerce, and Use of PCBs and PCB Items

### § 761.20 Prohibitions.

Except as authorized in § 761.30, the activities listed in paragraphs (a) and (d) of this section are prohibited pursuant to section 6(e)(2) of TSCA. The requirements set forth in paragraph (c) of this section and subpart F of this part concerning export and import of PCBs and PCB Items for disposal are established pursuant to section 6(e)(1) of TSCA. Subject to any exemptions granted pursuant to section 6(e)(3)(B) of TSCA, the activities listed in paragraphs (b) and (c) of this section are prohibited pursuant to section (6)(e)(3)(A) of TSCA. In addition, the Administrator hereby finds, under the authority of section 12(a)(2) of TSCA, that the manufacture, processing, and distribution in commerce of PCBs at concentrations of 50 ppm or greater and PCB Items with PCB concentrations of 50 ppm or greater present an unreasonable risk of injury to health within the United States. This finding is based upon the well-documented human health and environmental hazard of PCB exposure, the high probability of human and environmental exposure to PCBs and PCB Items from manufacturing, processing, or distribution activities; the potential hazard of PCB exposure posed by the transportation of PCBs or PCB Items within the United States; and the evidence that contamination of the environment by PCBs is spread far beyond the areas where they are used. In addition, the Administrator hereby finds, for purposes of section 6(e)(2)(C) of TSCA, that any exposure of human beings or the environment to PCBs, as measured or detected by any scientifically acceptable analytical method, may be significant, depending on such factors as the quantity of PCBs involved in the exposure, the likelihood of exposure to humans and the environment, and the effect of exposure. For purposes of determining which PCB Items are totally enclosed, pursuant to section 6(e)(2)(C) of TSCA, since exposure to such Items may be significant, the Administrator further finds that a totally enclosed manner is a manner which results in no exposure to humans or the environment to PCBs. The following activities are considered totally enclosed: distribution in commerce of intact, nonleaking electrical equipment such as transformers (including transformers used in railway locomotives and self-propelled cars), capacitors, electromagnets, voltage regulators, switches (including sectionalizers and motor starters), circuit breakers, reclosers, and cable that contain PCBs at any concentration and processing and distribution in commerce of PCB Equipment containing an intact, nonleaking PCB Capacitor. See paragraph (c)(1) of this section for provisions allowing the distribution in commerce of PCBs and PCB Items.

(a) No persons may use any PCB, or any PCB Item regardless of concentration, in any manner other than in a totally enclosed manner within the United States unless authorized under § 761.30, except that:

(1) An authorization is not required to use those PCBs or PCB Items which consist of excluded PCB products as defined in § 761.3.

(2) An authorization is not required to use those PCBs or PCB Items resulting from an excluded manufacturing process or recycled PCBs as defined in § 761.3, provided all applicable conditions of § 761.1(f) are met.

(3) An authorization is not required to use those PCB Items which contain or whose surfaces have been in contact

with excluded PCB products as defined in § 761.3.

(4) An authorization is not required to apply sewage sludges, contaminated with PCBs below 50 ppm, to land when regulated by authorities under the Clean Water Act and the Resource Conservation and Recovery Act.

(b) No person may manufacture PCBs for use within the United States or manufacture PCBs for export from the United States without an exemption, except that: an exemption is not required for PCBs manufactured in an excluded manufacturing process as defined in § 761.3, provided all applicable conditions of § 761.1(f) are met.

(c) No persons may process or distribute in commerce any PCB, or any PCB Item regardless of concentration, for use within the United States or for export from the United States without an exemption, except that an exemption is not required to process or distribute in commerce PCBs or PCB Items resulting from an excluded manufacturing process as defined in § 761.3, or to process or distribute in commerce recycled PCBs as defined in § 761.3, or to process or distribute in commerce excluded PCB products as defined in § 761.3, provided that all applicable conditions of § 761.1(f) are met. In addition, the activities described in paragraphs (c) (1) through (5) of this section may also be conducted without an exemption, under the conditions specified therein.

(1) PCBs at concentrations of 50 ppm or greater, or PCB Items with PCB concentrations of 50 ppm or greater, sold before July 1, 1979 for purposes other than resale may be distributed in commerce only in a totally enclosed manner after that date.

(2) PCBs at concentrations of 50 ppm or greater, or PCB Items with PCB concentrations of 50 ppm or greater may be processed and distributed in commerce in compliance with the requirements of this Part for purposes of disposal in accordance with the requirements of § 761.60.

(3) PCBs and PCB Items may be exported for disposal in accordance with the requirements of subpart F of this part.

(4) PCBs, at concentrations of less than 50 ppm, or PCB Items, with concentrations of less than 50 ppm, may be processed and distributed in commerce for purposes of disposal.

(5) Equipment, structures, or other materials that were contaminated with PCBs because of spills from, or proximity to, a PCB Item >50 ppm, and which are not otherwise authorized for use or distribution in commerce under this part, may be distributed in commerce, provided that these materials were decontaminated in accordance with applicable EPA PCB spill cleanup policies in effect at the time of the decontamination or, if not previously decontaminated, at the time of the distribution in commerce.

(d) The use of waste oil that contains any detectable concentration of PCB as a sealant, coating, or dust control agent is prohibited. Prohibited uses include, but are not limited to, road oiling, general dust control, use as a pesticide or herbicide carrier, and use as a rust preventative on pipes.

(e) In addition to any applicable requirements under 40 CFR Part 279, subparts G and H, marketers and burners of used oil who market (process or distribute in commerce) for energy recovery, used oil containing any quantifiable level of PCBs are subject to the following requirements:

(1) *Restrictions on marketing.* Used oil containing any quantifiable level of PCBs (2 ppm) may be marketed only to:

(i) Qualified incinerators as defined in 40 CFR 761.3.

(ii) Marketers who market off-specification used oil for energy recovery only to other marketers who have notified EPA of their used oil management activities, and who have an EPA identification number where an identification number is required by 40 CFR 279.73. This would include persons who market off-specification used oil who are subject to the requirements at 40 CFR part 279 and the notification requirements of 40 CFR 279.73.

(iii) Burners identified in 40 CFR 279.61(a)(1) and (2). Only burners in the automotive industry may burn used oil generated from automotive sources in used oil-fired space heaters provided the provisions of 40 CFR 279.23 are met. The Regional Administrator may grant a variance for a boiler that does not

meet the 40 CFR 279.61(a)(1) and (2) criteria after considering the criteria listed in 40 CFR 260.32 (a) through (f). The applicant must address the relevant criteria contained in 40 CFR 260.32 (a) through (f) in an application to the Regional Administrator.

(2) *Testing of used oil fuel.* Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

(i) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.

(ii) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in § 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.

(iii) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.

(3) *Restrictions on burning.* (i) Used oil containing any quantifiable levels of PCB may be burned for energy recovery only in the combustion facilities identified in paragraph (e)(1) of this section when such facilities are operating at normal operating temperatures (this prohibits feeding these fuels during either startup or shutdown operations). Owners and operators of such facilities are ''burners'' of used oil fuels.

(ii) Before a burner accepts from a marketer the first shipment of used oil fuel containing detectable PCBs (2 ppm), the burner must provide the marketer a one-time written and signed notice certifying that:

(A) The burner has complied with any notification requirements applicable to ''qualified incinerators'' (§ 761.3) or to ''burners'' regulated under 40 CFR part 279, subpart G.

(B) The burner will burn the used oil only in a combustion facility identified in paragraph (e)(1) of this section and identify the class of burner he qualifies.

(4) *Recordkeeping requirements.* The following recordkeeping requirements are in addition to the recordkeeping requirements for marketers found in 40 CFR 279.72(b), 279.74(a), (b) and (c), and 279.75, and for burners found in 40 CFR 279.65 and 279.66.

(i) *Marketers.* Marketers who first claim that the used oil fuel contains no detectable PCBs must include among the records required by 40 CFR 279.72(b) and 279.74(b) and (c), copies of the analysis or other information documenting his claim, and he must include among the records required by 40 CFR 279.74(a) and (c) and 279.75, a copy of each certification notice received or prepared relating to transactions involving PCB-containing used oil.

(ii) *Burners.* Burners must include among the records required by 40 CFR 279.65 and 279.66, a copy of each certification notice required by paragraph (e)(3)(ii) of this section that he sends to a marketer.

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020, (15 U.S.C. 2605)

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982, and amended at 49 FR 25241, June 20, 1984; 49 FR 28190, July 10, 1984; 49 FR 44638, Nov. 8, 1984; 53 FR 12524, Apr. 15, 1988; 53 FR 24220, June 27, 1988; 58 FR 15435, Mar. 23, 1993; 58 FR 34205, June 23, 1993; 60 FR 34465, July 3, 1995; 61 FR 11106, March 18, 1996]

### § 761.30 Authorizations.

The following non-totally enclosed PCB activities are authorized pursuant to section 6(e)(2)(B) of TSCA:

(a) *Use in and servicing of transformers (other than railroad transformers).* PCBs at any concentration may be used in transformers (other than in railroad locomotives and self-propelled railroad cars) and may be used for purposes of servicing including rebuilding these transformers for the remainder of their useful lives, subject to the following conditions:

(1) *Use conditions.* (i) As of October 1, 1985, the use and storage for reuse of PCB Transformers that pose an exposure risk to food or feed is prohibited.

(ii) As of October 1, 1990, the use of network PCB Transformers with higher secondary voltages (secondary voltages equal to or greater than 480 volts, including 480/277 volt systems) in or near commercial buildings is prohibited. Network PCB Transformers with higher secondary voltages which are removed from service in accordance with this requirement must either be reclassified to PCB Contaminated or non PCB status, placed into storage for disposal, or disposed.

(iii) Except as otherwise provided, as of October 1, 1985, the installation of PCB Transformers, which have been placed into storage for reuse or which have been removed from another location, in or near commercial buildings is prohibited.

(A) The installation of PCB Transformers on or after October 1, 1985, however, and their use thereafter, is permitted either in an emergency situation, as defined in § 761.3, or in situations where the transformer has been retrofilled and is being placed into service in order to qualify for reclassification under paragraph (a)(2)(v) of this section.

(B) Installation of a PCB Transformer in an emergency situation is permitted when done in accordance with the following:

(*1*) Documentation to support the reason for the emergency installation of a PCB Transformer must be maintained at the owner's facility and completed within 30 days after installation of the PCB Transformer. The documentation must include, but is not limited to:

(*i*) The type of transformer, i.e., radial or lower or higher network, that requires replacement.

(*ii*) The type(s) of transformers, i.e., radial or lower or higher network, that must be used for replacement.

(*iii*) The date of transformer failure.

(*iv*) The date of subsequent replacement.

(*v*) The type of transformer, i.e., radial or lower or higher network, installed as a replacement.

(*vi*) A statement describing actions taken to locate a non-PCB or PCB-Contaminated transformer replacement.

(*2*) Such emergency installation is permitted until October 1, 1990, and the use of any PCB Transformer installed on such an emergency basis is permitted for 1 year from the date of installation or until October 1, 1990, whichever is earlier.

(*3*) PCB Transformers installed for emergency purposes may be subsequently reclassified; however, the transformer must be effectively reclassified to a non-PCB or PCB-Contaminated status within 1 year after installation or by October 1, 1990, whichever is earlier because the transformer was initially installed in an emergency situation.

(C) Installation of a retrofilled PCB Transformer for reclassification purposes is permitted when it is done in accordance with the following:

(*1*) Those who installed transformers for reclassification purposes must maintain on the owner's premises, completed within 30 days of installation, the following information:

(*i*) The date of installation.

(*ii*) The type of transformer, i.e., radial or lower or higher network, installed.

(*iii*) The PCB concentration, if known, at the time of installation.

(*iv*) The retrofill and reclassification schedule.

(*2*) For purposes of this paragraph, the installation of retrofilled PCB Transformers for purposes of reclassification under paragraph (a)(2)(v) of this section is permitted until October 1, 1990.

(*i*) However, the use of a retrofilled PCB Transformer installed for reclassification purposes is limited to 18 months after installation or until October 1, 1990, whichever is earlier.

(*ii*) Retrofilled mineral oil PCB Transformers may be installed for reclassification purposes indefinitely after October 1, 1990.

(*iii*) Once a retrofilled transformer has been installed for reclassification purposes, it must be tested 3 months after installation to ascertain the concentration of PCBs. If the PCB concentration is below 50 ppm, the transformer can be reclassified as a non-PCB

Transformer. If the PCB concentration is between 50 and 500 ppm, the transformer can be reclassified as a PCB-Contaminated transformer. If the PCB concentration remains at 500 ppm or greater, the entire process must either be repeated until the transformer has been reclassified to a non-PCB or PCB-Contaminated transformer in accordance with paragraph (a)(2)(v) of this section or the transformer must be removed from service.

(D) Owners who installed PCB Transformers in emergency situations or for reclassification purposes between October 1, 1985 and September 1, 1988 must notify the Regional Administrator in writing by October 3, 1988 of such installation. The notification for emergency installation must include the information in paragraph (a)(1)(iii)(B)(*1*)(*i*) through (*vi*) of this section. The notification for reclassification must include the information in paragraph (a)(1)(iii)(C)(*1*) (*i*) through (*iv*) of this section. All PCB Transformers installed in an emergency situation or installed for reclassification purposes are subject to the requirements of this Part 761.

(iv) As of October 1, 1990, all higher secondary voltage radial PCB Transformers, in use in or near commercial buildings, and lower secondary voltage network PCB Transformers not located in sidewalk vaults in or near commercial buildings (network transformers with secondary voltages below 480 volts) that have not been removed from service as provided in paragraph (a)(1)(iv)(B) of this section, must be equipped with electrical protection to avoid transformer ruptures caused by high current faults. As of February 25, 1991, all lower secondary voltage radial PCB Transformers, in use in or near commercial buildings, must be equipped with electrical protection to avoid transformer ruptures caused by high current faults.

(A) Current-limiting fuses or other equivalent technology must be used to detect sustained high current faults and provide for the complete deenergization of the transformer (within several hundredths of a second in the case of higher secondary voltage radial PCB Transformers and within tenths of a second in the case of lower secondary voltage network PCB Transformers), before transformer rupture occurs. Lower secondary voltage radial PCB Transformers must be equipped with electrical protection as provided in paragraph (a)(1)(iv)(E) of this section. The installation, setting, and maintenance of current-limiting fuses or other equivalent technology to avoid PCB Transformer ruptures from sustained high current faults must be completed in accordance with good engineering practices.

(B) All lower secondary voltage network PCB Transformers not located in sidewalk vaults (network transformers with secondary voltages below 480 volts), in use in or near commercial buildings, which have not been protected as specified in paragraph (a)(1)(iv)(A) of this section by October 1, 1990, must be removed from service by October 1, 1993.

(C) As of October 1, 1990, owners of lower secondary voltage network PCB Transformers, in use in or near commercial buildings which have not been protected as specified in paragraph (a)(1)(iv)(A) of this section and which are not located in sidewalk vaults, must register in writing those transformers with the EPA Regional Administrator in the appropriate region. The information required to be provided in writing to the Regional Administrator includes:

(*1*) The specific location of the PCB Transformer(s).

(*2*) The address(es) of the building(s) and the physical location of the PCB Transformer(s) on the building site(s).

(*3*) The identification number(s) of the PCB Transformer(s).

(D) As of October 1, 1993, all lower secondary voltage network PCB Transformers located in sidewalk vaults (network transformers with secondary voltages below 480 volts) in use near commercial buildings must be removed from service.

(E) As of February 25, 1991, all lower secondary voltage radial PCB Transformers must be equipped with electrical protection, such as current-limiting fuses or other equivalent technology, to detect sustained high current faults and provide for the complete deenergization of the transformer or complete deenergization of the

faulted phase of the transformer within several hundredths of a second. The installation, setting, and maintenance of current-limiting fuses or other equivalent technology to avoid PCB Transformer ruptures from sustained high current faults must be completed in accordance with good engineering practices.

(v) As of October 1, 1990, all radial PCB Transformers with higher secondary voltages (480 volts and above, including 480/277 volt systems) in use in or near commercial buildings must, in addition to the requirements of paragraph (a)(1)(iv)(A) of this section, be equipped with protection to avoid transformer ruptures caused by sustained low current faults.

(A) Pressure and temperature sensors (or other equivalent technology which has been demonstrated to be effective in early detection of sustained low current faults) must be used in these transformers to detect sustained low current faults.

(B) Disconnect equipment must be provided to insure complete deenergization of the transformer in the event of a sensed abnormal condition (e.g., an overpressure or overtemperature condition in the transformer), caused by a sustained low current fault. The disconnect equipment must be configured to operate automatically within 30 seconds to 1 minute of the receipt of a signal indicating an abnormal condition from a sustained low current fault, or can be configured to allow for manual deenergization from a manned on-site control center upon the receipt of an audio or visual signal indicating an abnormal condition caused by a sustained low current fault. Manual deenergization from a manned on-site control center must occur within 1 minute of the receipt of the audio or visual signal indicating an abnormal condition caused by a sustained low current fault. If automatic operation is selected and a circuit breaker is utilized for disconnection, it must also have the capability to be manually opened if necessary.

(C) The enhanced electrical protective system required for the detection of sustained low current faults and the complete and rapid deenergization of transformers must be properly installed, maintained, and set sensitive enough (in accordance with good engineering practices) to detect sustained low current faults and allow for rapid and total deenergization prior to PCB Transformer rupture (either violent or non violent rupture) and release of PCBs.

(vi) As of December 1, 1985, all PCB Transformers (including PCB Transformers in storage for reuse) must be registered with fire response personnel with primary jurisdiction (that is, the fire department or fire brigade which would normally be called upon for the initial response to a fire involving the equipment). Information required to be provided to fire response personnel includes:

(A) The location of the PCB Transformer(s) (the address(es) of the building(s) and the physical location of the PCB Transformer(s) on the building site(s) and for outdoor PCB Transformers, the location of the outdoor substation).

(B) The principal constituent of the dielectric fluid in the transformer(s) (e.g., PCBs, mineral oil, or silicone oil).

(C) The name and telephone number of the person to contact in the event of a fire involving the equipment.

(vii) As of December 1, 1985, PCB Transformers in use in or near commercial buildings must be registered with building owners. For PCB Transformers located in commercial buildings, PCB Transformer owners must register the transformers with the building owner of record. For PCB Transformers located near commercial buildings, PCB Transformer owners must register the transformers with all owners of buildings located within 30 meters of the PCB Transformer(s). Information required to be provided to building owners by PCB Transformer owners includes but is not limited to:

(A) The specific location of the PCB Transformer(s).

(B) The principal constituent of the dielectric fluid in the transformer(s) (e.g., PCBs, mineral oil, or silicone oil).

(C) The type of transformer installation (e.g., 208/120 volt network, 280/120 volt radial, 208 volt radial, 480 volt network, 480/277 volt network, 480 volt radial, 480/277 volt radial).

(viii) As of December 1, 1985, combustible materials, including, but not limited to paints, solvents, plastics, paper, and sawn wood must not be stored within a PCB Transformer enclosure (i.e., in a transformer vault or in a partitioned area housing a transformer); within 5 meters of a transformer enclosure, or, if unenclosed (unpartitioned), within 5 meters of a PCB Transformer.

(ix) A visual inspection of each PCB Transformer (as defined in the definition of ''PCB Transformer'' under § 761.3) in use or stored for reuse shall be performed at least once every 3 months. These inspections may take place any time during the 3-month periods: January-March, April-June, July-September, and October-December as long as there is a minimum of 30 days between inspections. The visual inspection must include investigation for any leak of dielectric fluid on or around the transformer. The extent of the visual inspections will depend on the physical constraints of each transformer installation and should not require an electrical shutdown of the transformer being inspected.

(x) If a PCB Transformer is found to have a leak which results in any quantity of PCBs running off or about to run off the external surface of the transformer, then the transformer must be repaired or replaced to eliminate the source of the leak. In all cases any leaking material must be cleaned up and properly disposed of according to disposal requirements of § 761.60. Cleanup of the released PCBs must be initiated as soon as possible, but in no case later than 48 hours of its discovery. Until appropriate action is completed, any active leak of PCBs must be contained to prevent exposure of humans or the environment and inspected daily to verify containment of the leak. Trenches, dikes, buckets, and pans are examples of proper containment measures.

(xi) If a PCB Transformer is involved in a fire-related incident, the owner of the transformer must immediately report the incident to the National Response Center (toll-free 1–800–424–8802; in Washington, DC 202–426–2675). A fire-related incident is defined as any incident involving a PCB Transformer which involves the generation of sufficient heat and/or pressure (by any source) to result in the violent or non-violent rupture of a PCB Transformer and the release of PCBs. Information must be provided regarding the type of PCB Transformer installation involved in the fire-related incident (e.g., high or low secondary voltage network transformer, high or low secondary voltage simple radial system, expanded radial system, primary selective system, primary loop system, or secondary selective system or other systems) and the readily ascertainable cause of the fire-related incident (e.g., high current fault in the primary or secondary or low current fault in secondary). The owner of the PCB Transformer must also take measures as soon as practically and safely possible to contain and control any potential releases of PCBs and incomplete combustion products into water. These measures include, but are not limited to:

(A) The blocking of all floor drains in the vicinity of the transformer.

(B) The containment of water runoff.

(C) The control and treatment (prior to release) of any water used in subsequent cleanup operations.

(xii) Records of inspection and maintenance history shall be maintained at least 3 years after disposing of the transformer and shall be made available for inspection, upon request by EPA. Such records shall contain the following information for each PCB Transformer:

(A) Its location.

(B) The date of each visual inspection and the date that leak was discovered, if different from the inspection date.

(C) The person performing the inspection.

(D) The location of any leak(s).

(E) An estimate of the amount of dielectric fluid released from any leak.

(F) The date of any cleanup, containment, repair, or replacement.

(G) A description of any cleanup, containment, or repair performed.

(H) The results of any containment and daily inspection required for uncorrected active leaks.

(xiii) A reduced visual inspection frequency of at least once every 12 months applies to PCB Transformers that utilize either of the following risk reduction measures. These inspections

may take place any time during the calendar year as long as there is a minimum of 180 days between inspections.

(A) A PCB Transformer which has impervious, undrained, secondary containment capacity of at least 100 percent of the total dielectric fluid volume of all transformers so contained or

(B) A PCB Transformer which has been tested and found to contain less than 60,000 ppm PCBs (after 3 months of in service use if the transformer has been serviced for purposes of reducing the PCB concentration).

(xiv) An increased visual inspection frequency of at least once every week applies to any PCB Transformer in use or stored for reuse which poses an exposure risk to food or feed. The user of a PCB Transformer posing an exposure risk to food is responsible for the inspection, recordkeeping, and maintenance requirements under this section until the user notifies the owner that the transformer may pose an exposure risk to food or feed. Following such notification, it is the owner's ultimate responsibility to determine whether the PCB Transformer poses an exposure risk to food or feed.

(xv) In the event a mineral oil transformer, assumed to contain less than 500 ppm of PCBs as provided in § 761.3, is tested and found to be contaminated at 500 ppm or greater PCBs, it will be subject to all the requirements of this Part 761. In addition, efforts must be initiated immediately to bring the transformer into compliance in accordance with the following schedule:

(A) Report fire-related incidents, effective immediately after discovery.

(B) Mark the PCB transformer within 7 days after discovery.

(C) Mark the vault door, machinery room door, fence, hallway or other means of access to the PCB Transformer within 7 days after discovery.

(D) Register the PCB Transformer in writing with fire response personnel with primary jurisdiction and with the building owner, within 30 days of discovery.

(E) Install electrical protective equipment on a radial PCB Transformer and a non-sidewalk vault, lower secondary voltage network PCB Transformer in or near a commercial building within 18 months of discovery or by October 1, 1990, whichever is later.

(F) Remove a non-sidewalk vault, lower secondary voltage network PCB Transformer in or near a commercial building, if electrical protective equipment is not installed, within 18 months of discovery or by October 1, 1993, whichever is later.

(G) Remove a lower secondary voltage network PCB Transformer located in a sidewalk vault in or near a commercial building, within 18 months of discovery or by October 1, 1993, whichever is later.

(H) Retrofill and reclassify a radial PCB Transformer or a lower or higher secondary voltage network PCB Transformer, located in other than a sidewalk vault in or near a commercial building, within 18 months or by October 1, 1990, whichever is later. This is an option in lieu of installing electrical protective equipment on a radial or lower secondary voltage network PCB Transformer located in other than a sidewalk vault or of removing a higher secondary voltage network PCB Transformer or a lower secondary voltage network PCB Transformer, located in a sidewalk vault, from service.

(I) Retrofill and reclassify a lower secondary voltage network PCB Transformer, located in a sidewalk vault, in or near a commercial building within 18 months or by October 1, 1993, whichever is later. This is an option in lieu of installing electrical protective equipment or removing the transformer from service.

(J) Retrofill and reclassify a higher secondary voltage network PCB Transformer, located in a sidewalk vault, in or near a commercial building within 18 months or by October 1, 1990, whichever is later. This is an option in lieu of other requirements.

(2) *Servicing conditions.* (i) Transformers classified as PCB-Contaminated Electrical Equipment (as defined in the definition of ''PCB-Contaminated Electrical Equipment'' under § 761.3) may be serviced (including rebuilding) only with dielectric fluid containing less than 500 ppm PCB.

(ii) Any servicing (including rebuilding) of PCB Transformers (as defined in the definition of ''PCB Transformer'' under § 761.3) that requires the removal

of the transformer coil from the transformer casing is prohibited. PCB Transformers may be serviced (including topping off) with dielectric fluid at any PCB concentration.

(iii) PCBs removed during any servicing activity must be captured and either reused as dielectric fluid or disposed of in accordance with the requirements of § 761.60. PCBs from PCB Transformers must not be mixed with or added to dielectric fluid from PCB-Contaminated Electrical Equipment.

(iv) Regardless of its PCB concentration, dielectric fluids containing less than 500 ppm PCB that are mixed with fluids that contain 500 ppm or greater PCB must not be used as dielectric fluid in any electrical equipment. The entire mixture of dielectric fluid must be considered to be greater than 500 ppm PCB and must be disposed of in an incinerator that meets the requirements in § 761.70.

(v) A PCB Transformer may be converted to PCB-Contaminated Electrical Equipment or to a non-PCB Transformer and a transformer that is classified as PCB-Contaminated Electrical Equipment may be reclassified to a non-PCB Transformer by draining, refilling and/or otherwise servicing the transformer. In order to reclassify, the transformer's dielectric fluid must contain less than 500 ppm PCB (for conversion to PCB-Contaminated Electrical Equipment) or less than 50 ppm PCB (for conversion to a non-PCB Transformer) after a minimum of three months of in-service use subsequent to the last servicing conducted for the purpose of reducing the PCB concentration in the transformer. In-service means that the transformer is used electrically under loaded conditions that raise the temperature of the dielectric fluid to at least 50° Centigrade. The Director, Chemical Management Division may grant, without further rulemaking, approval for the use of alternative methods that simulate the loaded conditions of in-service use. All PCBs removed from transformers for purposes of reducing PCB concentrations are subject to the disposal requirements of § 761.60.

(vi) Any dielectric fluid containing 50 ppm or greater PCB used for servicing transformers must be stored in accordance with the storage for disposal requirements of § 761.65.

(vii) Processing and distribution in commerce of PCBs for purposes of servicing transformers is permitted only for persons who are granted an exemption under TSCA 6(e)(3)(B).

(b) *Use in and servicing of railroad transformers.* PCBs may be used in transformers in railroad locomotives or railroad self-propelled cars (''railroad transformers'') and may be processed and distributed in commerce for purposes of servicing these transformers in a manner other than a totally enclosed manner subject to the following conditions:

(1) *Use restrictions.* (i) After July 1, 1983, the number of railroad transformers containing a PCB concentration greater than 60,000 ppm (6.0 percent on a dry weight basis) in use by any affected railroad organization may not exceed two-thirds of the total railroad transformers containing PCBs in use by that organization on January 1, 1982.

(ii) After January 1, 1984, the number of railroad transformers containing a PCB concentration greater than 60,000 ppm in use by any affected railroad organization may not exceed one-third of the total railroad transformers containing PCBs in use by that organization on January 1, 1982.

(iii) After July 1, 1984, use of railroad transformers that contain dielectric fluids with a PCB concentration greater than 60,000 ppm is prohibited.

(iv) After July 1, 1985, the number of railroad transformers containing a PCB concentration greater than 1,000 ppm (0.1 percent on a dry weight basis) in use by any affected railroad organization may not exceed two-thirds of the total railroad transformers containing PCBs in use by that organization on July 1, 1984.

(v) After January 1, 1986, the number of railroad transformers containing a PCB concentration greater than 1,000 ppm in use by any affected railroad organization may not exceed one-third of the total railroad transformers containing PCBs in use by that organization on July 1, 1984.

(vi) After July 1, 1986, use of railroad transformers that contain dielectric

fluids with a PCB concentration greater than 1,000 ppm is prohibited.

(vii) The concentration of PCBs in the dielectric fluid contained in railroad transformers must be measured:

(A) Immediately upon completion of any authorized servicing of a railroad transformer conducted for the purpose of reducing the PCB concentration in the dielectric fluid in the transformer, and

(B) Between 12 and 24 months after each servicing conducted in accordance with paragraph (b)(1)(vii)(A) of this section;

(C) The data obtained as a result of paragraphs (b)(1)(vii)(A) and (B) of this section shall be retained until January 1, 1991.

(2) *Servicing restrictions.* (i) If the coil is removed from the casing of a railroad transformer (e.g., the transformer is rebuilt), after January 1, 1982, the railroad transformer may not be refilled with dielectric fluid containing a PCB concentration greater than 50 ppm;

(ii) After January 1, 1982, railroad transformers may only be serviced with dielectric fluid containing less than 60,000 ppm PCBs, except as provided in paragraph (b)(2)(i) of this section;

(iii) After January 1, 1984, railroad transformers may only be serviced with dielectric fluid containing less than 1000 ppm PCB, except as provided in paragraph (b)(2)(i) of this section;

(iv) Dielectric fluid may be filtered through activated carbon or otherwise industrially processed for the purpose of reducing the PCB concentration in the fluid;

(v) Any PCB dielectric fluid that is used to service PCB railroad transformers must be stored in accordance with the storage for disposal requirements of § 761.65;

(vi) After July 1, 1979, processing and distribution in commerce of PCBs for purposes of servicing railroad transformers is permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

(vii) A PCB Transformer may be converted to a PCB-Contaminated Transformer or to a non-PCB Transformer by draining, refilling, and/or otherwise servicing the railroad transformer. In order to reclassify, the railroad transformer's dielectric fluid must contain less than 500 ppm (for conversion to PCB-Contaminated Transformer) or less than 50 ppm PCB (for conversion to a non-PCB Transformer) after a minimum of three months of inservice use subsequent to the last servicing conducted for the purpose of reducing the PCB concentration in the transformer.

(c) *Use in and servicing of mining equipment.* PCBs may be used in mining equipment and may be processed and distributed in commerce for purposes of servicing mining equipment in a manner other than a totally enclosed manner until January 1, 1982, subject to the following conditions:

(1) PCBs may be added to motors in mining equipment in mines or mining areas until January 1, 1982;

(2) PCB motors in loader-type mining equipment must be rebuilt as air-cooled or other non-PCB-containing motors whenever the motor is returned to a service shop for servicing;

(3) PCB motors in continuous miner-type equipment may be rebuilt as PCB motors until January 1, 1980;

(4) Any PCBs that are on hand to service or repair mining equipment must be stored in accordance with the storage for disposal requirements of § 761.65;

(5) After July 1, 1979, processing and distribution in commerce of PCBs for purposes of servicing mining equipment is permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

(d) *Use in heat transfer systems.* After July 1, 1984, intentionally manufactured PCBs may be used in heat transfer systems in a manner other than a totally enclosed manner at a concentration level of less than 50 ppm provided that the requirements of paragraphs (d)(1) through (5) of this section are met.

(1) Each person who owns a heat transfer system that ever contained PCBs at concentrations above 50 ppm must test for the concentration of PCBs in the heat transfer fluid of such a system no later than November 1, 1979, and at least annually thereafter. All test sampling must be performed at least three months after the most recent fluid refilling. When a test shows

that the PCB concentration is less than 50 ppm, testing under this paragraph is no longer required.

(2) Within six months of a test performed under paragraph (d)(1) of this section that indicates that a system's fluid contains 50 ppm or greater PCB (0.005% on a dry weight basis), the system must be drained of the PCBs and refilled with fluid containing less than 50 ppm PCB. Topping-off with heat transfer fluids containing PCB concentrations of less than 50 ppm is permitted.

(3) After November 1, 1979, no heat transfer system that is used in the manufacture or processing of any food, drug, cosmetic or device, as defined in section 201 of the Federal Food, Drug, and Cosmetic Act, may contain transfer fluid with 50 ppm or greater PCB (0.005% on a dry weight basis).

(4) Addition of fluids containing PCB concentrations greater than 50 ppm is prohibited.

(5) Data obtained as a result of paragraph (d)(1) of this section must be retained for five years after the heat transfer system reaches 50 ppm PCB.

(e) *Use in hydraulic systems.* After July 1, 1984, intentionally manufactured PCBs may be used in hydraulic systems in a manner other than a totally enclosed manner at a concentration level of less than 50 ppm provided that the requirements in paragraphs (e)(1) through (5) of this section are met.

(1) Each person who owns a hydraulic system that ever contained PCBs at concentrations above 50 ppm must test for the concentration of PCBs in the hydraulic fluid of each system no later than November 1, 1979, and at least annually thereafter. All test sampling must be performed at least three months after the most recent fluid refilling. When a test shows that the PCB concentration is less than 50 ppm, testing under this paragraph is no longer required.

(2) Within six months of a test under paragraph (e)(1) of this section that indicates that a system's fluid contains 50 ppm or greater PCB (0.005% on a dry weight basis), the system must be drained of the PCBs and refilled with fluid containing less than 50 ppm PCB. Topping-off with hydraulic fluids containing PCB concentrations less than 50 ppm to reduce PCB concentrations is permitted.

(3) Addition of PCBs at concentrations of greater than 50 ppm is prohibited.

(4) Hydraulic fluid may be drained from a hydraulic system and filtered, distilled, or otherwise serviced in order to reduce the PCB concentration below 50 ppm.

(5) Data obtained as a result of paragraph (e)(1) of this section must be retained for five years after the hydraulic system reaches 50 ppm.

(f) *Use in carbonless copy paper.* Carbonless copy paper containing PCBs may be used in a manner other than a totally enclosed manner indefinitely.

(g) *Pigments.* Diarylide and Phthalocyanin pigments that contain 50 ppm or greater PCB may be processed, distributed in commerce, and used in a manner other than a totally enclosed manner until January 1, 1982, except that after July 1, 1979, processing and distribution in commerce of diarylide or phthalocyanin pigments that contain 50 ppm or greater PCB is permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

(h) *Use in and servicing of electromagnets, switches and voltage regulators.* PCBs at any concentration may be used in electromagnets, switches (including sectionalizers and motor starters), and voltage regulators and may be used for purposes of servicing this equipment (including rebuilding) for the remainder of their useful lives, subject to the following conditions:

(1) *Use conditions.* (i) After October 1, 1985, the use and storage for reuse of any electromagnet which poses an exposure risk to food or feed is prohibited if the electromagnet contains greater than 500 ppm PCBs.

(ii) A visual inspection of each electromagnet subject to paragraph (h)(1)(i) of this section, shall be performed at least once every week according to the conditions contained in § 761.30(a)(1) (iii) and (iv).

(2) *Servicing conditions.* (i) Servicing (including rebuilding) any electromagnet, switch, or voltage regulator with a PCB concentration of 500 ppm or greater which requires the removal and

rework of the internal components is prohibited.

(ii) Electromagnets, switches, and voltage regulators classified as PCB-Contaminated Electrical Equipment (as defined in the definition of ''PCB-Contaminated Electrical Equipment'' under § 761.3) may be serviced (including rebuilding) only with dielectric fluid containing less than 500 ppm PCB.

(iii) PCBs removed during any servicing activity must be captured and either reused as dielectric fluid or disposed of in accordance with the requirements of § 761.60. PCBs from electromagnets switches, and voltage regulators with a PCB concentration of at least 500 ppm must not be mixed with or added to dielectric fluid from PCB-Contaminated Electrical Equipment.

(iv) Regardless of its PCB concentration, dielectric fluids containing less than 500 ppm PCB that are mixed with fluids that contain 500 ppm or greater PCB must not be used as dielectric fluid in any electrical equipment. The entire mixture of dielectric fluid must be considered to be greater than 500 ppm PCB and must be disposed of in an incinerator that meets the requirements of § 761.70.

(v) An electromagnet, switch or voltage regulator with a PCB concentration of at least 500 ppm may be converted to PCB-Contaminated Electrical Equipment or to a non-PCB classification and PCB-Contaminated Electrical Equipment may be reclassified to a non-PCB classification by draining, refilling and/or otherwise servicing the equipment. In order to be reclassified, the equipment's dielectric fluid must contain less than 500 ppm PCB (for conversion to PCB-Contaminated Electrical Equipment) or less than 50 ppm PCB (for conversion to a non-PCB classification) after a minimum of three months of in-service use subsequent to the last servicing conducted for the purpose of reducing the PCB concentration in the equipment. In-service use means the equipment is used electrically under loaded conditions. The Assistant Administrator may grant, without further rulemaking, approval for the use of alternative methods that simulate the loaded conditions of in-service use. All PCBs removed from this equipment for purposes of reducing PCB concentrations are subject to the disposal requirements of § 761.60.

(vi) Any dielectric fluid containing 50 ppm or greater PCB used for servicing electromagnets, switches, or voltage regulators must be stored in accordance with the storage for disposal requirements of § 761.65.

(vii) Processing and distribution in commerce of PCBs for purposes of servicing electromagnets, switches or voltage regulators is permitted only for persons who are granted an exemption under TSCA 6(e)(3)(B).

(i) *Use in compressors and in the liquid of natural gas pipelines.* PCBs may be used indefinitely in the compressors and in the liquids of natural gas pipelines at a concentration level of less than 50 ppm provided that they are marked in accordance with § 761.45(a).

(j) *Small quantities for research and development.* PCBs may be used in small quantities for research and development, as defined in § 761.3, in a manner other than a totally enclosed manner, indefinitely. Manufacture, processing, and distribution in commerce of PCBs in small quantities for research and development is permitted only for persons who have been granted an exemption under TSCA section 6(e)(3)(B).

(k) *Microscopy mounting medium.* PCBs may be used as a permanent microscopic mounting medium in a manner other than a totally enclosed manner indefinitely. Manufacture, processing, and distribution in commerce of PCBs for purposes of use as a mounting medium are permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

(l) *Use in capacitors.* PCBs at any concentration may be used in capacitors, subject to the following conditions:

(1) *Use conditions.* (i) After October 1, 1988, the use and storage for reuse of PCB Large High Voltage Capacitors and PCB Large Low Voltage Capacitors which pose an exposure risk to food or feed is prohibited.

(ii) After October 1, 1988, the use of PCB Large High Voltage Capacitors and PCB Large Low Voltage Capacitors is prohibited unless the capacitor is used within a restricted-access electrical substation or in a contained and restricted-access indoor installation. A

restricted-access electrical substation is an outdoor, fenced or walled-in facility that restricts public access and is used in the transmission or distribution of electric power. A contained and restricted-access indoor installation does not have public access and has an adequate roof, walls, and floor to contain any release of PCBs within the indoor location.

(2) [Reserved]

(m) *Use in and servicing of circuit breakers, reclosers and cable.* PCBs at any concentration may be used in circuit breakers, reclosers, and cable and may be used for purposes of servicing this electrical equipment (including rebuilding) for the remainder of their useful lives, subject to the following conditions:

(1) *Servicing conditions.* (i) Circuit breakers, reclosers, and cable may be serviced (including rebuilding) only with dielectric fluid containing less than 50 ppm PCB.

(ii) Any circuit breaker, recloser or cable found to contain at least 50 ppm PCBs may be serviced only in accordance with the conditions contained in 40 CFR 761.30(h)(2).

(2) [Reserved]

(n) *Microscopy immersion oil.* PCBs may be used as an immersion oil in fluorescence microscopy, in a manner other than a totally enclosed manner indefinitely. Manufacture, processing, and distribution in commerce of PCBs for purposes of use as a low fluorescence immersion oil are permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

(o) *Optical liquids.* PCBs may be used as optical liquids in a manner other than a totally enclosed manner indefinitely. Manufacture, processing, and distribution in commerce of PCBs for purposes of use as optical liquids are permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

(p) *Analytical reference samples.* PCB's in analytical reference samples derived from waste materials may be used only when the samples originated from a person who has been granted an exemption to process and distribute in commerce such samples under TSCA section 6(e)(3)(B). Once the use of such samples is completed, disposal of such samples is governed by all applicable Federal, State, and local laws, including the rules contained in this part.

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020, 2025 (15 U.S.C. 2605)

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982, and amended at 47 FR 37357, Aug. 25, 1983; 48 FR 135, Jan. 3, 1983; 49 FR 25241 and 25242, June 20, 1984; 49 FR 28190, and 28202, July 10, 1984; 50 FR 29199, July 17, 1985; 53 FR 12524, Apr. 15, 1988; 53 FR 24221, June 27, 1988; 53 FR 27328, July 19, 1988; 54 FR 28419, July 6, 1989; 55 FR 45804, Oct. 31, 1990; 55 FR 49045, Nov. 26, 1990; 58 FR 15809, Mar. 24, 1993; 58 FR 34205, June 23, 1993; 59 FR 16998, Apr. 11, 1994]

## Subpart C—Marking of PCBs and PCB Items

### § 761.40 Marking requirements.

(a) Each of the following items in existence on or after July 1, 1978 shall be marked as illustrated in Figure 1 in § 761.45(a): The mark illustrated in Figure 1 is referred to as $M_L$ throughout this subpart.

(1) PCB Containers;

(2) PCB Transformers at the time of manufacture, at the time of distribution in commerce if not already marked, and at the time of removal from use if not already marked. [Marking of PCB-Contaminated Electrical Equipment is not required];

(3) PCB Large High Voltage Capacitors at the time of manufacture, at the time of distribution in commerce if not already marked, and at the time of removal from use if not already marked;

(4) Equipment containing a PCB Transformer or a PCB Large High Voltage Capacitor at the time of manufacture, at the time of distribution in commerce if not already marked, and at the time of removal of the equipment from use if not already marked;

(5) PCB Large Low Voltage Capacitors at the time of removal from use;

(6) Electric motors using PCB coolants (See also paragraph (e) of this section).

(7) Hydraulic systems using PCB hydraulic fluid (See also paragraph (e) of this section);

(8) Heat transfer systems (other than PCB Transformers) using PCBs (See also paragraph (e) of this section);

(9) PCB Article Containers containing articles or equipment that must be

marked under paragraphs (a) (1) through (8) of this section;

(10) Each storage area used to store PCBs and PCB Items for disposal.

(b) As of October 1, 1978, each transport vehicle shall be marked on each end and side with $M_L$ as described in § 761.45(a) if it is loaded with PCB Containers that contain more than 45 kg (99.4 lbs.) of PCBs in the liquid phase or with one or more PCB Transformers (See also paragraph (e) of this section).

(c) As of January 1, 1979, the following PCB Articles shall be marked with mark $M_L$ as described in § 761.45(a):

(1) All PCB Transformers not marked under paragraph (a) of this section [marking of PCB-Contaminated Electrical Equipment is not required];

(2) All PCB Large High Voltage Capacitors not marked under paragraph (a) of this section

(i) Will be marked individually with mark $M_L$, or

(ii) If one or more PCB Large High Voltage Capacitors are installed in a protected location such as on a power pole, or structure, or behind a fence; the pole, structure, or fence shall be marked with mark $M_L$, and a record or procedure identifying the PCB Capacitors shall be maintained by the owner or operator at the protected location.

(d) As of January 1, 1979, all PCB Equipment containing a PCB Small Capacitor shall be marked at the time of manufacture with the statement, ''This equipment contains PCB Capacitor(s)''. The mark shall be of the same size as the mark $M_L$.

(e) As of October 1, 1979, applicable PCB Items in paragraphs (a) (1), (6), (7), and (8) of this section containing PCBs in concentrations of 50 to 500 ppm and applicable transport vehicles in paragraph (b) of this section loaded with PCB Containers that contain more than 45 kg (99.4 lbs.) of liquid PCBs in concentrations of 50 ppm to 500 ppm shall be marked with mark $M_L$ as described in § 761.45(a).

(f) Where mark $M_L$ is specified but the PCB Article or PCB Equipment is too small to accomodate the smallest permissible size of mark $M_L$, mark $M_S$ as described in § 761.45(b), may be used instead of mark $M_L$.

(g) Each large low voltage capacitor, each small capacitor normally used in alternating current circuits, and each fluorescent light ballast manufactured (''manufactured'', for purposes of this sentence, means built) between July 1, 1978 and July 1, 1998 that do not contain PCBs shall be marked by the manufacturer at the time of manufacture with the statement, ''No PCBs''. The mark shall be of similar durability and readability as other marking that indicate electrical information, part numbers, or the manufacturer's name. For purposes of this paragraph marking requirement only is applicable to items built domestically or abroad after June 30, 1978.

(h) All marks required by this subpart must be placed in a position on the exterior of the PCB Items or transport vehicles so that the marks can be easily read by any persons inspecting or servicing the marked PCB Items or transport vehicles.

(i) Any chemical substance or mixture that is manufactured after the effective date of this rule and that contains less than 500 ppm PCB (0.05% on a dry weight basis), including PCB that is a byproduct or impurity, must be marked in accordance with any requirements contained in the exemption granted by EPA to permit such manufacture and is not subject to any other requirement in this subpart unless so specified in the exemption. This paragraph applies only to containers of chemical substances or mixtures. PCB articles and equipment into which the chemical substances or mixtures are processed, are subject to the marking requirements contained elsewhere in this subpart.

(j) PCB Transformer locations shall be marked as follows:

(1) Except as provided in paragraph (j)(2) of this section, as of December 1, 1985, the vault door, machinery room door, fence, hallway, or means of access, other than grates and manhole covers, to a PCB Transformer must be marked with the mark $M_L$ as required by paragraph (a) of this section.

(2) A mark other than the $M_L$ mark may be used provided all of the following conditions are met:

(i) The program using such an alternative mark was initiated prior to August 15, 1985, and can be substantiated with documentation.

(ii) Prior to August 15, 1985, coordination between the transformer owner and the primary fire department occurred, and the primary fire department knows, accepts, and recognizes what the alternative mark means, and that this can be substantiated with documentation.

(iii) The EPA Regional Administrator in the appropriate region is informed in writing of the use of the alternative mark by October 3, 1988 and is provided with documentation that the program began before August 15, 1985, and documentation that demonstrates that prior to that date the primary fire department knew, accepted and recognized the meaning of the mark, and included this information in firefighting training.

(iv) The Regional Administrator will either approve or disapprove in writing the use of an alternative mark within 30 days of receipt of the documentation of a program.

(3) Any mark placed in accordance with the requirements of this section must be placed in the locations described in paragraph (j)(1) of this section and in a manner that can be easily read by emergency response personnel fighting a fire involving this equipment.

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982, and amended at 47 FR 37359, Aug. 25, 1982; 50 FR 29201, July 17, 1985; 50 FR 32176, Aug. 9, 1985; 53 FR 12524, Apr. 15, 1988; 53 FR 27329, July 19, 1988]

### § 761.45 Marking formats.

The following formats shall be used for marking:

(a) *Large PCB Mark—$M_L$.* Mark $M_L$ shall be as shown in Figure 1, letters and striping on a white or yellow background and shall be sufficiently durable to equal or exceed the life (including storage for disposal) of the PCB Article, PCB Equipment, or PCB Container. The size of the mark shall be at least 15.25 cm (6 inches) on each side. If the PCB Article or PCB Equipment is too small to accommodate this size, the mark may be reduced in size proportionately down to a minimum of 5 cm (2 inches) on each side.

(b) *Small PCB Mark—$M_S$.* Mark $M_S$ shall be as shown in Figure 2, letters and striping on a white or yellow background, and shall be sufficiently durable to equal or exceed the life (including storage for disposal) of the PCB Article, PCB Equipment, or PCB Container. The mark shall be a rectangle 2.5 by 5 cm (1 inch by 2 inches). If the PCB Article or PCB Equipment is too small to accommodate this size, the mark may be reduced in size proportionately down to a minimum of 1 by 2 cm (.4 by .8 inches).

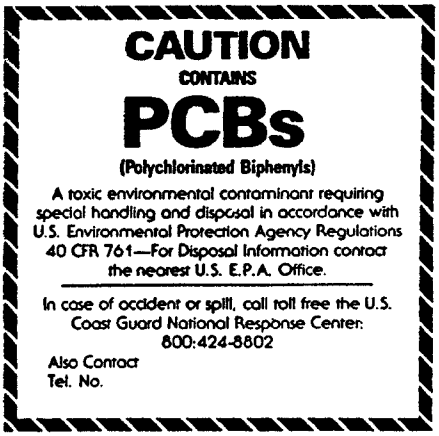


Figure 1

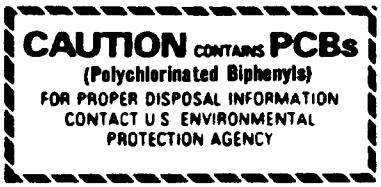


Figure 2

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982]

## Subpart D—Storage and Disposal

NOTE: This subpart does not require removal of PCBs and PCB Items from service and disposal earlier than would normally be the case. However, when PCBs and PCB Items are removed from service and disposed of, disposal must be undertaken in accordance with these regulations. PCBs (including soils and debris) and PCB Items which have been placed in a disposal site are considered

to be ''in service'' for purposes of the applicability of this subpart. This subpart does not require PCBs and PCB Items landfilled prior to February 17, 1978 to be removed for disposal. However, if such PCBs or PCB Items are removed from the disposal site, they must be disposed of in accordance with this subpart. Other subparts are directed to the manufacture, processing, distribution in commerce, and use of PCBs and may result in some cases in disposal at an earlier date than would otherwise occur.

**§ 761.60 Disposal requirements.**

(a) *PCBs.* (1) Except as provided in paragraphs (a)(2), (3), (4), and (5) of this section, PCBs at concentrations of 50 ppm or greater must be disposed of in an incinerator which complies with § 761.70.

(2) Mineral oil dielectric fluid from PCB-Contaminated Electrical Equipment containing a PCB concentration of 50 ppm or greater, but less than 500 ppm, must be disposed of in one of the following:

(i) In an incinerator that complies with § 761.70;

(ii) In a chemical waste landfill that complies with § 761.75 if information is provided to the owner or operator of the chemical waste landfill that shows that the mineral oil dielectric fluid does not exceed 500 ppm PCB and is not an ignitable waste as described in § 761.75(b)(8)(iii);

(iii) In a high efficiency boiler provided that:

(A) The boiler complies with the following criteria:

(*1*) The boiler is rated at a minimum of 50 million BTU hours;

(*2*) If the boiler uses natural gas or oil as the primary fuel, the carbon monoxide concentration in the stack is 50 ppm or less and the excess oxygen is at least three (3) percent when PCBs are being burned;

(*3*) If the boiler uses coal as the primary fuel, the carbon monoxide concentration in the stack is 100 ppm or less and the excess oxygen is at least three (3) percent when PCBs are being burned;

(*4*) The mineral oil dielectric fluid does not comprise more than ten (10) percent (on a volume basis) of the total fuel feed rate;

(*5*) The mineral oil dielectric fluid is not fed into the boiler unless the boiler is operating at its normal operating temperature (this prohibits feeding these fluids during either start up or shut down operations);

(*6*) The owner or operator of the boiler:

(*i*) Continuously monitors and records the carbon monoxide concentration and excess oxygen percentage in the stack gas while burning mineral oil dielectric fluid; or

(*ii*) If the boiler will burn less than 30,000 gallons of mineral oil dielectric fluid per year, measures and records the carbon monoxide concentration and excess oxygen percentage in the stack gas at regular intervals of no longer than 60 minutes while burning mineral oil dielectric fluid.

(*7*) The primary fuel feed rates, mineral oil dielectric fluid feed rates, and total quantities of both primary fuel and mineral oil dielectric fluid fed to the boiler are measured and recorded at regular intervals of no longer than 15 minutes while burning mineral oil dielectric fluid.

(*8*) The carbon monoxide concentration and the excess oxygen percentage are checked at least once every hour that mineral oil dielectric fluid is burned. If either measurement falls below the levels specified in this rule, the flow of mineral oil dielectric fluid to the boiler shall be stopped immediately.

(B) Thirty days before any person burns mineral oil dielectric fluid in the boiler, the person gives written notice to the EPA Regional Administrator for the EPA Region in which the boiler is located and that the notice contains the following information:

(*1*) The name and address of the owner or operator of the boiler and the address of the boiler;

(*2*) The boiler rating in units of BTU/hour;

(*3*) The carbon monoxide concentration and the excess oxygen percentage in the stack of the boiler when it is operated in a manner similar to the manner in which it will be operated when mineral oil dielectric fluid is burned; and

(*4*) The type of equipment, apparatus, and procedures to be used to control the feed of mineral oil dielectric fluid to the boiler and to monitor and record the carbon monoxide concentration

and excess oxygen percentage in the stack.

(C) When burning mineral oil dielectric fluid, the boiler must operate at a level of output no less than the output at which the measurements required under paragraph (a)(2)(iii)(B)(*3*) of this section were taken.

(D) Any person burning mineral oil dielectric fluid in a boiler obtains the following information and retains the information for five years at the boiler location:

(*1*) The data required to be collected under paragraphs (a)(2)(A) (*6*) and (*7*) of this section; and

(*2*) The quantity of mineral oil dielectric fluid burned in the boiler each month;

(iv) In a facility that is approved in accordance with § 761.60(e). For the purpose of burning mineral oil dielectric fluid, an applicant under § 761.60(e) must show that his combustion process destroys PCBs as efficiently as does a high efficiency boiler, as defined in paragraph (a)(2)(iii) of this section, or a § 761.70 approved incinerator.

(3) Liquids, other than mineral oil dielectric fluid, containing a PCB concentration of 50 ppm or greater, but less than 500 ppm, shall be disposed of:

(i) In an incinerator which complies with § 761.70;

(ii) In a chemical waste landfill which complies with § 761.75 if information is provided to the owner or operator of the chemical waste landfill that shows that the waste does not exceed 500 ppm PCB and is not an ignitable waste as described in § 761.75(b)(8)(iii);

(iii) In a high efficiency boiler provided that.

(A) The boiler complies with the following criteria:

(*1*) The boiler is rated at a minimum of 50 million BTU/hour;

(*2*) If the boiler uses natural gas or oil as the primary fuel, the carbon monoxide concentration in the stack is 50 ppm or less and the excess oxygen is at least three (3) percent when PCBs are being burned;

(*3*) If the boiler uses coal as the primary fuel, the carbon monoxide concentration in the stack is 100 ppm or less and the excess oxygen is at least three (3) percent when PCBs are being burned;

(*4*) The waste does not comprise more than ten (10) percent (on a volume basis) of the total fuel feed rate;

(*5*) The waste is not fed into the boiler unless the boiler is operating at its normal operating temperature (this prohibits feeding these fluids during either start up or shut down operations);

(*6*) The owner or operator of the boiler must:

(*i*) Continuously monitor and record the carbon monoxide concentration and excess oxygen percentage in the stack gas while burning waste fluid; or

(*ii*) If the boiler will burn less than 30,000 gallons of waste fluid per year, measure and record the carbon monoxide concentration and excess oxygen percentage in the stack gas at regular intervals of no longer than 60 minutes while burning waste fluid;

(*7*) The primary fuel feed rate, waste fluid feed rate, and total quantities of both primary fuel and waste fluid fed to the boiler must be measured and recorded at regular intervals of no longer than 15 minutes while burning waste fluid; and

(*8*) The carbon monoxide concentration and the excess oxygen percentage must be checked at least once every hour that the waste is burned. If either measurement falls below the levels specified in this rule, the flow of waste to the boiler shall be stopped immediately.

(B) Prior to any person burning these liquids in the boiler, approval must be obtained from the EPA Regional Administrator for the EPA Region in which the boiler is located and any persons seeking such approval must submit to the EPA Regional Administrator a request containing at least the following information:

(*1*) The name and address of the owner or operator of the boiler and the address of the boiler;

(*2*) The boiler rating in units of BTU/hour;

(*3*) The carbon monoxide concentration and the excess oxygen percentage in the stack of the boiler when it is operated in a manner similar to the manner in which it will be operated when low concentration PCB liquid is burned;

(*4*) The type of equipment, apparatus, and procedures to be used to control

the feed of mineral oil dielectric fluid to the boiler and to monitor and record the carbon monoxide concentration and excess oxygen percentage in the stack;

(*5*) The type of waste to be burned (e.g., hydraulic fluid, contaminated fuel oil, heat transfer fluid, etc.);

(*6*) The concentration of PCBs and of any other chlorinated hydrocarbon in the waste and the results of analyses using the American Society of Testing and Materials (ASTM) methods as follows: Carbon and hydrogen content using ASTM D–3178–84, nitrogen content using ASTM E–258–67 (Reapproved 1987), sulfur content using ASTM D–2784–89, D–1266–87, or D–129–64, chlorine content using ASTM D–808–87, water and sediment content using either ASTM D–2709–88 or ASTM D–1796–83 (Reapproved 1990), ash content using D–482–87, calorific value using ASTM D–240–87, carbon residue using either ASTM D–2158–89 or D–524–88, and flash point using ASTM D–93–90.

(*7*) The quantity of wastes estimated to be burned in a thirty (30) day period;

(*8*) An explanation of the procedures to be followed to insure that burning the waste will not adversely affect the operation of the boiler such that combustion efficiency will decrease.

(C) On the basis of the information in paragraph (a)(3)(iii)(B) of this section and any other available information, the Regional Administrator may, at his discretion, find that the alternate disposal method will not present an unreasonable risk of injury to health or the environment and approve the use of the boiler;

(D) When burning PCB wastes, the boiler must operate at a level of output no less than the output at which the measurements required under paragraph (a)(3)(iii)(B)(*3*) of this section were taken; and

(E) Any person burning liquids in boilers approved as provided in paragraph (a)(3)(iii)(C) of this section, must obtain the following information and retain the information for five years at the boiler location:

(*1*) The data required to be collected in paragraphs (a)(3)(iii)(A) (*6*) and (*7*) of this section;

(*2*) The quantity of low concentration PCB liquid burned in the boiler each month.

(*3*) The analysis of the waste required by paragraph (a)(3)(iii)(B)(*6*) of this section taken once a month for each month during which low concentration PCB liquid is burned in the boiler.

(iv) In a facility that is approved in accordance with § 761.60(e). For the purpose of burning liquids, other than mineral oil dielectric fluid, containing 50 ppm or greater PCB, but less than 500 ppm PCB, an applicant under § 761.60(e) must show that his combustion process destroys PCBs as efficiently as does a high efficiency boiler, as defined in § 761.60(a)(2)(iii), or a § 761.70 incinerator.

(4) Any non-liquid PCBs at concentrations of 50 ppm or greater in the form of contaminated soil, rags, or other debris shall be disposed of:

(i) In an incinerator which complies with § 761.70; or

(ii) In a chemical waste landfill which complies with § 761.75.

NOTE: Except as provided in § 761.75(b)(8)(ii), liquid PCBs shall not be processed into non-liquid forms to circumvent the high temperature incineration requirements of § 761.60(a).

(5) All dredged materials and municipal sewage treatment sludges that contain PCBs at concentrations of 50 ppm or greater shall be disposed of:

(i) In an incinerator which complies with § 761.70,

(ii) In a chemical waste landfill which complies with § 761.75; or

(iii) Upon application, using a disposal method to be approved by the Agency's Regional Administrator in the EPA Region in which the PCBs are located. Applications for disposal in a manner other than prescribed in paragraph (a)(5) (i) or (ii) of this section must be made in writing to the Regional Administrator. The application must contain information that, based on technical, environmental, and economic considerations, indicates that disposal in an incinerator or chemical waste landfill is not reasonable and appropriate, and that the alternate disposal method will provide adequate protection to health and the environment. The Regional Administrator may request other information that he

or she believes to be necessary for evaluation of the alternate disposal method. Any approval by the Regional Administrator shall be in writing and may contain any appropriate limitations on the approved alternate method for disposal. In addition to these regulations, the Regional Administrator shall consider other applicable Agency guidelines, criteria, and regulations to ensure that the discharges of dredged material and sludges that contain PCBs and other contaminants are adequately controlled to protect the environment. The person to whom such approval is issued must comply with all limitations contained in the approval.

(6) When storage is desired prior to disposal, PCBs at concentrations of 50 ppm or greater shall be stored in a facility which complies with § 761.65.

(b) *PCB Articles*—(1) *Transformers.* (i) PCB Transformers shall be disposed of in accordance with either of the following:

(A) In an incinerator that complies with § 761.70; or

(B) In a chemical waste landfill which complies with § 761.75; *Provided,* That the transformer is first drained of all free flowing liquid, filled with solvent, allowed to stand for at least 18 hours, and then drained thoroughly. PCB liquids that are removed shall be disposed of in accordance with paragraph (a) of this section. Solvents may include kerosene, xylene, toluene and other solvents in which PCBs are readily soluble. Precautionary measures should be taken, however, that the solvent flushing procedure is conducted in accordance with applicable safety and health standards as required by Federal or State regulations.

(ii) [Reserved]

(2) *PCB Capacitors.* (i) The disposal of any capacitor shall comply with all requirements of this subpart unless it is known from label or nameplate information, manufacturer's literature (including documented communications with the manufacturer), or chemical analysis that the capacitor does not contain PCBs.

(ii) Any person may dispose of PCB Small Capacitors as municipal solid waste, unless that person is subject to the requirements of paragraph (b)(2)(iv) of this section.

(iii) Any PCB Large High or Low Voltage Capacitor which contains 500 ppm or greater PCBs, owned by any person, shall be disposed of in accordance with either of the following:

(A) Disposal in an incinerator that complies with § 761.70; or

(B) Until March 1, 1981, disposal in a chemical waste landfill that complies with § 761.75.

(iv) Any PCB Small Capacitor owned by any person who manufactures or at any time manufactured PCB Capacitors or PCB Equipment and acquired the PCB Capacitors in the course of such manufacturing shall be disposed of in accordance with either of the following:

(A) Disposal in an incinerator which complies with § 761.70; or

(B) Until March 1, 1981, disposal in a chemical waste landfill which complies with § 761.75.

(v) Notwithstanding the restrictions imposed by paragraph (b)(2)(iii)(B) or (b)(2)(iv)(B) of this section, PCB capacitors may be disposed of in PCB chemical waste landfills that comply with § 761.75 subsequent to March 1, 1981, if the Assistant Administrator for Prevention, Pesticides and Toxic Substances publishes a notice in the FEDERAL REGISTER declaring that those landfills are available for such disposal and explaining the reasons for the extension or reopening. An extension or reopening for disposal of PCB capacitors that is granted under this subsection shall be subject to such terms and conditions as the Assistant Administrator may prescribe and shall be in effect for such period as the Assistant Administrator may prescribe. The Assistant Administrator may permit disposal of PCB capacitors in EPA approved chemical waste landfills after March 1, 1981, if in his opinion,

(A) Adequate incineration capability for PCB capacitors is not available, or

(B) The incineration of PCB capacitors will significantly interfere with the incineration of liquid PCBs, or

(C) There is other good cause shown.

As part of this evaluation, the Assistant Administrator will consider the impact of his action on the incentives to construct or expand PCB incinerators.

(vi) Prior to disposal in a § 761.75 chemical waste landfill, all large PCB capacitors, and all small PCB capacitors described in paragraph (b)(2)(iv) of this section, shall be placed in one of the Department of Transportation specification containers identified in § 761.65(c)(6) or in containers that comply with 49 CFR 178.118 (specification 17H containers). Large PCB capacitors which are too big to fit inside one of these containers shall be placed in a container with strength and durability equivalent to the DOT specification containers. In all cases, interstitial space in the container shall be filled with sufficient absorbent material (such as sawdust or soil) to absorb any liquid PCBs remaining in the capacitors.

(3) *PCB hydraulic machines.* PCB hydraulic machines containing PCBs at concentrations of 50 ppm or greater such as die casting machines may be disposed of as municipal solid waste or salvage provided that the machines are drained of all free-flowing liquid and the liquid is disposed of in accordance with the provisions of paragraph (a) of this section. If the PCB liquid contains 1000 ppm PCB or greater, then the hydraulic machine must be flushed prior to disposal with a solvent containing less than 50 ppm PCB under transformer solvents at paragraph (b)(1)(i)(B) of this section and the solvent disposed of in accordance with paragraph (a) of this section.

(4) *PCB-Contaminated Electrical Equipment.* All PCB-Contaminated Electrical Equipment except capacitors shall be disposed of by draining all free flowing liquid from the electrical equipment and disposing of the liquid in accordance with paragraph (a)(2) or (3) of this section. The disposal of the drained electrical equipment is not regulated by this rule. Capacitors that contain between 50 and 500 ppm PCBs shall be disposed of in an incinerator that complies with § 761.70 or in a chemical waste landfill that complies with § 761.75.

(5) *Other PCB Articles.* (i) PCB articles with concentrations at 500 ppm or greater must be disposed of:

(A) In an incinerator that complies with § 761.70; or

(B) In a chemical waste landfill that complies with § 761.75, provided that all free-flowing liquid PCBs have been thoroughly drained from any articles before the articles are placed in the chemical waste landfill and that the drained liquids are disposed of in an incinerator that complies with § 761.70.

(ii) PCB Articles with a PCB concentration between 50 and 500 ppm must be disposed of by draining all free flowing liquid from the article and disposing of the liquid in accordance with paragraph (a)(2) or (3) of this section. The disposal of the drained article is not regulated by this rule.

(6) *Storage of PCB Articles.* Except for a PCB Article described in paragraph (b)(2)(ii) of this section and hydraulic machines that comply with the municipal solid waste disposal provisions described in paragraph (b)(3) of this section, any PCB Article, with PCB concentrations at 50 ppm or greater, shall be stored in accordance with § 761.65 prior to disposal.

(c) *PCB Containers.* (1) Unless decontaminated in compliance with § 761.79 or as provided in paragraph (c)(2) of this section, a PCB container with PCB concentrations at 500 ppm or greater shall be disposed of:

(i) In an incinerator which complies with § 761.70, or

(ii) In a chemical waste landfill that complies with § 761.75; provided that if there are PCBs in a liquid state, the PCB Container shall first be drained and the PCB liquid disposed of in accordance with paragraph (a) of this section.

(2) Any PCB Container used to contain only PCBs at a concentration less than 500 ppm shall be disposed of as municipal solid wastes; provided that if the PCBs are in a liquid state, the PCB Container shall first be drained and the PCB liquid shall be disposed of in accordance with paragraph (a) of this section.

(3) Prior to disposal, a PCB container with PCB concentrations at 50 ppm or greater shall be stored in a facility which complies with § 761.65.

(d) *Spills.* (1) Spills and other uncontrolled discharges of PCBs at concentrations of 50 ppm or greater constitute the disposal of PCBs.

(2) PCBs resulting from the clean-up and removal of spills, leaks, or other uncontrolled discharges, must be stored and disposed of in accordance with paragraph (a) of this section.

(3) These regulations do not exempt any person from any actions or liability under other statutory authorities, including but not limited to the Clean Water Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

(e) Any person who is required to incinerate any PCBs and PCB Items under this subpart and who can demonstrate that an alternative method of destroying PCBs and PCB Items exists and that this alternative method can achieve a level of performance equivalent to § 761.70 incinerators or high efficiency boilers as provided in paragraphs (a)(2)(iv) and (a)(3)(iv) of this section, may submit a written request to either the Regional Administrator or the Director, Chemical Management Division for an exemption from the incineration requirements of § 761.70 or § 761.60. Requests for approval of alternate methods that will be operated in more than one region must be submitted to the Director, Chemical Management Division except for research and development involving less than 500 pounds of PCB material (see paragraph (i)(2) of this section). Requests for approval of alternate methods that will be operated in only one region must be submitted to the appropriate Regional Administrator. The applicant must show that his method of destroying PCBs will not present an unreasonable risk of injury to health or the environment. On the basis of such information and any available information, the Regional Administrator or the Director, Chemical Management Division may, in his discretion, approve the use of the alternate method if he finds that the alternate disposal method provides PCB destruction equivalent to disposal in a § 761.70 incinerator or a § 761.60 high efficiency boiler and will not present an unreasonable risk of injury to health or the environment. Any approval must be stated in writing and may contain such conditions and provisions as the Regional Administrator or Director, Chemical Management Division deems appropriate. The person to whom such waiver is issued must comply with all limitations contained in such determination.

(f)(1) Each operator of a chemical waste landfill, incinerator, or alternative to incineration approved under paragraph (e) of this section shall give the following written notices to the state and local governments within whose jurisdiction the disposal facility is located:

(i) Notice at least thirty (30) days before a facility is first used for disposal of PCBs required by these regulations; and

(ii) At the request of any state or local government, annual notice of the quantities and general description of PCBs disposed of during the year. This annual notice shall be given no more than thirty (30) days after the end of the year covered.

(iii) The Regional Administrator may reduce the notice period required by paragraph (f)(1)(i) of this section from thirty days to a period of no less than five days in order to expedite interim approval of the chemical waste landfill located in Sedgwick County, Kansas.

(2) Any person who disposes of PCBs under a paragraph (a)(5)(iii) of this section incineration or chemical waste landfilling waiver shall give written notice at least thirty (30) days prior to conducting the disposal activities to the state and local governments within whose jurisdiction the disposal is to take place.

(g) *Testing procedures.* (1) Owners or users of mineral oil dielectric fluid electrical equipment may use the following procedures to determine the concentration of PCBs in the dielectric fluid:

(i) Dielectric fluid removed from mineral oil dielectric fluid electrical equipment may be collected in a common container, provided that no other chemical substances or mixtures are added to the container. This common container option does not permit dilution of the collected oil. Mineral oil that is assumed or known to contain at least 50 ppm PCBs must not be mixed with mineral oil that is known or assumed to contain less than 50 ppm PCBs to reduce the concentration of

PCBs in the common container. If dielectric fluid from untested, oil-filled circuit breakers, reclosers, or cable is collected in a common container with dielectric fluid from other oil-filled electrical equipment, the entire contents of the container must be treated as PCBs at a concentration of at least 50 ppm, unless all of the fluid from the other oil-filled electrical equipment has been tested and shown to contain less than 50 ppm PCBs.

(ii) For purposes of complying with the marking and disposal requirements, representative samples may be taken from either the common containers or the individual electrical equipment to determine the PCB concentration, except that if any PCBs at a concentration of 500 ppm or greater have been added to the container or equipment then the total container contents must be considered as having a PCB concentration of 500 ppm or greater for purposes of complying with the disposal requirements of this subpart. For purposes of this subparagraph, representative samples of mineral oil dielectric fluid are either samples taken in accordance with ASTM D 923–86 or ASTM D 923–89 or samples taken from a container that has been thoroughly mixed in a manner such that any PCBs in the container are uniformly distributed throughout the liquid in the container.

(2) Owners or users of waste oil may use the following procedures to determine the PCB concentration of waste oil:

(i) Waste oil from more than one source may be collected in a common container, provided that no other chemical substances or mixtures, such as non-waste oils, are added to the container.

(ii) For purposes of complying with the marking and disposal requirements, representative samples may be taken from either the common containers or the individual electrical equipment to determine the PCB concentration. *Except,* That if any PCBs at a concentration of 500 ppm or greater have been added to the container or equipment then the total container contents must be considered as having a PCB concentration of 500 ppm or greater for purposes of complying with the disposal requirements of this subpart. For purposes of this paragraph, representative samples of mineral oil dielectric fluid are either samples taken in accordance with ASTM D 923–86 or ASTM D 923–89 or samples taken from a container that has been thoroughly mixed in a manner such that any PCBs in the container are uniformly distributed throughout the liquid in the container.

(h) Requirements for export and import of PCBs and PCB Items for disposal are found in Subpart F of this part.

(i) *Approval authority for disposal methods.* (1) The officials (the Director, Chemical Management Division and the Regional Administrators) designated in §§ 761.60(e) and 761.70(a) and (b) to receive requests for approval of PCB disposal activities are the primary approval authorities for these activities. Notwithstanding, the Director, Chemical Management Division may, at his/her discretion, assign the authority to review and approve any aspect of a disposal system to the Office of Prevention, Pesticides and Toxic Substances or to a Regional Administrator.

(2) Except for activity authorized under § 761.30(j), research and development (R and D) into PCB disposal methods using a total of less than 500 pounds of PCB material (regardless of PCB concentration) will be reviewed and approved by the appropriate EPA Regional Administrator and research and development using 500 pounds or more of PCB material (regardless of PCB concentration) will be reviewed by the approval authorities set out in §§ 761.60(e) and 761.70(a) and (b).

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605)

[44 FR 31542, May 31, 1979, as amended at 44 FR 54297, Sept. 19, 1979; 45 FR 20475, Mar. 28, 1980. Redesignated at 47 FR 19527, May 6, 1982, and amended at 47 FR 37359, Aug. 25, 1982; 48 FR 5730, Feb. 8, 1983; 48 FR 13185, Mar. 30, 1983; 48 FR 15125, Apr. 7, 1983; 49 FR 28191, July 10, 1984; 49 FR 36648, Sept. 19, 1984; 53 FR 10391, Mar. 31, 1988; 53 FR 12524, Apr. 15, 1988; 53 FR 21641, June 9, 1988; 54 FR 22595, May 25, 1989; 57 FR 13323, Apr. 16, 1992; 58 FR 15809, Mar. 24, 1993; 61 FR 11107, Mar. 18, 1996]

**§ 761.65 Storage for disposal.**

This section applies to the storage for disposal of PCBs at concentrations of 50 ppm or greater and PCB Items with PCB concentrations of 50 ppm or greater.

(a) Any PCB Article or PCB Container stored for disposal before January 1, 1983, shall be removed from storage and disposed of as required by this part before January 1, 1984. Any PCB Article or PCB Container stored for disposal after January 1, 1983, shall be removed from storage and disposed of as required by subpart D of this part within one year from the date when it was first placed into storage.

(b) Except as provided in paragraph (c) of this section, after July 1, 1978, owners or operators of any facilities used for the storage of PCBs and PCB Items designated for disposal shall comply with the following requirements:

(1) The facilities shall meet the following criteria:

(i) Adequate roof and walls to prevent rain water from reaching the stored PCBs and PCB Items;

(ii) An adequate floor which has continuous curbing with a minimum six inch high curb. The floor and curbing must provide a containment volume equal to at least two times the internal volume of the largest PCB Article or PCB Container stored therein or 25 percent of the total internal volume of all PCB Articles or PCB Containers stored therein, whichever is greater;

(iii) No drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area;

(iv) Floors and curbing constructed of continuous smooth and impervious materials, such as Portland cement concrete or steel, to prevent or minimize penetration of PCBs; and

(v) Not located at a site that is below the 100-year flood water elevation.

(2) [Reserved]

(c)(1) The following PCB Items may be stored temporarily in an area that does not comply with the requirements of paragraph (b) of this section for up to thirty days from the date of their removal from service, provided that a notation is attached to the PCB Item or a PCB Container (containing the item) indicating the date the item was removed from service:

(i) Non-leaking PCB Articles and PCB Equipment;

(ii) Leaking PCB Articles and PCB Equipment if the PCB Items are placed in a non-leaking PCB Container that contains sufficient sorbent materials to absorb any liquid PCBs remaining in the PCB Items;

(iii) PCB Containers containing non-liquid PCBs such as contaminated soil, rags, and debris; and

(iv) PCB Containers containing liquid PCBs at a concentration between 50 and 500 ppm, provided a Spill Prevention, Control and Countermeasure Plan has been prepared for the temporary storage area in accordance with 40 CFR Part 112. In addition, each container must bear a notation that indicates that the liquids in the drum do not exceed 500 ppm PCB.

(2) Non-leaking and structurally undamaged PCB Large High Voltage Capacitors and PCB-Contaminated Electrical Equipment that have not been drained of free flowing dielectric fluid may be stored on pallets next to a storage facility that meets the requirements of paragraph (b) of this section. PCB-Contaminated Electrical Equipment that has been drained of free flowing dielectric fluid is not subject to the storage provisions of § 761.65. Storage under this subparagraph will be permitted only when the storage facility has immediately available unfilled storage space equal to 10 percent of the volume of capacitors and equipment stored outside the facility. The capacitors and equipment temporarily stored outside the facility shall be checked for leaks weekly.

(3) Any storage area subject to the requirements of paragraph (b) or paragraph (c)(1) of this section shall be marked as required in subpart C—§ 761.40(a)(10).

(4) No item of movable equipment that is used for handling PCBs and PCB Items in the storage facilities and that comes in direct contact with PCBs shall be removed from the storage facility area unless it has been decontaminated as specified in § 761.79.

(5) All PCB Articles and PCB Containers in storage shall be checked for leaks at least once every 30 days. Any

leaking PCB Articles and PCB Containers and their contents shall be transferred immediately to properly marked non-leaking containers. Any spilled or leaked materials shall be immediately cleaned up, using sorbents or other adequate means, and the PCB-contaminated materials and residues shall be disposed of in accordance with § 761.60(a)(4).

(6) Except as provided in paragraph (c)(7) of this section, any container used for the storage of liquid PCBs shall comply with the Shipping Container Specification of the Department of Transportation (DOT), 49 CFR 178.80 (Specification 5 container without removable head), 178.82 (Specification 5B container without removable head), 178.102 (Specification 6D overpack with Specification 2S(§ 178.35) or 2SL(§ 178.35a) polyethylene containers) or 178.116 (Specification 17E container). Any container used for the storage of non-liquid PCBs shall comply with the specifications of 49 CFR 178.80 (Specification 5 container), 178.82 (Specification 5B container) or 178.115 (Specification 17C container). As an alternate, containers larger than those specified in DOT Specifications 5, 5B, or 17C may be used for non-liquid PCBs if the containers are designed and constructed in a manner that will provide as much protection against leaking and exposure to the environment as the DOT Specification containers, and are of the same relative strength and durability as the DOT Specification containers.

(7) Storage containers for liquid PCBs can be larger than the containers specified in paragraph (c)(6) of this section provided that:

(i) The containers are designed, constructed, and operated in compliance with Occupational Safety and Health Standards, 29 CFR 1910.106, *Flammable and combustible liquids*. Before using these containers for storing PCBs, the design of the containers must be reviewed to determine the effect on the structural safety of the containers that will result from placing liquids with the specific gravity of PCBs into the containers (see 29 CFR 1910.106(b)(1)(i)(*f*)).

(ii) The owners or operators of any facility using containers described in paragraph (c)(7)(i) of this section, shall prepare and implement a Spill Prevention Control and Countermeasure (SPCC) Plan as described in Part 112 of this title. In complying with 40 CFR Part 112, the owner or operator shall read ''oil(s)'' as ''PCB(s)'' whenever it appears. The exemptions for storage capacity, 40 CFR 112.1(d)(2), and the amendment of SPCC plans by the Regional Administrator, 40 CFR 112.4, shall not apply unless some fraction of the liquids stored in the container are oils as defined by section 311 of the Clean Water Act.

(8) PCB Articles and PCB Containers shall be dated on the article or container when they are placed in storage. The storage shall be managed so that the PCB Articles and PCB Containers can be located by the date they entered storage. Storage containers provided in paragraph (c)(7) of this section, shall have a record that includes for each batch of PCBs the quantity of the batch and date the batch was added to the container. The record shall also include the date, quantity, and disposition of any batch of PCBs removed from the container.

(9) Owners or operators of storage facilities shall establish and maintain records as provided in § 761.180.

(d) *Approval of commercial storers of PCB waste.* (1) All commercial storers of PCB waste shall have interim approval to operate commercial facilities for the storage of PCB waste until August 2, 1990. Commercial storers of PCB waste are prohibited from storing any PCB waste at their facilities after August 2, 1990 unless they have submitted by August 2, 1990 a complete application for a final storage approval under paragraph (d)(2) of this section. The period of interim approval shall continue until the Regional Administrator (or the Director of the Chemical Management Division (Director, CMD) in cases involving commercial storage ancillary to a facility approved for disposal by the Director, CMD) makes a final decision on the storage application at which time such interim approval shall terminate.

(2) The Regional Administrator for the region in which the storage facility is located (or the Director, CMD, if the commercial storage area is ancillary to a facility approved for disposal by the

Director, CMD) shall grant written, final approval to engage in the commercial storage of PCB waste upon a determination by the Regional Administrator or the Director, CMD, that the criteria in paragraph (d)(2)(i) through (d)(2)(vii) of this section have been met by the applicant:

(i) The applicant, its principals, and its key employees responsible for the establishment or operation of the commercial storage facility are qualified to engage in the business of commercial storage of PCB waste.

(ii) The facility possesses the capacity to handle the quantity of PCB waste which the owner or operator of the facility has estimated will be the maximum quantity of PCB waste that will be handled at any one time at the facility.

(iii) The owner or operator of the facility has certified compliance with the storage facility standards in paragraphs (b) and (c)(7) of this section.

(iv) The owner or operator has developed a written closure plan for the facility that is deemed acceptable by the Regional Administrator (or the Director, CMD, if the commercial storage is ancillary to a disposal facility permitted by the Director, CMD) under the closure plan standards of paragraph (e) of this section.

(v) The owner or operator has included in the application for final approval a demonstration of financial responsibility for closure that meets the financial responsibility standards of paragraph (g) of this section.

(vi) The operation of the storage facility will not pose an unreasonable risk of injury to health or the environment.

(vii) The environmental compliance history of the applicant, its principals, and its key employees may be deemed to constitute a sufficient basis for denial of approval whenever in the judgment of the Regional Administrator (or Director, CMD) that history of environmental civil violations or criminal convictions evidences a pattern or practice of noncompliance that demonstrates the applicant's unwillingness or inability to achieve and maintain compliance with the regulations.

(3) Applicants for storage approvals shall submit a written application that includes any relevant information bearing upon the qualifications of the facility's principals and key employees to engage in the business of commercial storage of PCB wastes. This information shall include, but is not limited to:

(i) The identification of the owner and the operator of the facility, including all general partners of a partnership, any limited partner of a partnership, any stockholder of a corporation or any participant in any other type of business organization or entity who owns or controls, directly or indirectly, more than 5 percent of each partnership, corporation, or other business organization and all officials of the facility who have direct management responsibility for the facility.

(ii) The identification of the person responsible for the overall operations of the facility (i.e., a plant manager, superintendent, or a person of similar responsibility) and the supervisory employees who are or will be responsible for the operation of the facility.

(iii) Information concerning the technical qualifications and experience of the persons responsible for the overall operation of the facility and the employees responsible for handling PCB waste or other wastes.

(iv) Information concerning any past State or Federal environmental violations involving the same business or another business with which the principals or supervisory employees were affiliated directly that occurred within 5 years preceding the date of submission and which relate directly to violations that resulted in either a civil penalty (irrespective of whether the matter was disposed of by an adjudication or by a without prejudice settlement) or judgment of conviction whether entered after trial or a plea, either of guilt or nolo contendere or civil injunctive relief and involved storage, disposal, transport, or other waste handling activities.

(v) A list of all companies currently owned or operated in the past by the principals or key employees identified in paragraphs (d)(3)(i) and (d)(3)(ii) of this section that are or were directly or indirectly involved with waste handling activities.

(vi) The owner's or operator's estimate of maximum PCB waste quantity to be handled at the facility.

(vii) A written statement certifying compliance with paragraph (b) or (c) of this section and containing a certification as defined in § 761.3.

(viii) A written closure plan for the facility, as described in paragraph (e) of this section.

(ix) The current closure cost estimate for the facility, as described in paragraph (f) of this section.

(x) A demonstration of financial responsibility to close the facility, as described in paragraph (g) of this section.

(4) The written approval issued by the Regional Administrator (or the Director, CMD, if the commercial storage area is ancillary to a disposal facility approved by the Director, CMD) shall include, but not be limited to, the following:

(i) The determination that the applicant has satisfied the requirements set forth in paragraph (d)(2) of this section, and a brief statement setting forth the basis for the determination.

(ii) Incorporation of the closure plan submitted by the facility owner or operator and approved by the Regional Administrator (or the Director, CMD, if the commercial storage area is ancillary to a disposal facility approved by the Director, CMD).

(iii) A condition imposing a maximum PCB storage capacity which the facility shall not exceed during its PCB waste storage operations. The maximum storage capacity imposed under this condition shall not be greater than the estimated maximum inventory of PCB waste included in the owner's or operator's application for final approval.

(iv) Such other conditions as deemed necessary by the Regional Administrator (or the Director, CMD, if the commercial storage area is ancillary to a disposal facility approved by the Director, CMD) to ensure that the operations of the PCB storage facility will not pose an unreasonable risk of injury to health or the environment.

(5) Storage areas at transfer facilities are exempt from the requirement to obtain approval as a commercial storer of PCB waste under this paragraph, unless the same PCB waste is stored at these facilities for a period of time greater than 10 consecutive days between destinations.

(6) Storage areas at RCRA-permitted facilities may be exempt from the separate TSCA storage approval requirements in this paragraph (d) upon a showing to the Regional Administrator's satisfaction that the facility's existing RCRA closure plan is substantially equivalent to this rule's closure plan standards, and that such facility's closure cost estimate and financial assurance demonstration account for maximum PCB waste inventories, and the requirements of paragraph (d)(3)(i) through (d)(3)(v) and (d)(3)(vii) of this section are met. A pay-in period of longer than 3 years after approval of the storage facility pursuant to this rule, will be acceptable to EPA if that pay-in period has already been established for a valid RCRA facility or previously approved TSCA facility.

(7) Storage areas ancillary to TSCA-approved disposal facilities may be exempt from a separate facility approval provided all of the following conditions are met:

(i) The current disposal approval contains an expiration date.

(ii) The current disposal approval's closure and financial responsibility conditions specifically extend to storage areas ancillary to disposal.

(iii) The current disposal approval's closure and financial responsibility conditions provide for annual adjustments for inflation, and for modification when changes in operation would affect closure costs.

(iv) The current disposal approval contains conditions on closure and financial responsibility that are at least as stringent as those in paragraphs (e) and (g) of this section. However, the provision for a 3-year closure trust pay-in period, as specified in paragraph (g)(1)(i) of this section, would be waived in a case in which an approved TSCA facility or RCRA facility that covers PCB storage has a longer pay-in period for the trust.

(v) The current disposal approval satisfies the requirements of paragraph (d)(3)(i) through (d)(3)(v) of this section.

(8) The approval of any existing TSCA-approved disposal facility ancillary to a commercial storage facility that is deficient in any of the conditions of paragraph (d)(7)(i) through (d)(7)(v) of this section shall be called in by the Regional Administrator or the Director, CMD, if it was the Director, CMD who issued it. The approval shall be modified to meet the requirements of paragraph (d)(7) of this section within 180 days of the effective date of this final rule, or a separate application for approval of the storage facility may be submitted to the Regional Administrator or the Director, CMD, in the cases where the Director, CMD issued the approval.

(e) *Closure.* (1) A commercial storer of PCB waste shall have a written closure plan that identifies the steps that the owner or operator of the facility shall take to close the PCB waste storage facility in a manner that eliminates the potential for post-closure releases of PCBs which may present an unreasonable risk to human health or the environment. An acceptable closure plan must include, at a minimum, all of the following:

(i) A description of how the PCB storage areas of the facility will be closed in a manner that eliminates the potential for post-closure releases of PCBs into the environment.

(ii) An identification of the maximum extent of storage operations that will be open during the active life of the facility, including an identification of the extent of PCB storage operations at the facility relative to other wastes that will be handled at the facility.

(iii) An estimate of the maximum inventory of PCB wastes that could be handled at one time at the facility over its active life, and a detailed description of the methods or arrangements to be used during closure for removing, transporting, storing, or disposing of the facility's inventory of PCB waste, including an identification of any off-site facilities that will be used.

(iv) A detailed description of the steps needed to remove or decontaminate PCB waste residues and contaminated containment system components, equipment, structures, and soils during closure in accordance with the levels specified in the PCB Spills Cleanup Policy in subpart G of this part, including a description of the methods for sampling and testing of surrounding soils, and the criteria for determining the extent of removal or decontamination.

(v) A detailed description of other activities necessary during the closure period to ensure that any post-closure releases of PCBs will not present unreasonable risks to human health or the environment. This includes activities such as ground-water monitoring, run-on and run-off control, and facility security.

(vi) A schedule for closure of each area of the facility where PCB waste is stored or handled, including the total time required to close each area of PCB waste storage or handling, and the time required for any intervening closure activities.

(vii) An estimate of the expected year of closure of the PCB waste storage areas, if a trust fund is opted for as the financial mechanism.

(2) A written closure plan determined to be acceptable by the Regional Administrator (or the Director, CMD, if the commercial storage area is ancillary to a disposal facility approved by the Director, CMD) under this section shall become a condition of any approval granted under paragraph (d) of this section.

(3) A separate and new closure plan need not be submitted in cases where a facility is currently covered by a TSCA approval or a RCRA permit, upon a showing to the satisfaction of the Regional Administrator (or the Director, CMD, if the commercial storage area is ancillary to a disposal facility approved by the Director, CMD) that the existing closure plan is substantially equivalent to closure plans required under paragraphs (d) through (g) of this section, and that the plan adequately accounts for PCB waste inventories.

(4) The commercial storer of PCB waste shall submit a written request to the Regional Administrator (or the Director, CMD, if he approved the closure plan) for a modification to its storage approval to amend its closure plan, whenever:

(i) Changes in ownership, operating plans, or facility design affect the existing closure plan.

(ii) There is a change in the expected date of closure, if applicable.

(iii) In conducting closure activities, unexpected events require a modification of the approved closure plan.

(5) The Regional Administrator or the Director, CMD, if he approved the closure plan, may modify the existing closure plan under the conditions described in paragraph (e)(4) of this section.

(6) Commercial storers of PCB waste shall comply with the following closure schedule:

(i) The commercial storer shall notify in writing the Regional Administrator or the Director, CMD if he approved the closure plan, at least 60 days prior to the date on which final closure of its PCB storage facility is expected to begin.

(ii) The date when a commercial storer of PCB waste ''expects to begin closure'' shall be no later than 30 days after the date on which the storage facility received its final quantities of PCB waste. For good cause shown, the Regional Administrator or the Director, CMD if he approved the closure plan, may extend the date for commencement of closure for an additional 30-day period.

(iii) Within 90 days after receiving the final quantity of PCB waste for storage, a commercial storer of PCB waste shall remove all PCB waste in storage at the facility from the facility in accordance with the approved closure plan. For good cause shown, the Regional Administrator or the Director, CMD if he approved the closure plan, may approve a reasonable extension to the period for removal of the PCB waste.

(iv) A commercial storer of PCB waste shall complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final quantity of PCB waste for storage at the facility. For good cause shown, the Regional Administrator or Director, CMD if he approved the closure plan, may approve a reasonable extension to the closure period.

(7) During the closure period, all contaminated system component equipment, structures, and soils shall be disposed of in accordance with the disposal requirements of subpart D of this part, or, if applicable, decontaminated in accordance with the levels specified in the PCB Spills Cleanup Policy at subpart G of this part. When PCB waste is removed from the storage facility during closure, the owner or operator becomes a generator of PCB waste subject to the generator requirements of subpart J of this part.

(8) Within 60 days of completion of closure of each facility for the storage of PCB waste, the commercial storer of PCB waste shall submit to the Regional Administrator (or Director, CMD if he approved the closure plan), by registered mail, a certification that the PCB storage facility has been closed in accordance with the approved closure plan. The certification shall be signed by the owner or operator and by an independent registered professional engineer.

(f) *Closure cost estimate.* (1) A commercial storer of PCB wastes shall have a detailed estimate, in current dollars, of the cost of closing the facility in accordance with its approved closure plan. The closure cost estimate shall be in writing, be certified by the person preparing it (using the certification defined in § 761.3) and comply with all of the following criteria:

(i) The closure cost estimate shall equal the cost of final closure at the point in the PCB storage facility's active life when the extent and manner of PCB storage operations would make closure the most expensive, as indicated by the facility's closure plan.

(ii) The closure cost estimate shall be based on the costs to the owner or operator of hiring a third party to close the facility, and the third party shall not be either a corporate parent or subsidiary of the owner or operator, or member in joint ownership of the facility.

(iii) The owner or operator shall include in the estimate the current market costs for off-site commercial disposal of the facility's maximum estimated inventory of PCB wastes, except that on-site disposal costs may be used if on-site disposal capacity will exist at the facility at all times over the life of the PCB storage facility.

(iv) The closure cost estimate may not incorporate any salvage value that may be realized with the sale of wastes,

facility structures or equipment, land, or other assets associated with the facility at the time of closure.

(2) During the active life of the PCB storage facility, the commercial storer of PCB waste shall adjust annually for inflation the closure cost estimate within 60 days prior to the anniversary date of the establishment of the financial instruments used to demonstrate financial responsibility for closure, except that owners or operators who use the financial test or corporate guarantee shall adjust their closure cost estimates for inflation within 30 days after the close of the storer's fiscal year. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business.* The Implicit Price Deflator for Gross National Product is included in a monthly publication titled *Economic Indicators*, which is available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402. The inflation factor used in the latter method is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The adjustment to the closure cost estimate is then made by multiplying the most recent closure cost estimate by the latest inflation factor.

(3) Where the Regional Administrator (or the Director, CMD, if he approved the closure plan) approves a modification to the facility's closure plan, and that modification increases the cost of closure, the owner or operator shall revise the closure cost estimate no later than 30 days after the modification is approved. Any such revision shall also be adjusted for inflation in accordance with paragraph (f)(2) of this section.

(4) The owner or operator of the facility shall keep at the facility during its operating life the most recent closure cost estimate, including any adjustments resulting from inflation or from modifications to the closure plan.

(g) *Financial assurance for closure.* A commercial storer of PCB waste shall establish financial assurance for closure of each PCB storage facility that he owns or operates. In establishing financial assurance for closure, the commercial storer of PCB waste may choose from the following financial assurance mechanisms or any combination of mechanisms:

(1) The ''closure trust fund,'' as specified in § 264.143(a) of this chapter, except for paragraph (a)(3) of § 264.143. For purposes of this paragraph, the following provisions also apply:

(i) Payments into the trust fund shall be made annually by the owner or operator over the remaining operating life of the facility as estimated in the closure plan, or over 3 years, whichever period is shorter. This period of time is hereafter referred to as the ''pay-in period.'' For an existing facility, the first payment must be made within 30 calendar days after EPA has notified the facility of its conditional approval. Interim approval to operate is canceled and the application is denied if EPA does not receive verification that the payment was made in that 30-day period.

(ii) For a new facility, the first payment into the closure trust fund shall be made before EPA grants final approval of the application and before the facility may accept the initial shipment of PCB waste for commercial storage. A receipt from the trustee shall be submitted by the owner or operator to the Regional Administrator (or the Director, CMD, if the commercial storage area is ancillary to a disposal facility approved by the Director CMD) before this initial delivery of PCB waste. The first payment shall be at least equal to the current closure cost estimate, divided by the number of years in the pay-in period, except as provided in paragraph (g)(7) of this section for multiple mechanisms. Subsequent payments shall be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be determined by subtracting the current value of the trust fund from the current closure cost estimate, and dividing this difference by the number of years remaining in the pay-in period.

(iii) If an owner or operator of a facility existing on the effective date of this paragraph establishes a trust fund

to meet the financial assurance requirements of this paragraph, and the value of the trust fund is less than the current closure cost estimate when a final approval is granted for the facility, the amount of the current closure cost estimate still to be paid into the trust fund shall be paid in over the pay-in period as defined in paragraph (g)(1)(i) of this section. Payments shall continue to be made no later than 30 days after each anniversary date of the first payment made into the trust fund. The amount of each payment shall be determined by subtracting the current value of the trust fund from the current closure cost estimate, and dividing this difference by the number of years remaining in the pay-in period.

(iv) The submission of a trust agreement with the wording specified in § 264.151(a)(1) of this chapter, including any reference to hazardous waste management facilities, shall be deemed to be in compliance with the requirement to submit a trust agreement under this subpart.

(2) The ''surety bond guaranteeing payment into a closure trust fund,'' as specified in § 264.143(b) of this chapter, including the use of the surety bond instrument specified at § 264.151(b) of this chapter and the standby trust specified at § 264.143(b)(3) of this chapter. The use of the surety bonds, surety bond instruments, and standby trust agreements specified in §§ 264.143(b) and 264.151(b) of this chapter shall be deemed to be in compliance with this subpart.

(3)(i) The ''surety bond guaranteeing performance of closure,'' as specified at § 264.143(c) of this chapter, except for paragraph (c)(5) of § 264.143 of this chapter. The submission and use of the surety bond instrument specified at § 264.151(c) of this chapter and the standby trust specified at § 264.143(c)(3) of this chapter shall be deemed to be in compliance with the requirements under this subpart relating to the use of surety bonds and standby trust funds.

(ii) For the purposes of this paragraph, and under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Liability is established by a final administrative determination pursuant to section 16 of TSCA that the owner or operator has failed to perform final closure in accordance with the closure plan and other approval or regulatory requirements when required to do so.

(4)(i) The ''closure letter of credit'' specified in § 264.143(d) of this chapter, except for paragraph (d)(8). The submission and use of the irrevocable letter of credit instrument specified in § 264.151(d) of this chapter and the standby trust specified in § 264.143(d)(3) of this chapter shall be deemed to be in compliance with the requirements of this subpart relating to the use of letters of credit and standby trust funds.

(ii) For the purposes of this paragraph, the Regional Administrator (or the Director, CMD, if the commercial storage area is ancillary to a disposal facility approved by the Director, CMD) may draw on the letter of credit following a final administrative determination pursuant to section 16 of TSCA that the owner or operator has failed to perform final closure in accordance with the closure plan and other approval or regulatory requirements when required to do so.

(5) ''Closure insurance,'' as specified in § 264.143(e) of this chapter, utilizing the certificate of insurance for closure specified at § 264.151(e) of this chapter. The use of closure insurance as specified in § 264.143(e) of this chapter and the submission and use of the certificate of insurance specified in § 264.151(e) of this chapter shall be deemed to be in compliance with the requirements of this subpart relating to the use of closure insurance.

(6) The ''financial test and corporate guarantee for closure,'' as described in § 264.143(f) of this chapter, including a letter signed by the owner's or operator's chief financial officer as specified at § 264.151(f) of this chapter and, if applicable, the written corporate guarantee specified at § 264.151(h) of this chapter. The use of the financial test and corporate guarantee specified in § 264.143(f) of this chapter, the submission and use of the letter specified in § 264.151(f) of this chapter, and the submission and use of the written corporate guarantee specified at § 264.151(h) of this chapter shall be deemed to be in compliance with the

requirements of this subpart relating to the use of financial tests and corporate guarantees.

(7) The use of multiple financial mechanisms, as specified in § 264.143(g) of this chapter is permitted.

(h) *Release of owner or operator.* Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Regional Administrator or the Director, CMD, if he approved the closure plan, will notify the owner or operator in writing that the owner or operator is no longer required by this section to maintain financial assurance for final closure of the facility, unless the Regional Administrator or the Director, CMD, if he approved the closure plan, has reason to believe that final closure has not been completed in accordance with the approved closure plan. The Regional Administrator or the Director, CMD, if he approved the closure plan, shall provide the owner or operator with a detailed written statement stating the reasons why he believed closure was not conducted in accordance with the approved closure plan.

(i) *Laboratories and samples.* (1) A laboratory is conditionally exempt from the notification and approval requirements for a commercial storer under § 761.65 (d) through (h) when it stores samples held for disposal in a facility that complies with the standards in § 761.65(b)(1)(i) through (b)(1)(iv).

(2) A laboratory sample is exempt from the manifesting requirements in § 761.208 when:

(i) The sample is being transported to a laboratory for the purpose of testing.

(ii) The sample is being transported back to the sample collector after testing.

(iii) The sample is being stored by the sample collector before transport to a laboratory for testing.

(iv) The sample is being stored in a laboratory before testing.

(v) The sample is being stored in a laboratory after testing but before it is returned to the sample collector.

(vi) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

(3) In order to qualify for the exemption in paragraph (i)(2)(i) and (i)(2)(ii) of this section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

(i) Comply with applicable U.S. Department of Transportation (DOT) or U.S. Postal Service (USPS) shipping requirements, found respectively in 49 CFR 173.345 and U.S. Postal Regulations 652.2 and 652.3.

(ii) Assure that the following information accompanies the sample:

(A) The sample collector's name, mailing address, and telephone number.

(B) The laboratory's name, mailing address, and telephone number.

(C) The quantity of the sample.

(D) The date of shipment.

(E) A description of the sample.

(iii) Package the sample so that it does not leak, spill, or vaporize from its packaging.

(4) When the concentration of the PCB sample has been determined, and its use is terminated, the sample must be properly disposed. A laboratory must either manifest the PCB waste to a disposer or commercial storer, as required under § 761.208, retain a copy of each manifest, as required under § 761.209, and follow up on exception reporting, as required under § 761.215 (a) and (b), or return the sample to the sample collector who must then properly dispose of the sample. If the laboratory returns the sample to the sample collector, the laboratory must comply with the shipping requirements set forth in paragraph (i)(3)(i) through (i)(3)(iii) of this section.

(j) *States and the Federal Government.* States and the Federal Government are exempt from the requirements of paragraphs (f) and (g) of this section.

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**§ 761.70 Incineration.**

This section applies to facilities used to incinerate PCBs required to be incinerated by this part.

(a) *Liquid PCBs.* An incinerator used for incinerating PCBs shall be approved by an EPA Regional Administrator or the Director, Chemical Management Division pursuant to paragraph (d) of this section. Requests for approval of incinerators to be used in more than one region must be submitted to the Director, Chemical Management Division, except for research and development involving less than 500 pounds of PCB material (see § 761.60(i)(2)). Requests for approval of incinerators to be used in only one region must be submitted to the appropriate Regional Administrator. The incinerator shall meet all of the requirements specified in paragraphs (a) (1) through (9) of this section, unless a waiver from these requirements is obtained pursuant to paragraph (d)(5) of this section. In addition, the incinerator shall meet any other requirements which may be prescribed pursuant to paragraph (d)(4) of this section.

(1) Combustion criteria shall be either of the following:

(i) Maintenance of the introduced liquids for a 2-second dwell time at 1200°C(±100°C) and 3 percent excess oxygen in the stack gas; or

(ii) Maintenance of the introduced liquids for a 1½ second dwell time at 1600°C(±100°C) and 2 percent excess oxygen in the stack gas.

(2) Combustion efficiency shall be at least 99.9 percent computed as follows:

Combustion efficiency=
$[C_{co_2}/(C_{co_2}+C_{co})]100$

where

$C_{co_2}$=Concentration of carbon dioxide.
$C_{co}$=Concentration of carbon monoxide.

(3) The rate and quantity of PCBs which are fed to the combustion system shall be measured and recorded at regular intervals of no longer than 15 minutes.

(4) The temperatures of the incineration process shall be continuously measured and recorded. The combustion temperature of the incineration process shall be based on either direct (pyrometer) or indirect (wall thermocouple-pyrometer correlation) temperature readings.

(5) The flow of PCBs to the incinerator shall stop automatically whenever the combustion temperature drops below the temperatures specified in paragraph (a)(1) of this section.

(6) Monitoring of stack emission products shall be conducted:

(i) When an incinerator is first used for the disposal of PCBs under the provisions of this regulation;

(ii) When an incinerator is first used for the disposal of PCBs after the incinerator has been modified in a manner which may affect the characteristics of the stack emission products; and

(iii) At a minimum such monitoring shall be conducted for the following parameters:

(*a*) $O_2$; (*b*) CO; (*c*) $CO_2$; (*d*) Oxides of Nitrogen ($NO_x$); (*e*) Hydrochloric Acid (HCl); (*f*) Total Chlorinated Organic Content (RCl); (*g*) PCBs; and (*h*) Total Particulate Matter.

(7) At a minimum monitoring and recording of combustion products and incineration operations shall be conducted for the following parameters whenever the incinerator is incinerating PCBs:

(i) $O_2$; (ii) CO; and (iii) $CO_2$. The monitoring for $O_2$ and CO shall be continuous. The monitoring for $CO_2$ shall be periodic, at a frequency specified by the Regional Administrator or Director, Chemical Management Division.

(8) The flow of PCBs to the incinerator shall stop automatically when any one or more of the following conditions occur, unless a contingency plan is submitted by the incinerator owner or operator and approved by the Regional Administrator or Director, Chemical Management Division. The contingency plan indicates what alternative measures the incinerator owner or operator would take if any of the following conditions occur:

(i) Failure of monitoring operations specified in paragraph (a)(7) of this section;

(ii) Failure of the PCB rate and quantity measuring and recording equipment specified in paragraph (a)(3) of this section; or

(iii) Excess oxygen falls below the percentage specified in paragraph (a)(1) of this section.

(9) Water scrubbers shall be used for HCl control during PCB incineration and shall meet any performance requirements specified by the appropriate EPA Regional Administrator or the Director, Chemical Management Division. Scrubber effluent shall be monitored and shall comply with applicable effluent or pretreatment standards, and any other State and Federal laws and regulations. An alternate method of HCl control may be used if the alternate method has been approved by the Regional Administrator or the Director, Chemical Management Division. (The HCl neutralizing capability of cement kilns is considered to be an alternate method.)

(b) *Nonliquid PCBs.* An incinerator used for incinerating nonliquid PCBs, PCB Articles, PCB Equipment, or PCB Containers shall be approved by the appropriate EPA Regional Administrator or the Director, Chemical Management Division pursuant to paragraph (d) of this section. Requests for approval of incinerators to be used in more than one region must be submitted to the Director, Chemical Management Division, except for research and development involving less than 500 pounds of PCB material (see § 761.60(i)(2)). Requests for approval of incinerators to be used in only one region must be submitted to the appropriate Regional Administrator. The incinerator shall meet all of the requirements specified in paragraphs (b)(1) and (2) of this section unless a waiver from these requirements is obtained pursuant to paragraph (d)(5) of this section. In addition, the incinerator shall meet any other requirements that may be prescribed pursuant to paragraph (d)(4) of this section.

(1) The mass air emissions from the incinerator shall be no greater than 0.001g PCB/kg of the PCB introduced into the incinerator.

(2) The incinerator shall comply with the provisions of paragraphs (a)(2), (3), (4), (6), (7), (8)(i) and (ii), and (9) of this section.

(c) *Maintenance of data and records.* All data and records required by this section shall be maintained in accordance with § 761.180, Records and monitoring.

(d) *Approval of incinerators.* Prior to the incineration of PCBs and PCB Items the owner or operator of an incinerator shall receive the written approval of the Agency Regional Administrator for the region in which the incinerator is located, or the Director, Chemical Management Division. Approval from the Director, Chemical Management Division may be effective in all ten EPA regions. Such approval shall be obtained in the following manner:

(1) *Application.* The owner or operator shall submit to the Regional Administrator or the Director, Chemical Management Division an application which contains:

(i) The location of the incinerator;

(ii) A detailed description of the incinerator including general site plans and design drawings of the incinerator;

(iii) Engineering reports or other information on the anticipated performance of the incinerator;

(iv) Sampling and monitoring equipment and facilities available;

(v) Waste volumes expected to be incinerated;

(vi) Any local, State, or Federal permits or approvals; and

(vii) Schedules and plans for complying with the approval requirements of this regulation.

(2) *Trial burn.* (i) Following receipt of the application described in paragraph (d)(1) of this section, the Regional Administrator or the Director, Chemical Management Division shall determine if a trial burn is required and notify the person who submitted the report whether a trial burn of PCBs and PCB Items must be conducted. The Regional Administrator or the Director, Chemical Management Division may require the submission of any other information that the Regional Administrator or the Director, Chemical Management Division finds to be reasonably necessary to determine the need for a trial burn. Such other information shall be restricted to the types of information required in paragraphs (d)(1)(i) through (vii) of this section.

(ii) If the Regional Administrator or the Director, Chemical Management Division determines that a trial burn must be held, the person who submitted the report described in paragraph

(d)(1) of this section shall submit to the Regional Administrator or the Director, Chemical Management Division a detailed plan for conducting and monitoring the trial burn. At a minimum, the plan must include:

(A) Date trial burn is to be conducted;

(B) Quantity and type of PCBs and PCB Items to be incinerated;

(C) Parameters to be monitored and location of sampling points;

(D) Sampling frequency and methods and schedules for sample analyses; and

(E) Name, address, and qualifications of persons who will review analytical results and other pertinent data, and who will perform a technical evaluation of the effectiveness of the trial burn.

(iii) Following receipt of the plan described in paragraph (d)(2)(ii) of this section, the Regional Administrator or the Director, Chemical Management Division will approve the plan, require additions or modifications to the plan, or disapprove the plan. If the plan is disapproved, the Regional Administrator or the Director, Chemical Management Division will notify the person who submitted the plan of such disapproval, together with the reasons why it is disapproved. That person may thereafter submit a new plan in accordance with paragraph (d)(2)(ii) of this section. If the plan is approved (with any additions or modifications which the Regional Administrator or the Director, Chemical Management Division may prescribe), the Regional Administrator or the Director, Chemical Management Division will notify the person who submitted the plan of the approval. Thereafter, the trial burn shall take place at a date and time to be agreed upon between the Regional Administrator or the Director, Chemical Management Division and the person who submitted the plan.

(3) *Other information.* In addition to the information contained in the report and plan described in paragraphs (d)(1) and (2) of this section, the Regional Administrator or the Assistant Administrator for Prevention, Pesticides and Toxic Substances may require the owner or operator to submit any other information that the Regional Administrator or the Assistant Administrator for Prevention, Pesticides and Toxic Substances finds to be reasonably necessary to determine whether an incinerator shall be approved.

NOTE: The Regional Administrator will have available for review and inspection an Agency manual containing information on sampling methods and analytical procedures for the parameters required in § 761.70(a) (3), (4), (6), and (7) plus any other parameters he/she may determine to be appropriate. Owners or operators are encouraged to review this manual prior to submitting any report required in § 761.70.

(4) *Contents of approval.* (i) Except as provided in paragraph (d)(5) of this section, the Regional Administrator or the Director, Chemical Management Division may not approve an incinerator for the disposal of PCBs and PCB Items unless he finds that the incinerator meets all of the requirements of paragraphs (a) and/or (b) of this section.

(ii) In addition to the requirements of paragraphs (a) and/or (b) of this section, the Regional Administrator or the Director, Chemical Management Division may include in an approval any other requirements that the Regional Administrator or the Director, Chemical Management Division finds are necessary to ensure that operation of the incinerator does not present an unreasonable risk of injury to health or the environment from PCBs. Such requirements may include a fixed period of time for which the approval is valid.

(5) *Waivers.* An owner or operator of the incinerator may submit evidence to the Regional Administrator or the Director, Chemical Management Division that operation of the incinerator will not present an unreasonable risk of injury to health or the enviroment from PCBs, when one or more of the requirements of paragraphs (a) and/or (b) of this section are not met. On the basis of such evidence and any other available information, the Regional Administrator or the Director, Chemical Management Division may in his/her discretion find that any requirement of paragraphs (a) and (b) of this section is not necessary to protect against such a risk, and may waive the requirements in any approval for that incinerator.

Any finding and waiver under this paragraph must be stated in writing and included as part of the approval.

(6) *Persons approved.* An approval will designate the persons who own and who are authorized to operate the incinerator, and will apply only to such persons, except as provided in paragraph (d)(8) of this section.

(7) *Final approval.* Approval of an incinerator will be in writing and signed by the Regional Administrator or the Director, Chemical Management Division. The approval will state all requirements applicable to the approved incinerator.

(8) *Transfer of property.* Any person who owns or operates an approved incinerator must notify EPA at least 30 days before transferring ownership in the incinerator or the property it stands upon, or transferring the right to operate the incinerator. The transferor must also submit to EPA, at least 30 days before such transfer, a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's EPA incinerator approval. Within 30 days of receiving such notification and affidavit, EPA will issue an amended approval substituting the transferee's name for the transferor's name, or EPA may require the transferee to apply for a new incinerator approval. In the latter case, the transferee must abide by the transferor's EPA approval until EPA issues the new approval to the transferee.

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605)

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982, and amended at 48 FR 13185, Mar. 30, 1983; 49 FR 28191, July 10, 1984; 53 FR 12524, Apr. 15, 1988; 58 FR 15809, Mar. 24, 1993]

### § 761.75 Chemical waste landfills.

This section applies to facilities used to dispose of PCBs in accordance with the part.

(a) *General.* A chemical waste landfill used for the disposal of PCBs and PCB Items shall be approved by the Agency Regional Administrator pursuant to paragraph (c) of this section. The landfill shall meet all of the requirements specified in paragraph (b) of this section, unless a waiver from these requirements is obtained pursuant to paragraph (c)(4) of this section. In addition, the landfill shall meet any other requirements that may be prescribed pursuant to paragraph (c)(3) of this section.

(b) *Technical requirements.* Requirements for chemical waste landfills used for the disposal of PCBs and PCB Items are as follows:

(1) *Soils.* The landfill site shall be located in thick, relatively impermeable formations such as large-area clay pans. Where this is not possible, the soil shall have a high clay and silt content with the following parameters:

(i) In-place soil thickness, 4 feet or compacted soil liner thickness, 3 feet;

(ii) Permeability (cm/sec), equal to or less than $1\times10^{-7}$;

(iii) Percent soil passing No. 200 Sieve, >30;

(iv) Liquid Limit, >30; and

(v) Plasticity Index >15.

(2) *Synthetic membrane liners.* Synthetic membrane liners shall be used when, in the judgment of the Regional Administrator, the hydrologic or geologic conditions at the landfill require such a liner in order to provide at least a permeability equivalent to the soils in paragraph (b)(1) of this section. Whenever a synthetic liner is used at a landfill site, special precautions shall be taken to insure that its integrity is maintained and that it is chemically compatible with PCBs. Adequate soil underlining and soil cover shall be provided to prevent excessive stress on the liner and to prevent rupture of the liner. The liner must have a minimum thickness of 30 mils.

(3) *Hydrologic conditions.* The bottom of the landfill shall be above the historical high groundwater table as provided below. Floodplains, shorelands, and groundwater recharge areas shall be avoided. There shall be no hydraulic connection between the site and standing or flowing surface water. The site shall have monitoring wells and leachate collection. The bottom of the landfill liner system or natural in-place soil barrier shall be at least fifty feet from the historical high water table.

(4) *Flood protection.* (i) If the landfill site is below the 100-year floodwater elevation, the operator shall provide surface water diversion dikes around

the perimeter of the landfill site with a minimum height equal to two feet above the 100-year floodwater elevation.

(ii) If the landfill site is above the 100-year floodwater elevation, the operators shall provide diversion structures capable of diverting all of the surface water runoff from a 24-hour, 25-year storm.

(5) *Topography*. The landfill site shall be located in an area of low to moderate relief to minimize erosion and to help prevent landslides or slumping.

(6) *Monitoring systems*—(i) *Water sampling.* (A) For all sites receiving PCBs, the ground and surface water from the disposal site area shall be sampled prior to commencing operations under an approval provided in paragraph (c) of this section for use as baseline data.

(B) Any surface watercourse designated by the Regional Administrator using the authority provided in paragraph (c)(3)(ii) of this section shall be sampled at least monthly when the landfill is being used for disposal operations.

(C) Any surface watercourse designated by the Regional Administrator using the authority provided in paragraph (c)(3)(ii) of this section shall be sampled for a time period specified by the Regional Administrator on a frequency of no less than once every six months after final closure of the disposal area.

(ii) *Groundwater monitor wells.* (A) If underlying earth materials are homogenous, impermeable, and uniformly sloping in one direction, only three sampling points shall be necessary. These three points shall be equally spaced on a line through the center of the disposal area and extending from the area of highest water table elevation to the area of the lowest water table elevation on the property.

(B) All monitor wells shall be cased and the annular space between the monitor zone (zone of saturation) and the surface shall be completely backfilled with Portland cement or an equivalent material and plugged with Portland cement to effectively prevent percolation of surface water into the well bore. The well opening at the surface shall have a removable cap to provide access and to prevent entrance of rainfall or stormwater runoff. The well shall be pumped to remove the volume of liquid initially contained in the well before obtaining a sample for analysis. The discharge shall be treated to meet applicable State or Federal discharge standards or recycled to the chemical waste landfill.

(iii) *Water analysis.* As a minimum, all samples shall be analyzed for the following parameters, and all data and records of the sampling and analysis shall be maintained as required in § 761.180(d)(1). Sampling methods and analytical procedures for these parameters shall comply with those specified in 40 CFR part 136 as amended in 41 FR 52779 on December 1, 1976.

(A) PCBs.

(B) pH.

(C) Specific conductance.

(D) Chlorinated organics.

(7) *Leachate collection*. A leachate collection monitoring system shall be installed above the chemical waste landfill. Leachate collection systems shall be monitored monthly for quantity and physicochemical characteristics of leachate produced. The leachate should be either treated to acceptable limits for discharge in accordance with a State or Federal permit or disposed of by another State or Federally approved method. Water analysis shall be conducted as provided in paragraph (b)(6)(iii) of this section. Acceptable leachate monitoring/collection systems shall be any of the following designs, unless a waiver is obtained pursuant to paragraph (c)(4) of this section.

(i) *Simple leachate collection*. This system consists of a gravity flow drainfield installed above the waste disposal facility liner. This design is recommended for use when semi-solid or leachable solid wastes are placed in a lined pit excavated into a relatively thick, unsaturated, homogenous layer of low permeability soil.

(ii) *Compound leachate collection*. This system consists of a gravity flow drainfield installed above the waste disposal facility liner and above a secondary installed liner. This design is recommended for use when semi-liquid or leachable solid wastes are placed in a lined pit excavated into relatively permeable soil.

(iii) *Suction lysimeters.* This system consists of a network of porous ceramic cups connected by hoses/tubing to a vacuum pump. The porous ceramic cups or suction lysimeters are installed along the sides and under the bottom of the waste disposal facility liner. This type of system works best when installed in a relatively permeable unsaturated soil immediately adjacent to the bottom and/or sides of the disposal facility.

(8) *Chemical waste landfill operations.* (i) PCBs and PCB Items shall be placed in a landfill in a manner that will prevent damage to containers or articles. Other wastes placed in the landfill that are not chemically compatible with PCBs and PCB Items including organic solvents shall be segregated from the PCBs throughout the waste handling and disposal process.

(ii) An operation plan shall be developed and submitted to the Regional Administrator for approval as required in paragraph (c) of this section. This plan shall include detailed explanations of the procedures to be used for recordkeeping, surface water handling procedures, excavation and backfilling, waste segregation burial coordinates, vehicle and equipment movement, use of roadways, leachate collection systems, sampling and monitoring procedures, monitoring wells, environmental emergency contingency plans, and security measures to protect against vandalism and unauthorized waste placements. EPA guidelines entitled ''Thermal Processing and Land Disposal of Solid Waste'' (39 FR 29337, Aug. 14, 1974) are a useful reference in preparation of this plan. If the facility is to be used to dispose of liquid wastes containing between 50 ppm and 500 ppm PCB, the operations plan must include procedures to determine that liquid PCBs to be disposed of at the landfill do not exceed 500 ppm PCB and measures to prevent the migration of PCBs from the landfill. Bulk liquids not exceeding 500 ppm PCBs may be disposed of provided such waste is pretreated and/or stabilized (e.g., chemically fixed, evaporated, mixed with dry inert absorbant) to reduce its liquid content or increase its solid content so that a non-flowing consistency is achieved to eliminate the presence of free liquids prior to final disposal in a landfill. PCB Container of liquid PCBs with a concentration between 50 and 500 ppm PCB may be disposed of if each container is surrounded by an amount of inert sorbant material capable of absorbing all of the liquid contents of the container.

(iii) Ignitable wastes shall not be disposed of in chemical waste landfills. Liquid ignitable wastes are wastes that have a flash point less than 60 degrees C (140 degrees F) as determined by the following method or an equivalent method: Flash point of liquids shall be determined by a Pensky-Martens Closed Cup Tester, using the protocol specified in ASTM D 93–90, or the Setaflash Closed Tester using the protocol specified in ASTM Standard D–3278–89.

(iv) Records shall be maintained for all PCB disposal operations and shall include information on the PCB concentration in liquid wastes and the three dimensional burial coordinates for PCBs and PCB Items. Additional records shall be developed and maintained as required in § 761.180.

(9) *Supporting facilities.* (i) A six foot woven mesh fence, wall, or similar device shall be placed around the site to prevent unauthorized persons and animals from entering.

(ii) Roads shall be maintained to and within the site which are adequate to support the operation and maintenance of the site without causing safety or nuisance problems or hazardous conditions.

(iii) The site shall be operated and maintained in a manner to prevent safety problems or hazardous conditions resulting from spilled liquids and windblown materials.

(c) *Approval of chemical waste landfills.* Prior to the disposal of any PCBs and PCB Items in a chemical waste landfill, the owner or operator of the landfill shall receive written approval of the Agency Regional Administrator for the Region in which the landfill is located. The approval shall be obtained in the following manner:

(1) *Initial report.* The owner or operator shall submit to the Regional Administrator an initial report which contains:

(i) The location of the landfill;

(ii) A detailed description of the landfill including general site plans and design drawings;

(iii) An engineering report describing the manner is which the landfill complies with the requirements for chemical waste landfills specified in paragraph (b) of this section;

(iv) Sampling and monitoring equipment and facilities available;

(v) Expected waste volumes of PCBs;

(vi) General description of waste materials other than PCBs that are expected to be disposed of in the landfill;

(vii) Landfill operations plan as required in paragraph (b) of this section;

(viii) Any local, State, or Federal permits or approvals; and

(ix) Any schedules or plans for complying with the approval requirements of these regulations.

(2) *Other information.* In addition to the information contained in the report described in paragraph (c)(1) of this section, the Regional Administrator may require the owner or operator to submit any other information that the Regional Administrator finds to be reasonably necessary to determine whether a chemical waste landfill should be approved. Such other information shall be restricted to the types of information required in paragraphs (c)(1) (i) through (ix) of this section.

(3) *Contents of approval.* (i) Except as provided in paragraph (c)(4) of this section the Regional Administrator may not approve a chemical waste landfill for the disposal of PCBs and PCB Items, unless he finds that the landfill meets all of the requirements of paragraph (b) of this section.

(ii) In addition to the requirements of paragraph (b) of this section, the Regional Administrator may include in an approval any other requirements or provisions that the Regional Administrator finds are necessary to ensure that operation of the chemical waste landfill does not present an unreasonable risk of injury to health or the environment from PCBs. Such provisions may include a fixed period of time for which the approval is valid.

The approval may also include a stipulation that the operator of the chemical waste landfill report to the Regional Administrator any instance when PCBs are detectable during monitoring activities conducted pursuant to paragraph (b)(6) of this section.

(4) *Waivers.* An owner or operator of a chemical waste landfill may submit evidence to the Regional Administrator that operation of the landfill will not present an unreasonable risk of injury to health or the environment from PCBs when one or more of the requirements of paragraph (b) of this section are not met. On the basis of such evidence and any other available information, the Regional Administrator may in his discretion find that one or more of the requirements of paragraph (b) of this section is not necessary to protect against such a risk and may waive the requirements in any approval for that landfill. Any finding and waiver under this paragraph will be stated in writing and included as part of the approval.

(5) *Persons approved.* Any approval will designate the persons who own and who are authorized to operate the chemical waste landfill, and will apply only to such persons, except as provided by paragraph (c)(7) of this section.

(6) *Final approval.* Approval of a chemical waste landfill will be in writing and will be signed by the Regional Administrator. The approval will state all requirements applicable to the approved landfill.

(7) *Transfer of property.* Any person who owns or operates an approved chemical waste landfill must notify EPA at least 30 days before transferring ownership in the property or transferring the right to conduct the chemical waste landfill operation. The transferor must also submit to EPA, at least 30 days before such transfer, a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's EPA chemical waste landfill approval. Within 30 days of receiving such notification and affidavit, EPA will issue an amended approval substituting the transferee's name for the transferor's name, or EPA may require the transferee to apply for a new chemical waste landfill approval. In the latter case, the

transferee must abide by the transferor's EPA approval until EPA issues the new approval to the transferee.

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605)

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982, and amended at 48 FR 5730, Feb. 8, 1983; 49 FR 28191, July 10, 1984; 53 FR 12524, Apr. 15, 1988; 53 FR 21641, June 9, 1988; 57 FR 13323, Apr. 16, 1992]

### § 761.79 Decontamination.

(a) Any PCB Container to be decontaminated shall be decontaminated by flushing the internal surfaces of the container three times with a solvent containing less than 50 ppm PCB. The solubility of PCBs in the solvent must be five percent or more by weight. Each rinse shall use a volume of the normal diluent equal to approximately ten (10) percent of the PCB Container capacity. The solvent may be reused for decontamination until it contains 50 ppm PCB. The solvent shall then be disposed of as a PCB in accordance with § 761.60(a). Non-liquid PCBs resulting from the decontamination procedures shall be disposed of in accordance with the provisions of § 761.60(a)(4).

(b) Movable equipment used in storage areas shall be decontaminated by swabbing surfaces that have contacted PCBs with a solvent meeting the criteria of paragraph (a) of this section.

NOTE: Precautionary measures should be taken to ensure that the solvent meets safety and health standards as required by applicable Federal regulations.

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982]

## Subpart E—Exemptions

### § 761.80 Manufacturing, processing and distribution in commerce exemptions.

(a) The Administrator grants the following petitioner(s) an exemption for 1 year to process and distribute in commerce PCBs for use as a mounting medium in microscopy:

(1) McCrone Accessories Components, Division of Walter C. McCrone Associates, Inc., 2820 South Michigan Avenue, Chicago, IL. 60616.

(2) [Reserved]

(b) The Administrator grants the following petitioner(s) an exemption for 1 year to process and distribute in commerce PCBs for use as a mounting medium in microscopy, an immersion oil in low fluorescence microscopy and an optical liquid:

(1) R.P. Cargille Laboratories, Inc., 55 Commerce Road, Cedar Grove, N.J. 07009.

(2) [Reserved]

(c) The Administrator grants the following petitioner(s) an exemption for 1 year to export PCBs for use in small quantities for research and development:

(1) Accu-Standard, New Haven, CT. 06503.

(2) ManTech, Research Triangle Park, NC 27709.

(d) The Administrator grants the following petitioner(s) an exemption for 1 year to import (manufacture) into the United States, small quantities of existing PCB fluids from electrical equipment for analysis:

(1) Unison Transformer Services, Inc., Tarrytown, N.Y. 10591, provided each of the following conditions are met:

(i) The samples must be shipped in 5.0 ml or less, hermetically sealed vials.

(ii) The exemption is limited to no more than 250 total samples per year.

(iii) Unison makes quarterly inspections of its laboratories to ensure that proper safety procedures are being followed.

(iv) Unison annually notifies and describes to EPA its attempts to have samples analyzed abroad.

(2) [Reserved]

(e) [Reserved]

(f) The Administrator grants the following petitioner(s) an exemption for 1 year to manufacture PCBs for use in small quantities for research and development:

(1) California Bionuclear Corp., Sun Valley, CA 91352 (ME–13).

(2) Foxboro Co., North Haven, CT 06473 (ME–6).

(3) ULTRA-Scientific, Inc.,Hope, RI 02831 (ME–99.1).

(4) Midwest Research Institute, Kansas City, MO 64110 (ME–70.1).

(5) Pathfinder Laboratories, St. Louis, MO 63146 (A division of Sigma

Aldridge Corporation, St. Louis, MO, 63178 (ME–76).

(6) Radian Corp., Austin, TX 78766 (ME–81.2).

(7) Wellington Sciences USA, College Station, TX 77840 (ME–104.1).

(8) Accu-Standard, 25 Science Park, New Haven, CT. 06503.

(g) The Administrator grants a class exemption to all processors and distributors of PCBs in small quantities for research and development provided that the following conditions are met:

(1) All processors and distributors must maintain records of their PCB activities for a period of 5 years.

(2) Any person or company which expects to process or distribute in commerce 100 grams (.22 lb) or more PCBs in 1 year must report to EPA identifying the sites of PCB activities and the quantity of PCBs to be processed or distributed in commerce.

(h) The Administrator grants the following petitioners an exemption for 1 year to process and distribute in commerce PCBs for analytical reference samples derived from actual waste materials:

(1) R.T. Corporation, Laramie, WY 82070.

(2) [Reserved]

(i)–(l) [Reserved]

(m) The Administrator grants the following petitioner(s) an exemption for 1 year to process and export small quantities of PCBs for research and development:

(1) Chem Service, Inc., West Chester, PA 19380 (PDE–41).

(2) Foxboro Co., North Haven, CT 06473 (ME–6).

(3) PolyScience Corp., Niles, IL 60648 (PDE–178).

(4) ULTRA-Scientific, Inc., Hope, RI 02831 (PDE–282.1).

(5) Supelco, Inc., Bellefonte, PA 16823–0048 (PDE–41.2).

(6) Radian Corp., Austin, TX 78766 (PDE–182.1).

(7) Restek Corporation, Bellefonte, PA

(n) The 1–year exemption granted to petitioners in paragraphs (a) through (c)(1), (d), (f), and (m)(1) through (m)(6) of this section shall be renewed automatically as long as there is no increase in the amount of PCBs to be processed and distributed, imported (manufactured), or exported, nor any change in the manner of processing and distributing, importing (manufacturing), or exporting of PCBs. If there is such a change, a new exemption petition must be submitted to EPA and it will be addressed through an exemption rulemaking. In such a case, the activities granted under the existing exemption may continue until the new petition is addressed by rulemaking, but must conform to the terms of the existing exemption approved by EPA. The 1–year exemption granted to petitioners in paragraphs (c)(2), (h) and (m)(7) of this section may be extended pursuant to 40 CFR 750.11(e) or 750.31(e).

(o) The 1–year class exemption granted to all processors and distributors of PCBs in small quantities for research and development in paragraph (g) of this section shall be renewed automatically unless information is submitted affecting EPA's conclusion that the class exemption, or the activities of any individual or company included in the exemption, will not pose an unreasonable risk of injury to health or the environment. EPA will evaluate the information, issue a proposed rule for public comment, and issue a final rule affecting the class exemption or individuals or companies included in the class exemption. Until EPA issues a final rule, individuals and companies included in the class exemption will be allowed to continue processing and distributing PCBs in small quantities for research and development.

[55 FR 38999, Sept. 24, 1990, as amended at 59 FR 16998, Apr. 11, 1994]

## Subpart F—Transboundary Shipments of PCBs for Disposal

SOURCE: 61 FR 11107, Mar. 18, 1996, unless otherwise noted.

### § 761.91 Applicability.

This subpart establishes requirements under section 6 of TSCA applicable to the transboundary shipments of PCBs and PCB Items into and out of the United States for disposal. Nothing in this subpart is intended to obviate or otherwise alter obligations applicable to imported or exported PCBs and

PCB Items under foreign laws, international agreements or arrangements, other United States statutes and regulations, other sections of TSCA (e.g., sections 13 and 14), or laws of the various States of the United States. No provision of this section shall be construed to affect or limit the applicability of any requirement applicable to transporters of PCB waste under regulations issued by the U.S. Department of Transportation (DOT) and set forth at 49 CFR parts 171-180.

**§ 761.93 Import for disposal.**

(a) *General provisions.* (1) No person may import PCBs or PCB Items for disposal without an exemption, except that:

(i) PCBs and PCB Items at concentrations less than 50 ppm may be imported for disposal.

(ii) PCBs and PCB Items at concentrations of 50 ppm or greater may be imported from United States territories or possessions outside the customs territory of the United States into the customs territory of the United States for disposal.

(iii) PCBs and PCB Items at concentrations of 50 ppm or greater, other than those described in paragraph (a)(1)(ii), may be imported for disposal pursuant to paragraph (b) of this section.

(iv) PCBs and PCB Items at concentrations of 50 ppm or greater may be imported for analysis and disposal pursuant to paragraph (c) of this section.

(v) PCBs and PCB Items at concentrations of 50 ppm or greater may be imported for evaluation of disposal technologies for PCB waste pursuant to paragraph (d) of this section.

(2) For purposes of paragraph (a)(1) of this section, PCBs and PCB Items of unknown concentrations shall be treated as if they contain 50 ppm or greater.

(3) All imports of PCBs and PCB Items at any concentration under paragraph (a)(1) of this section must be in compliance with all international agreements or arrangements that the United States has entered into applicable to PCB waste imports. The United States retains the authority to disallow any PCB waste import not in compliance with these agreements or arrangements, or other international obligations of the United States.

(b) *PCBs and PCB Items.* PCBs and PCB Items at concentrations of 50 ppm or greater may be imported for disposal under paragraph (a)(1)(iii) of this section only by a person who is an approved commercial storer or disposer under subpart D of this part, and only if a PCB waste import notice is submitted to EPA pursuant to this paragraph.

(1) *PCB waste import notice.* (i) PCB waste import notices under this paragraph must be submitted to EPA in writing. The complete PCB waste import notice must be received by EPA at the mailing address or delivery address set forth in this paragraph at least 45 days prior to the date on which the initial shipment enters the United States. Each notice shall be clearly marked ''PCB Waste Import Notice'' and shall be sent by certified mail to: Attn: PCB Waste Import Notice, Office of Enforcement and Compliance Assurance, Office of Compliance (2222A), U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Alternately, notices may be delivered by courier to the same office at the Ariel Rios Building, room 5124, 1200 Pennsylvania Ave., NW., Washington, DC 20004.

(ii) Each PCB waste import notice may cover an individual shipment or a series of shipments extending over a period up to 12 months beginning with the date on which the initial shipment enters the United States. A new notice must be received by EPA every 12 months if import for disposal will continue. A new notice must also be received by EPA at any time that import will deviate from the terms described in the prior notice, at least 45 days before the activity constituting the deviation begins. Such notices should indicate that the notice is a revision, and indicate what information has changed.

(iii) Each PCB waste import notice shall contain the following information:

(A) Company name, name of a contact person, address, telephone number, facsimile (FAX) number, and EPA identification number of the importer of PCB waste.

(B) Company name, name of contact person, address (including country), telephone number, and facsimile (FAX) number of the foreign generator, countries of transit (if any), port of entry in the United States, and method of transportation.

(C) Types of PCBs and PCB Items to be imported (e.g., transformers, capacitors, oil, soil), PCB concentrations of each type of PCB or PCB Items, number and frequency of shipments, maximum shipment size, and maximum total quantity to be imported during the designated import period.

(D) Projected dates of shipments, and period of time intended for import activities addressed by the notice (not to exceed 12 months).

(E) Name, contact name, address, telephone number, facsimile (FAX) number, and EPA Identification Number of each TSCA-approved commercial storage and disposal facility where the PCB waste will be stored and disposed of.

(F) Written certification from each TSCA-approved commercial storage or disposal facility identified in paragraph (b)(1)(iii)(E) of this section, including the importer, indicating that each facility has agreed to accept the shipments of PCBs or PCB Items; has approval to store or dispose of PCB waste under subpart D of this part; has sufficient storage capacity available for imported PCB waste; and until March 18, 1999, will not exceed the 70% capacity limit imposed on imported PCB waste under paragraph (b)(2)(i) of this paragraph.

(G) Written certification from the importer, stating: ''I certify that I am a TSCA-approved commercial storer (disposer) of PCB waste, and that I accept complete financial liability for the transportation, storage, and disposal of all PCBs and PCB Items imported into the United States under this notice.''

(H) Written certification pursuant to § 761.185(e), signed by the importer identified in paragraph (b)(1)(iii)(A) of this section, indicating that the information in the notice is complete and accurate.

(iv) Some of the information required to be submitted in a PCB waste import notice may also be required to be submitted to EPA pursuant to certain international agreements. With the exception of information required by paragraphs (b)(1)(iii)(F), (G), and (H) of this section, importers may elect to include information in the PCB waste import notice using the same form submitted under the international agreement provided the form contains the information required by paragraphs (b)(1)(iii)(A)-(E) of this section. Under all circumstances, the specific certifications required by paragraphs (b)(1)(iii)(F), (G), and (H) of this section must be included in each PCB waste import notice.

(v) Notwithstanding the submission of a PCB waste import notice pursuant to this subpart, EPA reserves the right to refuse entry into the United States of individual shipments of PCBs or PCB Items that do not comply with applicable Federal laws and regulations. EPA also reserves the right to bring an enforcement action against an importer whose past import of PCBs or PCB Items does not comply with applicable Federal laws or regulations.

(vi) Submission of a PCB waste import notice under paragraph (b)(1)(i) of this section does not replace or satisfy other import notice or consent requirements of applicable international agreements or arrangements, of the Resource Conservation and Recovery Act (RCRA), of other Federal statutes, or of TSCA section 13 (see 40 CFR 707.20).

(vii) Confidential business information. (A) EPA believes that the information requested in PCB waste import notices generally will not be entitled to be treated as confidential business information (CBI) pursuant to section 14 of TSCA. However, a person submitting a PCB waste import notice may claim as CBI information the person believes to be entitled to confidential treatment under TSCA section 14 and part 2 of this chapter. If no claim is made at the time the notice is submitted, the information in the notice shall be available to the public without further notice to the submitter. If CBI claims are made, such claims shall be made by marking the specific information in the notice that is claimed CBI. In addition each claim should be accompanied, at the time the claim is

made, by a written justification substantiating each item of the claim pursuant to 40 CFR 2.204(e). In accordance with the procedures set forth in TSCA and part 2 of this chapter, EPA will routinely request such substantiation from the importer if it does not accompany the claim of confidentiality.

(B) Any claim of confidentiality shall accompany the PCB waste import notice at the time it is submitted to EPA. The importer shall submit two copies of each PCB waste import notice if a claim of confidentiality is made.

(*1*) One copy of the notice shall contain all information required in paragraph (b)(1)(iii) of this section. In this copy of the notice, the submitter must clearly highlight or mark the specific items claimed as confidential on each page, and identify each item with the label ''TSCA Confidential Business Information.'' This notice shall be double wrapped, and the inside envelope marked ''PCB Waste Import Notice—CBI Claimed.'' The outside envelope shall be addressed to: TSCA Document Processing Center (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Substantiation of CBI claims should be sealed inside the inner envelope and submitted with this copy.

(*2*) The other copy shall contain all information required in paragraph (b)(1)(iii) of this section, except that all information claimed as confidential in the first copy must be deleted. This copy must be sent to the address indicated in (b)(1)(i) of this section.

(*3*) If the importer claims any information in the PCB waste import notice as CBI, the PCB waste import notice is not considered complete for purposes of this paragraph until both copies and the written substantiation are received by EPA.

(2) *Storage and disposal.* Imports of PCBs and PCB Items under paragraph (a)(1)(iii) of this section are subject to the following conditions, in addition to all other applicable provisions of this part.

(i) No facility that stores or disposes of imported PCB waste shall store at any time a combined quantity of imported PCB waste from all sources in excess of 70% of the facility's approved maximum PCB storage capacity, pursuant to §761.65(d)(4)(iii). This limit on the acceptance of imported PCB waste shall expire on March 18, 1999.

(ii) All PCBs and PCB Items imported for disposal under paragraph (a)(1)(iii) of this section are PCB wastes subject to 40 CFR part 761, subpart D and:

(A) Shall be stored and disposed of in facilities which have approval under subpart D of this part to store or dispose of the type of PCB waste being imported.

(B) Shall be marked in accordance with subpart C of this part, and packaged and stored in accordance with subpart D of this part.

(C) For purposes of compliance with the 1 year storage for disposal limit under §761.65(a), the date of removal from service for disposal for imported PCB waste shall be whichever of the following dates occurs first:

(*1*) The date the PCB waste enters the contiguous 48 States.

(*2*) The date the PCB waste enters any State, if the PCB waste will be disposed of in that State.

(*3*) The date the PCB waste enters a State outside the contiguous 48 States, if the PCB waste is stored in that State for a period of more than 10 consecutive days.

(3) *Recordkeeping and manifesting.* (i) Importers, storers, and disposers of imported PCBs and PCB Items under paragraph (a)(1)(iii) of this section shall meet the requirements of subpart J of this part, with the following modifications:

(A) An importer who is not the initial commercial storer or disposer of the imported PCB waste is considered to be the generator for purposes of maintaining annual records under §761.180(a); the annual document log maintained under §761.180(a)(2) must clearly distinguish between imported and domestically generated waste.

(B) Disposers and commercial storers of PCB waste must clearly distinguish between imported and domestically generated waste in the annual document log maintained under §761.180(b)(2), and in the annual report submitted to EPA under §761.180(b)(3).

(ii) Importers, storers, and disposers of PCBs and PCB Items under paragraph (a)(1)(iii) of this section shall

meet the requirements of subpart K of this part, with the following modifications:

(A) Imported PCB waste shall be manifested, even in cases where the importer does not relinquish control of the shipment.

(B) Imported PCB waste shall be manifested separately from domestic PCB waste.

(C) In place of the generator's name, address and EPA identification number on the manifest, the name and address of the foreign generator and the importer's name, address and EPA identification number shall be used.

(D) In place of the generator's signature on the manifest certification statement, the importer shall sign and date the certification and obtain the signature of the initial transporter.

(E) The importer shall comply with all other requirements of subpart K of this part which apply to the generator.

(F) The date of removal from service for disposal shall be determined according to paragraph (b)(2)(ii)(C) of this section.

(c) *PCB analytical samples.* PCBs and PCB Items at concentrations of 50 ppm or greater may be imported into the United States by a laboratory, commercial storer or disposer of PCB waste under paragraph (a)(1)(iv) of this section, without prior notification, for purposes of chemical analysis to determine the physical and chemical properties of the PCBs and PCB Items, provided:

(1) Quantities of PCBs and PCB Items imported by an individual facility shall not exceed 200 kilograms annually for non-liquids, and 25 liters annually for liquids; individual samples cannot exceed 5 kilograms for non-liquids or 25 milliliters for liquids.

(2) Unused and residual PCB waste remaining after analytical use is completed shall be marked, stored, manifested, and disposed of in accordance with subparts C, D, and K of this part.

(3) PCB waste is handled by laboratories in compliance with § 761.65(i).

(4) A TSCA PCB commercial storage approval is required for each laboratory, unless a total volume of no more than 500 gallons (1.89 cubic meters) of PCB waste is in storage at any one time.

(d) *Treatability studies.* PCBs and PCB Items at concentrations of 50 ppm or greater may be imported into the United States under paragraph (a)(1)(v) of this section, without prior notification, for purposes of evaluating the effectiveness of a disposal technology, provided:

(1) The importer receiving the PCB waste is an approved disposer of PCB waste under 40 CFR part 761, subpart D.

(2) The quantity of PCB waste imported annually to a disposal facility does not exceed a total volume of 500 gallons.

(3) The imported PCB waste does not exceed a concentration of 10,000 ppm PCBs, and no more than 1 kilogram total of pure PCBs is imported annually.

(4) PCB waste imported under this paragraph must be marked, stored, and manifested in accordance with subparts C and K of this part, and must comply with paragraphs (b)(2)(ii) and (b)(3) of this section.

(5) PCB waste imported under this paragraph, including residues from any treatability study, must be disposed of in accordance with the terms and conditions of the TSCA disposal approval for the facility performing the treatability study.

### § 761.97 Export for disposal.

(a) General provisions. No person may export PCBs or PCB Items for disposal without an exemption, except that:

(1) PCBs and PCB Items at concentrations less than 50 ppm may be exported for disposal.

(2) [Reserved]

(b) [Reserved]

## Subpart G—PCB Spill Cleanup Policy

SOURCE: 52 FR 10705, Apr. 2, 1987, unless otherwise noted.

### § 761.120 Scope.

(a) *General.* This policy establishes criteria EPA will use to determine the adequacy of the cleanup of spills resulting from the release of materials containing PCBs at concentrations of 50 ppm or greater. The policy applies to spills which occur after May 4, 1987.

(1) Existing spills (spills which occurred prior to May 4, 1987, are excluded from the scope of this policy for two reasons:

(i) For old spills which have already been discovered, this policy is not intended to require additional cleanup where a party has already cleaned a spill in accordance with requirements imposed by EPA through its regional offices, nor is this policy intended to interfere with ongoing litigation of enforcement actions which bring into issue PCB spills cleanup.

(ii) EPA recognizes that old spills which are discovered after the effective date of this policy will require site-by-site evaluation because of the likelihood that the site involves more pervasive PCB contamination than fresh spills and because old spills are generally more difficult to clean up than fresh spills (particularly on porous surfaces such as concrete). Therefore, spills which occurred before the effective date of this policy are to be decontaminated to requirements established at the discretion of EPA, usually through its regional offices.

(2) EPA expects most PCB spills subject to the TSCA PCB regulations to conform to the typical spill situations considered in developing this policy. This policy does, however, exclude from application of the final numerical cleanup standards certain spill situations from its scope: Spills directly into surface waters, drinking water, sewers, grazing lands, and vegetable gardens. These types of spills are subject to final cleanup standards to be established at the discretion of the regional office. These spills are, however, subject to the immediate notification requirements and measures to minimize further environmental contamination.

(3) For all other spills, EPA generally expects the decontamination standards of this policy to apply. Occasionally, some small percentage of spills covered by this policy may warrant more stringent cleanup requirements because of additional routes of exposure or significantly greater exposures than those assumed in developing the final cleanup standards of this policy. While the EPA regional offices have the authority to require additional cleanup in these circumstances, the Regional Administrator must first make a finding based on the specific facts of a spill that additional cleanup must occur to prevent unreasonable risk. In addition, before a final decision is made to require additional cleanup, the Regional Administrator must notify the Director, Office of Pollution Prevention and Toxics at Headquarters of his/her finding and the basis for the finding.

(4) There may also be exceptional spill situations that requires less stringent cleanup or a different approach to cleanup because of factors associated with the particular spill. These factors may mitigate expected exposures and risks or make cleanup to these requirements impracticable.

(b) *Spills that may require more stringent cleanup levels.* For spills within the scope of this policy, EPA generally retains, under § 761.135, the authority to require additional cleanup upon finding that, despite good faith efforts by the responsible party, the numerical decontamination levels in the policy have not been met. In addition, EPA foresees the possibility of exceptional spill situations in which site-specific risk factors may warrant additional cleanup to more stringent numerical decontamination levels than are required by the policy. In these situations, the Regional Administrator has the authority to require cleanup to levels lower than those included in this policy upon finding that further cleanup must occur to prevent unreasonable risk. The Regional Administrator will consult with the Director, Office of Pollution Prevention and Toxics, prior to making such a finding.

(1) For example, site-specific characteristics, such as short depth to ground water, type of soil, or the presence of a shallow well, may pose exceptionally high potential for ground water contamination by PCBs remaining after cleanup to the standards specified in this policy. Spills that pose such a high degree of potential for ground water contamination have not been excluded from the policy under paragraph (d) of this section because the presence of such potential may not be readily apparent. EPA feels that automatically excluding such spills from the scope of the policy could result in the delay of

cleanup—a particularly undesirable outcome if potential ground water contamination is, in fact, a significant concern.

(2) In those situations, the Regional Administrator may require cleanup in addition to that required under § 761.125 (b) and (c). However, the Regional Administrator must first make a finding, based on the specific facts of a spill, that additional cleanup is necessary to prevent unreasonable risk. In addition, before making a final decision on additional cleanup, the Regional Administrator must notify the Director of the Office of Pollution Prevention and Toxics of his finding and the basis for the finding.

(c) *Flexibility to allow less stringent or alternative requirements.* EPA retains the flexibility to allow less stringent or alternative decontamination measures based upon site-specific considerations. EPA will exercise this flexibility if the responsible party demonstrates that cleanup to the numerical decontamination levels is clearly unwarranted because of risk-mitigating factors, that compliance with the procedural requirements or numerical standards in the policy is impracticable at a particular site, or that site-specific characteristics make the costs of cleanup prohibitive. The Regional Administrator will notify the Director of OPPT of any decision and the basis for the decision to allow less stringent cleanup. The purpose of this notification is to enable the Director of OPPT to ensure consistency of spill cleanup standards under special circumstances across the regions.

(d) *Excluded spills.* (1) Although the spill situations in paragraphs (d)(2) (i) through (vi) of this section are excluded from the automatic application of final decontamination standards under § 761.125 (b) and (c), the general requirements under § 761.125(a) do apply to these spills. In addition, all of these excluded situations require practicable, immediate actions to contain the area of contamination. While these situations may not always require more stringent cleanup measures, the Agency is excluding these scenarios because they will always involve significant factors that may not be adequately addressed by cleanup standards based upon typical spill characteristics.

(2) For the spill situations in paragraphs (d)(2)(i) through (vi) of this section, the responsible party shall decontaminate the spill in accordance with site-specific requirements established by the EPA regional offices.

(i) Spills that result in the direct contamination of surface waters (surface waters include, but are not limited to, ''waters of the United States'' as defined in Part 122 of this chapter, ponds, lagoons, wetlands, and storage reservoirs).

(ii) Spills that result in the direct contamination of sewers or sewage treatment systems.

(iii) Spills that result in the direct contamination of any private or public drinking water sources or distribution systems.

(iv) Spills which migrate to and contaminate surface waters, sewers, or drinking water supplies before cleanup has been completed in accordance with this policy.

(v) Spills that contaminate animal grazing lands.

(vi) Spills that contaminate vegetable gradens.

(e) *Relationship of policy to other statutes.* (1) This policy does not affect cleanup standards or requirements for the reporting of spills imposed, or to be imposed, under other Federal statutory authorities, including but not limited to, the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA). Where more than one requirement applies, the stricter standard must be met.

(2) The Agency recognizes that the existence of this policy will inevitably result in attempts to apply the standards to situations within the scope of other statutory authorities. However, other statutes require the Agency to consider different or alternative factors in determining appropriate corrective actions. In addition, the types and magnitudes of exposures associated with sites requiring corrective action

under other statutes often involve important differences from those expected of the typical, electrical equipment-type spills considered in developing this policy. Thus, cleanups under other statutes, such as RCRA corrective actions or remedial and response actions under SARA may result in different outcomes.

**§ 761.123 Definitions.**

For purposes of this policy, certain words and phrases are used to denote specific materials, procedures, or circumstances. The following definitions are provided for purposes of clarity and are not to be taken as exhaustive lists of situations and materials covered by the policy.

*Double wash/rinse* means a minimum requirement to cleanse solid surfaces (both impervious and nonimpervious) two times with an appropriate solvent or other material in which PCBs are at least 5 percent soluble (by weight). A volume of PCB-free fluid sufficient to cover the contaminated surface completely must be used in each wash/rinse. The wash/rinse requirement does not mean the mere spreading of solvent or other fluid over the surface, nor does the requirement mean a once-over wipe with a soaked cloth. Precautions must be taken to contain any runoff resulting from the cleansing and to dispose properly of wastes generated during the cleansing.

*High-concentration PCBs* means PCBs that contain 500 ppm or greater PCBs, or those materials which EPA requires to be assumed to contain 500 ppm or greater PCBs in the absence of testing.

*High-contact industrial surface* means a surface in an industrial setting which is repeatedly touched, often for relatively long periods of time. Manned machinery and control panels are examples of high-contact industrial surfaces. High-contact industrial surfaces are generally of impervious solid material. Examples of low-contact industrial surfaces include ceilings, walls, floors, roofs, roadways and sidewalks in the industrial area, utility poles, unmanned machinery, concrete pads beneath electrical equipment, curbing, exterior structural building components, indoor vaults, and pipes.

*High-contact residential/commercial surface* means a surface in a residential/commercial area which is repeatedly touched, often for relatively long periods of time. Doors, wall areas below 6 feet in height, uncovered flooring, windowsills, fencing, bannisters, stairs, automobiles, and children's play areas such as outdoor patios and sidewalks are examples of high-contact residential/commercial surfaces. Examples of low-contact residential/commercial surfaces include interior ceilings, interior wall areas above 6 feet in height, roofs, asphalt roadways, concrete roadways, wooden utility poles, unmanned machinery, concrete pads beneath electrical equipment, curbing, exterior structural building components (e.g., aluminum/vinyl siding, cinder block, asphalt tiles), and pipes.

*Impervious solid surfaces* means solid surfaces which are nonporous and thus unlikely to absorb spilled PCBs within the short period of time required for cleanup of spills under this policy. Impervious solid surfaces include, but are not limited to, metals, glass, aluminum siding, and enameled or laminated surfaces.

*Low-concentration PCBs* means PCBs that are tested and found to contain less than 500 ppm PCBs, or those PCB-containing materials which EPA requires to be assumed to be at concentrations below 500 ppm (i.e., untested mineral oil dielectric fluid).

*Nonimpervious solid surfaces* means solid surfaces which are porous and are more likely to absorb spilled PCBs prior to completion of the cleanup requirements prescribed in this policy. Nonimpervious solid surfaces include, but are not limited to, wood, concrete, asphalt, and plasterboard.

*Nonrestricted access areas* means any area other than restricted access, outdoor electrical substations, and other restricted access locations, as defined in this section. In addition to residential/commercial areas, these areas include unrestricted access rural areas (areas of low density development and population where access is uncontrolled by either man-made barriers or naturally occurring barriers, such as rough terrain, mountains, or cliffs).

*Other restricted access (nonsubstation) locations* means areas other than electrical substations that are at least 0.1 kilometer (km) from a residential/commercial area and limited by man-made barriers (e.g., fences and walls) to substantially limited by naturally occurring barriers such as mountains, cliffs, or rough terrain. These areas generally include industrial facilities and extremely remote rural locations. (Areas where access is restricted but are less than 0.1 km from a residential/commercial area are considered to be residential/commercial areas.)

*Outdoor electrical substations* means outdoor, fenced-off, and restricted access areas used in the transmission and/or distribution of electrical power Outdoor electrical substations restrict public access by being fenced or walled off as defined under § 761.30(l)(1)(ii). For purposes of this TSCA policy, outdoor electrical substations are defined as being located at least 0.1 km from a residential/commercial area. Outdoor fenced-off and restricted access areas used in the transmission and/or distribution of electrical power which are located less than 0.1. km from a residential/commercial area are considered to be residential/commercial areas.

*PCBs* means polychlorinated biphenyls as defined under § 761.3. As specified under § 761.1(b), no requirements may be avoided through dilution of the PCB concentration.

*Requirements and standards* means:

(1) ''Requirements'' as used in this policy refers to both the procedural responses and numerical decontamination levels set forth in this policy as constituting adequate cleanup of PCBs.

(2) ''Standards'' refers to the numerical decontamination levels set forth in this policy.

*Residential/commercial areas* means those areas where people live or reside, or where people work in other than manufacturing or farming industries. Residential areas include housing and the property on which housing is located, as well as playgrounds, roadways, sidewalks, parks, and other similar areas within a residential community. Commercial areas are typically accessible to both members of the general public and employees and include public assembly properties, institutional properties, stores, office buildings, and transportation centers.

*Responsible party* means the owner of the PCB equipment, facility, or other source of PCBs or his/her designated agent (e.g., a facility manager or foreman).

*Soil* means all vegetation, soils and other ground media, including but not limited to, sand, grass , gravel, and oyster shells. It does not include concrete and asphalt.

*Spill* means both intentional and unintentional spills, leaks, and other uncontrolled discharges where the release results in any quantity of PCBs running off or about to run off the external surface of the equipment or other PCB source, as well as the contamination resulting from those releases. This policy applies to spills of 50 ppm or greater PCBs. The concentration of PCBs spilled is determined by the PCB concentration in the material spilled as opposed to the concentration of PCBs in the material onto which the PCBs were spilled. Where a spill of untested mineral oil occurs, the oil is presumed to contain greater than 50 ppm, but less than 500 ppm PCBs and is subject to the relevant requirements of this policy.

*Spill area* means the area of soil on which visible traces of the spill can be observed plus a buffer zone of 1 foot beyond the visible traces. Any surface or object (e.g., concrete sidewalk or automobile) within the visible traces area or on which visible traces of the spilled material are observed is included in the spill area. This area represents the minimum area assumed to be contaminated by PCBs in the absence of precleanup sampling data and is thus the minimum area which must be cleaned.

*Spill boundaries* means the actual area of contamination as determined by postcleanup verification sampling or by precleanup sampling to determine actual spill boundaries. EPA can require additional cleanup when necessary to decontaminate all areas within the spill boundaries to the levels required in this policy (e.g., additional cleanup will be required if postcleanup sampling indicates that the area decontaminated by the responsible party, such as the spill area as defined in this

section, did not encompass the actual boundaries of PCB contamination).

*Standard wipe test* means, for spills of high-concentration PCBs on solid surfaces, a cleanup to numerical surface standards and sampling by a standard wipe test to verify that the numerical standards have been met. This definition constitutes the minimum requirements for an appropriate wipe testing protocol. A standard-size template (10 centimeters (cm) x 10 cm) will be used to delineate the area of cleanup; the wiping medium will be a gauze pad or glass wool of known size which has been saturated with hexane. It is important that the wipe be performed very quickly after the hexane is exposed to air. EPA strongly recommends that the gauze (or glass wool) be prepared with hexane in the laboratory and that the wiping medium be stored in sealed glass vials until it is used for the wipe test. Further, EPA requires the collection and testing of field blanks and replicates.

[52 FR 10705, Apr. 2, 1987; 52 FR 23397, June 19, 1987]

### § 761.125 Requirements for PCB spill cleanup.

(a) *General.* Unless expressly limited, the reporting, disposal, and precleanup sampling requirements in paragraphs (a) (1) through (3) of this section apply to all spills of PCBs at concentrations of 50 ppm or greater which are subject to decontamination requirements under TSCA, including those spills listed under § 761.120(b) which are excluded from the cleanup standards at paragraphs (b) and (c) of this section.

(1) *Reporting requirements.* The reporting in paragraphs (a)(1) (i) through (iv) of this section is required in addition to applicable reporting requirements under the Clean Water Act (CWA) or the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA). For example, under the National Contingency Plan all spills involving 10 pounds or more by weight of PCBs must currently be reported to the National Response Center (1–800–424–8802). The requirements in paragraphs (a)(1) (i) through (iv) of this section are designed to be consistent with existing reporting requirements to the extent possible so as to minimize reporting burdens on governments as well as the regulated community.

(i) Where a spill directly contaminates surface water, sewers, or drinking water supplies, as discussed under § 761.120(d), the responsible party shall notify the appropriate EPA regional office (the Office of Prevention, Pesticides and Toxic Substances Branch) and obtain guidance for appropriate cleanup measures in the shortest possible time after discovery, but in no case later than 24 hours after discovery.

(ii) Where a spill directly contaminates grazing lands or vegetable gardens, as discussed under § 761.120(d), the responsible party shall notify the appropriate EPA regional office (the Office of Prevention, Pesticides and Toxic Substances Branch) and proceed with the immediate requirements specified under paragraph (b) or (c) of this section, depending on the source of the spill, in the shortest possible time after discovery, but in no case later than 24 hours after discovery.

(iii) Where a spill exceeds 10 pounds of PCBs by weight and is not addressed in paragraph (a)(1) (i) or (ii) of this section, the responsible party will notify the appropriate EPA regional office (Pesticides and Toxic Substances Branch) and proceed to decontaminate the spill area in accordance with this TSCA policy in the shortest possible time after discovery, but in no case later than 24 hours after discovery.

(iv) Spills of 10 pounds or less, which are not addressed in paragraph (a)(1) (i) or (ii) of this section, must be cleaned up in accordance with this policy (in order to avoid EPA enforcement liability), but notification of EPA is not required.

(2) *Disposal of cleanup debris and materials.* All concentrated soils, solvents, rags, and other materials resulting from the cleanup of PCBs under this policy shall be properly stored, labeled, and disposed of in accordance with the provisions of § 761.60.

(3) *Determination of spill boundaries in the absence of visible traces.* For spills where there are insufficient visible traces yet there is evidence of a leak or spill, the boundaries of the spill are to be determined by using a statistically based sampling scheme.

(b) *Requirements for cleanup of low-concentration spills which involve less than 1 pound of PCBs by weight (less than 270 gallons of untested mineral oil)*—(1) *Decontamination requirements.* Spills of less than 270 gallons of untested mineral oil, low-concentration PCBs, as defined under § 761.123, which involve less than 1 pound of PCBs by weight (e.g., less than 270 gallons of untested mineral oil containing less than 500 ppm PCBs) shall be cleaned in the following manner:

(i) Solid surfaces must be double washed/rinsed (as defined under § 761.123); except that all indoor, residential surfaces other than vault areas must be cleaned to 10 micrograms per 100 square centimeters (10 µg/100 $cm^2$) by standard commercial wipe tests.

(ii) All soil within the spill area (i.e., visible traces of soil and a buffer of 1 lateral foot around the visible traces) must be excavated, and the ground be restored to its original configuration by back-filling with clean soil (i.e., containing less than 1 ppm PCBs).

(iii) Requirements of paragraphs (b)(1) (i) and (ii) of this section must be completed within 48 hours after the responsible party was notified or became aware of the spill.

(2) *Effect of emergency or adverse weather.* Completion of cleanup may be delayed beyond 48 hours in case of circumstances including but not limited to, civil emergency, adverse weather conditions, lack of access to the site, and emergency operating conditions. The occurrence of a spill on a weekend or overtime costs are not acceptable reasons to delay response. Completion of cleanup may be delayed only for the duration of the adverse conditions. If the adverse weather conditions, or time lapse due to other emergency, has left insufficient visible traces, the responsible party must use a statistically based sampling scheme to determine the spill boundaries as required under paragraph (a)(3) of this section.

(3) *Records and certification.* At the completion of cleanup, the responsible party shall document the cleanup with records and certification of decontamination. The records and certification must be maintained for a period of 5 years. The records and certification shall consist of the following:

(i) Identification of the source of the spill (e.g., type of equipment).

(ii) Estimated or actual date and time of the spill occurrence.

(iii) The date and time cleanup was completed or terminated (if cleanup was delayed by emergency or adverse weather: the nature and duration of the delay).

(iv) A brief description of the spill location.

(v) Precleanup sampling data used to establish the spill boundaries if required because of insufficient visible traces, and a brief description of the sampling methodology used to establish the spill boundaries.

(vi) A brief description of the solid surfaces cleaned and of the double wash/rinse method used.

(vii) Approximate depth of soil excavation and the amount of soil removed.

(viii) A certification statement signed by the responsible party stating that the cleanup requirements have been met and that the information contained in the record is true to the best of his/her knowledge.

(ix) While not required for compliance with this policy, the following information would be useful if maintained in the records:

(A) Additional pre- or post-cleanup sampling.

(B) The estimated cost of the cleanup by man-hours, dollars, or both.

(c) *Requirements for cleanup of high-concentration spills and low-concentration spills involving 1 pound or more PCBs by weight (270 gallons or more of untested mineral oil).* Cleanup of low-concentration spills involving 1 lb or more PCBs by weight and of all spills of materials other than low-concentration materials shall be considered complete if all of the immediate requirements, cleanup standards, sampling, and recordkeeping requirements of paragraphs (c) (1) through (5) of this section are met.

(1) *Immediate requirements.* The four actions in paragraphs (c)(1) (i) through (iv) of this section must be taken as quickly as possible and within no more than 24 hours (or within 48 hours for PCB Transformers) after the responsible party was notified or became aware of the spill, except that actions described in paragraphs (c)(1) (ii)

through (iv) of this section can be delayed beyond 24 hours if circumstances (e.g., civil emergency, hurricane, tornado, or other similar adverse weather conditions, lack of access due to physical impossibility, or emergency operating conditions) so require for the duration of the adverse conditions. The occurrence of a spill on a weekend or overtime costs are not acceptable reasons to delay response. Owners of spilled PCBs who have delayed cleanup because of these types of circumstances must keep records documenting the fact that circumstances precluded rapid response.

(i) The responsible party shall notify the EPA regional office and the NRC as required by § 761.125(a)(1) or by other applicable statutes.

(ii) The responsible party shall effectively cordon off or otherwise delineate and restrict an area encompassing any visible traces plus a 3-foot buffer and place clearly visible signs advising persons to avoid the area to minimize the spread of contamination as well as the potential for human exposure.

(iii) The responsible party shall record and document the area of visible contamination, noting the extent of the visible trace areas and the center of the visible trace area. If there are no visible traces, the responsible party shall record this fact and contact the regional office of the EPA for guidance in completing statistical sampling of the spill area to establish spill boundaries.

(iv) The responsible party shall initiate cleanup of all visible traces of the fluid on hard surfaces and initiate removal of all visible traces of the spill on soil and other media, such as gravel, sand, oyster shells, etc.

(v) If there has been a delay in reaching the site and there are insufficient visible traces of PCBs remaining at the spill site, the responsible party must estimate (based on the amount of material missing from the equipment or container) the area of the spill and immediately cordon off the area of suspect contamination. The responsible party must then utilize a statistically based sampling scheme to identify the boundaries of the spill area as soon as practicable.

(vi) Although this policy requires certain immediate actions, as described in paragraphs (c)(1)(i) through (iv) of this section, EPA is not placing a time limit on completion of the cleanup effort since the time required for completion will vary from case to case. However, EPA expects that decontamination will be achieved promptly in all cases and will consider promptness of completion in determining whether the responsible party made good faith efforts to clean up in accordance with this policy.

(2) *Requirements for decontaminating spills in outdoor electrical substations.* Spills which occur in outdoor electrical substations, as defined under § 761.123, shall be decontaminated in accordance with paragraphs (c)(2)(i) and (ii) of this section. Conformance to the cleanup standards under paragraphs (c)(2)(i) and (ii) of this section shall be verified by post-cleanup sampling as specified under § 761.130. At such times as outdoor electrical substations are converted to another use, the spill site shall be cleaned up to the nonrestricted access requirements under paragraph (c)(4) of this section.

(i) Contaminated solid surfaces (both impervious and non-impervious) shall be cleaned to a PCB concentration of 100 micrograms (μg)/100 square centimeters ($cm^2$) (as measured by standard wipe tests).

(ii) At the option of the responsible party, soil contaminated by the spill will be cleaned either to 25 ppm PCBs by weight, or to 50 ppm PCBs by weight provided that a label or notice is visibly placed in the area. Upon demonstration by the responsible party that cleanup to 25 ppm or 50 ppm will jeopardize the integrity of the electrical equipment at the substation, the EPA regional office may establish an alternative cleanup method or level and place the responsible party on a reasonably timely schedule for completion of cleanup.

(3) *Requirements for decontaminating spills in other restricted access areas.* Spills which occur in restricted access locations other than outdoor electrical substations, as defined under § 761.123, shall be decontaminated in accordance with paragraphs (c)(3) (i) through (v) of

this section. Conformance to the cleanup standards in paragraphs (c)(3) (i) through (v) of this section shall be verified by postcleanup sampling as specified under § 761.130. At such times as restricted access areas other than outdoor electrical substations are converted to another use, the spill site shall be cleaned up to the nonrestricted access area requirements of paragraph (c)(4) of this section.

(i) High-contact solid surfaces, as defined under § 761.163 shall be cleaned to 10 μg/100 $cm^2$ (as measured by standard wipe tests).

(ii) Low-contact, indoor, impervious solid surfaces will be decontaminated to 10 μg/100 $cm^2$.

(iii) At the option of the responsible party, low-contact, indoor, nonimpervious surfaces will be cleaned either to 10 μg/100 $cm^2$ or to 100 μg/100 $cm^2$ and encapsulated. The Regional Administrator, however, retains the authority to disallow the encapsulation option for a particular spill situation upon finding that the uncertainties associated with that option pose special concerns at that site. That is, the Regional Administrator would not permit encapsulation if he/she determined that if the encapsulation failed the failure would create an imminent hazard at the site.

(iv) Low-contact, outdoor surfaces (both impervious and nonimpervious) shall be cleaned to 100 μg/100 $cm^2$.

(v) Soil contaminated by the spill will be cleaned to 25 ppm PCBs by weight.

(4) *Requirements for decontaminating spills in nonrestricted access areas.* Spills which occur in nonrestricted access locations, as defined under § 761.123, shall be decontaminated in accordance with paragraphs (c)(4)(i) through (v) of this section. Conformance to the cleanup standards at paragraphs (c)(4)(i) through (v) of this section shall be verified by postcleanup sampling as specified under § 761.130.

(i) Furnishings, toys, and other easily replaceable household items shall be disposed of in accordance with the provisions of § 761.60 and replaced by the responsible party.

(ii) Indoor solid surfaces and high-contact outdoor solid surfaces, defined as high contact residential/commercial surfaces under § 761.123, shall be cleaned to 10 μg/100 $cm^2$ (as measured by standard wipe tests).

(iii) Indoor vault areas and low-contact, outdoor, impervious solid surfaces shall be decontaminated to 10 μg/100 $cm^2$.

(iv) At the option of the responsible party, low-contact, outdoor, nonimpervious solid surfaces shall be either cleaned to 10 μg/100 $cm^2$ or cleaned to 100 μg/100 $cm^2$ and encapsulated. The Regional Administrator, however, retains the authority to disallow the encapsulation option for a particular spill situation upon finding that the uncertainties associated with that option pose special concerns at that site. That is, the Regional Administrator would not permit encapsulation if he/she determined that if the encapsulation failed the failure would create an imminent hazard at the site.

(v) Soil contaminated by the spill will be decontaminated to 10 ppm PCBs by weight provided that soil is excavated to a minimum depth of 10 inches. The excavated soil will be replaced with clean soil, i.e., containing less than 1 ppm PCBs, and the spill site will be restored (e.g., replacement of turf).

(5) *Records.* The responsible party shall document the cleanup with records of decontamination. The records must be maintained for a period of 5 years. The records and certification shall consist of the following:

(i) Identification of the source of the spill, e.g., type of equipment.

(ii) Estimated or actual date and time of the spill occurrence.

(iii) The date and time cleanup was completed or terminated (if cleanup was delayed by emergency or adverse weather: the nature and duration of the delay).

(iv) A brief description of the spill location and the nature of the materials contaminated. This information should include whether the spill occurred in an outdoor electrical substation, other restricted access location, or in a nonrestricted access area.

(v) Precleanup sampling data used to establish the spill boundaries if required because of insufficient visible traces and a brief description of the sampling methodology used to establish the spill boundaries.

(vi) A brief description of the solid surfaces cleaned.

(vii) Approximate depth of soil excavation and the amount of soil removed.

(viii) Postcleanup verification sampling data and, if not otherwise apparent from the documentation, a brief description of the sampling methodology and analytical technique used.

(ix) While not required for compliance with this policy, information on the estimated cost of cleanup (by manhours, dollars, or both) would be useful if maintained in the records.

[52 FR 10705, Apr. 2, 1987, as amended at 53 FR 40884, Oct. 19, 1988]

### § 761.130 Sampling requirements.

Postcleanup sampling is required to verify the level of cleanup under § 761.125(c) (2) through (4). The responsible party may use any statistically valid, reproducible, sampling scheme (either random samples or grid samples) provided that the requirements of paragraphs (a) and (b) of this section are satisfied.

(a) The sampling area is the greater of (1) an area equal to the area cleaned plus an additional 1-foot boundary, or (2) an area 20 percent larger than the original area of contamination.

(b) The sampling scheme must ensure 95 percent confidence against false positives.

(c) The number of samples must be sufficient to ensure that areas of contamination of a radius of 2 feet or more within the sampling area will be detected, except that the minimum number of samples is 3 and the maximum number of samples is 40.

(d) The sampling scheme must include calculation for expected variability due to analytical error.

(e) EPA recommends the use of a sampling scheme developed by the Midwest Research Institute (MRI) for use in EPA enforcement inspections: ''Verification of PCB Spill Cleanup by Sampling and Analysis.'' Guidance for the use of this sampling scheme is available in the MRI report ''Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup.'' Both the MRI sampling scheme and the guidance document are available from the Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room E–543B, 401 M St., SW., Washington, DC, 20460, Telephone: (202) 554–1404, TDD: (202) 544–0551. The major advantage of this sampling scheme is that it is designed to characterize the degree of contamination within the entire sampling area with a high degree of confidence while using fewer samples than any other grid or random sampling scheme. This sampling scheme also allows some sites to be characterized on the basis of composite samples.

(f) EPA may, at its discretion, take samples from any spill site. If EPA's sampling indicates that the remaining concentration level exceeds the required level, EPA will require further cleanup. For this purpose, the numerical level of cleanup required for spills cleaned in accordance with § 761.125(b) is deemed to be the equivalent of numerical cleanup requirements required for cleanups under § 761.125(c)(2) through (4). Using its best engineering judgment, EPA may sample a statistically valid random or grid sampling technique, or both. When using engineering judgment or random ''grab'' samples, EPA will take into account that there are limits on the power of a grab sample to dispute statistically based sampling of the type required of the responsible party. EPA headquarters will provide guidance to the EPA regions on the degree of certainty associated with various grab sample results.

[52 FR 10705, Apr. 2, 1987, as amended at 60 FR 34465, July 3, 1995]

### § 761.135 Effect of compliance with this policy and enforcement.

(a) Although a spill of material containing 50 ppm or greater PCBs is considered improper PCB disposal, this policy establishes requirements that EPA considers to be adequate cleanup of the spilled PCBs. Cleanup in accordance with this policy means compliance with the procedural as well as the numerical requirements of this policy. Compliance with this policy creates a presumption against both enforcement action for penalties and the need for further cleanup under TSCA. The Agency reserves the right, however, to initiate appropriate action to compel

cleanup where, upon review of the records of cleanup or EPA sampling following cleanup, EPA finds that the decontamination levels in the policy have not been achieved. The Agency also reserves the right to seek penalties where the Agency believes that the responsible party has not made a good faith effort to comply with all provisions of this policy, such as prompt notification of EPA of a spill, recordkeeping, etc.

(b) EPA's exercise of enforcement discretion does not preclude enforcement action under other provisions of TSCA or any other Federal statute. This includes, even in cases where the numerical decontamination levels set forth in this policy have been met, civil or criminal action for penalties where EPA believes the spill to have been the result of gross negligence or knowing violation.

## Subparts H and I—[Reserved]

## Subpart J—General Records and Reports

### § 761.180 Records and monitoring.

This section contains recordkeeping and reporting requirements that apply to PCBs, PCB Items, and PCB storage and disposal facilities that are subject to the requirements of the part.

(a) *PCBs and PCB Items in service or projected for disposal.* Beginning February 5, 1990, each owner or operator of a facility, other than a commercial storer or a disposer of PCB waste, using or storing at any one time at least 45 kilograms (99.4 pounds) of PCBs contained in PCB Container(s), or one or more PCB Transformers, or 50 or more PCB Large High or Low Voltage Capacitors shall develop and maintain at the facility, or a central facility provided they are maintained at that facility, all annual records and the written annual document log of the disposition of PCBs and PCB Items. The written annual document log must be prepared for each facility by July 1 covering the previous calendar year (January through December). The annual document log shall be maintained for at least 3 years after the facility ceases using or storing PCBs and PCB Items in the quantities prescribed in this paragraph. Annual records (manifests and certificates of disposal) shall be maintained for the same period. The annual records and the annual document log shall be available for inspection at the facility where they are maintained by authorized representatives of EPA during normal business hours, and each owner or operator of a facility subject to these requirements shall know the location of these records. All records and annual documents required to be prepared and maintained by this section prior to February 5, 1990 shall continue to be maintained at the facility for the same time as the annual records and the annual document log. The annual document required for 1989 shall cover the period from January 1, 1989 to February 5, 1990.

(1) The annual records shall include the following:

(i) All signed manifests generated by the facility during the calendar year.

(ii) All Certificates of Disposal that have been received by the facility during the calendar year.

(2) The written annual document log shall include the following:

(i) The name, address, and EPA identification number of the facility covered by the annual document log and the calendar year covered by the annual document log.

(ii) The unique manifest number of every manifest generated by the facility during the calendar year, and from each manifest and for unmanifested waste that may be stored at the facility, the following information:

(A) For bulk PCB waste (*e.g.*, in a tanker or truck), its weight in kilograms, the first date it was removed from service for disposal, the date it was placed into transport for off-site storage or disposal, and the date of disposal, if known.

(B) The serial number (if available) or other means of identifying each PCB Article (*e.g.*, transformer or capacitor), the weight in kilograms of the PCB waste in each transformer or capacitor, the date it was removed from service for disposal, the date it was placed in transport for off-site storage or disposal, and the date of disposal, if known.

(C) A unique number identifying each PCB Container, a description of the contents of each PCB Container, such as liquid, soil, cleanup debris, etc., including the total weight of the material in kilograms in each PCB Container, the first date material placed in each PCB Container was removed from service for disposal, and the date each PCB Container was placed in transport for off-site storage or disposal, and the date of disposal (if known).

(D) A unique number identifying each PCB Article Container, a description of the contents of each PCB Article Container, such as pipes, capacitors, electric motors, pumps, etc., including the total weight in kilograms of the content of each PCB Article Container, the first date a PCB Article placed in each PCB Article Container was removed from service for disposal, and the date the PCB Article Container was placed in transport for off-site storage or disposal, and the date of disposal (if known.)

(iii) The total number by specific type of PCB Articles and the total weight in kilograms of PCBs in PCB Articles, the total number of PCB Article Containers and total weight in kilograms of the contents of PCB Article Containers, the total number of PCB Containers and the total weight in kilograms of the contents of PCB Containers, and the total weight in kilograms of bulk PCB waste that was placed into storage for disposal or disposed during the calendar year.

(iv) The total number of PCB Transformers and total weight in kilograms of PCBs contained in the transformers remaining in service at the end of the calendar year.

(v) The total number of Large High or Low Voltage PCB Capacitors remaining in service at the end of the calendar year.

(vi) The total weight in kilograms of any PCBs and PCB Items in PCB Containers, including the identification of container contents, remaining in service at the facility at the end of the calendar year.

(vii) For any PCBs or PCB item received from or shipped to another facility owned or operated by the same generator, the information required under paragraph (a)(2)(ii)(A) through (a)(2)(ii)(D) of this section.

(viii) A record of each telephone call, or other means of verification agreed upon by both parties, made to each designated commercial storer or designated disposer to confirm receipt of PCB waste transported by an independent transporter, as required by § 761.208.

(b) *Disposers and commercial storers of PCB waste.* Beginning February 5, 1990, each owner or operator of a facility (including high efficiency boiler operations) used for the commercial storage or disposal of PCBs and PCB Items shall maintain annual records on the disposition of all PCBs and PCB items at the facility and prepare and maintain a written annual document log that includes the information required by paragraphs (b)(2) of this section for PCBs and PCB Items that were handled as PCB waste at the facility. The written annual document log shall be prepared by July 1 for the previous calendar year (January through December). The written annual document log shall be maintained at each facility for at least 3 years after the facility is no longer used for the storage or disposal of PCBs and PCB Items except that, in the case of chemical waste landfills, the annual document log shall be maintained at least 20 years after the chemical waste landfill is no longer used for the disposal of PCBs and PCB Items. The annual records shall be maintained for the same period. The annual records and written annual document log shall be available at the facility for inspection by authorized representatives of the EPA. All records and annual documents required to be prepared and maintained by this section prior to February 5, 1990 shall continue to be maintained at the facility for the same time as the annual records and the annual document log. The annual document for 1989 shall cover the period from January 1, 1989 to February 5, 1990. From the written annual document log the owner or operator of a facility must prepare the annual report containing the information required by paragraphs (b)(3)(i) through (b)(3)(vi) of this section for PCBs and PCB Items that were handled as PCB waste at the facility during the previous calendar year (January through December). The

annual report must be submitted by July 15 of each year for the preceding calendar year. If the facility ceases commercial PCB storage or disposal operations, the owner or operator of the facility shall provide at least 60 days advance written notice to the Regional Administrator for the region in which the facility is located of the date the facility intends to begin closure. d

(1) The annual records shall include the following:

(i) All signed manifests generated or received at the facility during the calendar year.

(ii) All Certificates of Disposal that have been generated or received by the facility during the calendar year.

(2) The written annual document log shall include the following:

(i) The name, address, and EPA identification number of the storage or disposal facility covered by the annual document log and the calendar year covered by the annual document log.

(ii) For each manifest generated or received by the facility during the calendar year, the unique manifest number and the name and address of the facility that generated the manifest and the following information:

(A) For bulk PCB waste (*e.g.*, in a tanker or truck), its weight in kilograms, the first date PCB waste placed in the tanker or truck was removed from service for disposal, the date it was received at the facility, the date it was placed in transport for off-site disposal (if applicable), and the date of disposal, (if known ).

(B) The serial number or other means of identifying each PCB Article, not in a PCB Container or PCB Article Container, the weight in kilograms of the PCB waste in the PCB Article, the date it was removed from service for disposal, the date it was received at the facility, the date it was placed in transport for off-site disposal (if applicable), and the date of disposal (if known).

(C) The unique number assigned by the generator identifying each PCB Container, a description of the contents of each PCB Container, such as liquid, soil, cleanup debris, etc., including the total weight of the PCB waste in kilograms in each PCB Container, the first date PCB waste placed in each PCB Container was removed from service for disposal, the date it was received at the facility, the date each PCB Container was placed in transport for off-site storage or disposal (as applicable), and the date the PCB Container was disposed of (if known).

(D) The unique number assigned by the generator identifying each PCB Article Container, a description of the contents of each PCB Article Container, such as pipes, capacitors, electric motors, pumps, etc., including the total weight in kilograms of the PCB waste in each PCB Article Container, the first date a PCB Article placed in each PCB Article Container was removed from service for disposal, the date it was received at the facility, the date each PCB Article Container was placed in transport for off-site storage or disposal (as applicable), and the date the PCB Article Container was disposed of (if known).

(E) Disposers of PCB waste shall include the confirmed date of disposal for items in paragraphs (b)(2)(ii)(A) through (b)(2)(ii)(D) of this section.

(iii) For any PCB waste disposed at a facility that generated the PCB waste or any PCB waste that was not manifested to the facility, the information required under paragraph (b)(2)(ii)(A) through (b)(2)(ii)(E) of this section.

(3) The owner or operator of a PCB disposal or commercial storage facility shall submit an annual report, which briefly summarizes the records and annual document log required to be maintained and prepared under paragraphs (b)(1) and (b)(2) of this section, to the Regional Administrator of the EPA region in which the facility is located by July 15 of each year, beginning with July 15, 1991. The first annual report submitted on July 15, 1991, shall be for the period starting February 5, 1990 and ending December 31, 1990. The annual report shall contain no confidential business information. The annual report shall consist of the information listed in paragraphs (b)(3)(i) through (b)(3)(vi) of this section.

(i) The name, address, and EPA identification number of the facility covered by the annual report for the calendar year.

(ii) A list of the numbers of all signed manifests of PCB waste initiated or received by the facility during that year.

(iii) The total weight in kilograms of bulk PCB waste, PCB waste in PCB Transformers, PCB waste in PCB Large High or Low Voltage Capacitors, PCB waste in PCB Article Containers, and PCB waste in PCB Containers in storage at the facility at the beginning of the calendar year, received or generated at the facility, transferred to another facility, or disposed of at the facility during the calendar year. The information must be provided for each of these categories, as appropriate.

(iv) The total number of PCB Transformers, the total number of PCB Large High or Low Voltage Capacitors, the total number of PCB Article Containers, and the total number of PCB Containers in storage at the facility at the beginning of the calendar year, received or generated at the facility, transferred to another facility, or disposed of at the facility during the calendar year. The information must be provided for each of these categories, as appropriate.

(v) The total weight in kilograms of each of the following PCB categories: bulk PCB waste, PCB waste in PCB Transformers, PCB waste in PCB Large High or Low Voltage Capacitors, PCB waste in PCB Article Containers, and PCB waste in PCB Containers remaining in storage for disposal at the facility at the end of the calendar year.

(vi) The total number of PCB Transformers, the total number of PCB Large High or Low Voltage Capacitors, the total number of PCB Article Containers, and the total number of PCB Containers remaining in storage for disposal at the facility at the end of the calendar year.

(vii) The requirement to submit annual reports to the Regional Administrator continues until the submission of the annual report for the calendar year during which the facility ceases PCB storage or disposal operations. Storage operations have not ceased until all PCB waste, including any PCB waste generated during closure, has been removed from the facility.

(4) Whenever a commercial storer of PCB waste accepts PCBs or PCB Items at his storage facility and transfers the PCB waste off-site to another facility for storage or disposal, the commercial storer of PCB waste shall initiate a manifest under subpart K of this part for the transfer of PCBs or PCB Items to the next storage or disposal facility.

NOTE: Any requirements for weights in kilograms of PCBs may be calculated values if the internal volume of PCBs in containers and transformers is known and included in the reports, together with any assumptions on the density of the PCBs contained in the containers or tranformers. If the internal volume of PCBs is not known, a best estimate may be used.

(c) *Incineration facilities.* Each owner or operator of a PCB incinerator facility shall collect and maintain for a period of 5 years from the date of collection the following information, in addition to the information required in paragraph (b) of this section:

(1) When PCBs are being incinerated, the following continuous and short-interval data:

(i) Rate and quantity of PCBs fed to the combustion system as required in § 761.70(a)(3);

(ii) Temperature of the combustion process as required in § 761.70(a)(4); and

(iii) Stack emission product to include $O_2$, CO, and $CO_2$ as required in § 761.70(a)(7).

(2) When PCBs are being incinerated, data and records on the monitoring of stack emissions as required in § 761.70(a)(6).

(3) Total weight in kilograms of any solid residues generated by the incineration of PCBs and PCB Items during the calendar year, the total weight in kilograms of any solid residues disposed of by the facility in chemical waste landfills, and the total weight in kilograms of any solid residues remaining on the facility site.

(4) When PCBs and PCB Items are being incinerated, additional periodic data shall be collected and maintained as specified by the Regional Administrator pursuant to § 761.70(d)(4).

(5) Upon any suspension of the operation of any incinerator pursuant to § 761.70(a)(8), the owner or operator of such an incinerator shall prepare a document. The document shall, at a minimum, include the date and time of the suspension and an explanation of the circumstances causing the suspension

of operation. The document shall be sent to the appropriate Regional Administrator within 30 days of any such suspension.

(d) *Chemical waste landfill facilities.* Each owner or operator of a PCB chemical waste landfill facility shall collect and maintain until at least 20 years after the chemical waste landfill is no longer used for the disposal of PCBs the following information in addition to the information required in paragraph (b) of this section:

(1) Any water analysis obtained in compliance with § 761.75(b)(6)(iii); and

(2) Any operations records including burial coordinates of wastes obtained in compliance with § 761.75(b)(8)(ii).

(e) *High efficiency boiler facilities.* Each owner or operator of a high efficiency boiler used for the disposal of liquids between 50 and 500 ppm PCB shall collect and maintain for a period of 5 years the following information, in addition to the information required in paragraph (b) of this section:

(1) For each month PCBs are burned in the boiler the carbon monoxide and excess oxygen data required in § 761.60(a)(2)(iii)(A)(*8*) and § 761.60(a)(3)(iii)(A)(*8*);

(2) The quantity of PCBs burned each month as required in § 761.60(a)(2)(iii)(A)(*7*) and § 761.60(a)(3)(iii)(A)(*7*); and

(3) For each month PCBs (other than mineral oil dielectric fluid) are burned, chemical analysis data of the waste as required in § 761.60(a)(3) (iii)(B)(*6*).

(f) *Retention of special records by storage and disposal facilities.* In addition to the information required to be maintained under paragraphs (b), (c), (d) and (e) of this section, each owner or operator of a PCB storage or disposal facility (including high efficiency boiler operations) shall collect and maintain for the time period specified in paragraph (b) of this section the following data:

(1) All documents, correspondence, and data that have been provided to the owner or operator of the facility by any State or local government agency and that pertain to the storage or disposal of PCBs and PCB Items at the facility.

(2) All documents, correspondence, and data that have been provided by the owner or operator of the facility to any State or local government agency and that pertain to the storage or disposal of PCBs and PCB Items at the facility.

(3) Any applications and related correspondence sent by the owner or operator of the facility to any local, State, or Federal authorities in regard to waste water discharge permits, solid waste permits, building permits, or other permits or authorizations such as those required by §§ 761.70(d) and 761.75(c).

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605)

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982, and further redesignated at 47 FR 37360, Aug. 25, 1982; 49 FR 28191, July 10, 1984; 53 FR 12524, Apr. 15, 1988; 54 FR 52750, Dec. 21, 1989; 55 FR 26205, June 27, 1990; 58 FR 34205, June 23, 1993]

### § 761.185 Certification program and retention of records by importers and persons generating PCBs in excluded manufacturing processes.

(a) In addition to meeting the basic requirements of § 761.1(f) and the definition of excluded manufacturing processes at § 761.3, manufacturers with processes inadvertently generating PCBs and importers of products containing inadvertently generated PCBs must report to EPA any excluded manufacturing process or imports for which the concentration of PCBs in products leaving the manufacturing site or imported is greater than 2 micrograms per gram (2 μg/g, roughly 2 ppm) for any resolvable gas chromatographic peak. Such reports must be filed by October 1, 1984 or, if no processes or imports require reports at the time, within 90 days of having processes or imports for which such reports are required.

(b) Manufacturers required to report by paragraph (a) of this section must transmit a letter notifying EPA of the number, the type, and the location of excluded manufacturing processes in which PCBs are generated when the PCB level in products leaving any manufacturing site is greater than 2 μg/g for any resolvable gas chromatographic peak. Importers required to report by paragraph (a) of this section must transmit a letter notifying EPA of the concentration of PCBs in imported products when the PCB concentration

of products being imported is greater than 2 μg/g for any resolvable gas chromatographic peak. Persons must also certify the following:

(1) Their compliance with all applicable requirements of § 761.1(f), including any applicable requirements for air and water releases and process waste disposal.

(2) Whether determinations of compliance are based on actual monitoring of PCB levels or on theoretical assessments.

(3) That such determinations of compliance are being maintained.

(4) If the determination of compliance is based on a theoretical assessment, the letter must also notify EPA of the estimated PCB concentration levels generated and released.

(c) Any person who reports pursuant to paragraph (a) of this section:

(1) Must have performed either a theoretical analysis or actual monitoring of PCB concentrations.

(2) Must maintain for a period of three years after ceasing process operations or importation, or for seven years, whichever is shorter, records containing the following information:

(i) *Theoretical analysis.* Manufacturers records must include: the reaction or reactions believed to be generating PCBs; the levels of PCBs generated; and the levels of PCBs released. Importers records must include: the reaction or reactions believed to be generating PCBs and the levels of PCBs generated; the basis for all estimations of PCB concentrations; and the name and qualifications of the person or persons performing the theoretical analysis; or

(ii) *Actual monitoring.* (A) The method of analysis.

(B) The results of the analysis, including data from the Quality Assurance Plan.

(C) Description of the sample matrix.

(D) The name of the analyst or analysts.

(E) The date and time of the analysis.

(F) Numbers for the lots from which the samples are taken.

(d) The certification required by paragraph (b) of this section must be signed by a responsible corporate officer. This certification must be maintained by each facility or importer for a period of three years after ceasing process operation or importation, or for seven years, whichever is shorter, and must be made available to EPA upon request. For the purpose of this section, a responsible corporate officer means:

(1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.

(2) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000 (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(e) Any person signing a document under paragraph (d) of this section shall also make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information. Based on my inquiry of the person or persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for falsifying information, including the possibility of fines and imprisonment for knowing violations.

Dated: _____

Signature: _____

(f) This report must be submitted to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATTN: PCB Notification. This report must be submitted by October 1, 1984 or within 90 days of starting up processes or commencing importation of PCBs.

(g) This certification process must be repeated whenever process conditions

are significantly modified to make the previous certification no longer valid.

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605)

[49 FR 28191, July 10, 1984; 49 FR 33019, Aug. 20, 1984, as amended at 53 FR 12524, Apr. 15, 1988; 58 FR 34205, June 23, 1993; 59 FR 33697, June 30, 1994; 60 FR 34465, July 3, 1995]

### § 761.187 Reporting importers and by persons generating PCBs in excluded manufacturing processes.

In addition to meeting the basic requirements of § 761.1(f) and the definition of excluded manufacturing process at § 761.3, PCB-generating manufacturing processes or importers of PCB-containing products shall be considered ''excluded manufacturing processes'' only when the following conditions are met:

(a) Data are reported to the EPA by the owner/operator or importer concerning the total quantity of PCBs in product from excluded manufacturing processes leaving any manufacturing site in any calendar year when such quantity exceeds 0.0025 percent of that site's rated capacity for such manufacturing processes as of October 1, 1984; or the total quantity of PCBs imported in any calendar year when such quantity exceeds 0.0025 percent of the average total quantity of such product containing PCBs imported by such importer during the years 1978, 1979, 1980, 1981 and 1982.

(b) Data are reported to the EPA by the owner/operator concerning the total quantity of inadvertently generated PCBs released to the air from excluded manufacturing processes at any manufacturing site in any calendar year when such quantity exceeds 10 pounds.

(c) Data are reported to the EPA by the owner/operator concerning the total quantity of inadvertently generated PCBs released to water from excluded manufacturing processes from any manufacturing site in any calendar year when such quantity exceeds 10 pounds.

(d) These reports must be submitted to the Document Control Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room G–099, 401 M St., SW., Washington, DC., 20460, ATTN: PCB Notification.

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605)

[49 FR 28192, July 10, 1984, as amended at 53 FR 12524, Apr. 15, 1988; 58 FR 34205, June 23, 1993; 59 FR 33697, June 30, 1994; 60 FR 34465, July 3, 1995]

### § 761.193 Maintenance of monitoring records by persons who import, manufacture, process, distribute in commerce, or use chemicals containing inadvertently generated PCBs.

(a) Persons who import, manufacture, process, distribute in commerce, or use chemicals containing PCBs present as a result of inadvertent generation or recycling who perform any actual monitoring of PCB concentrations must maintain records of any such monitoring for a period of three years after a process ceases operation or importing ceases, or for seven years, whichever is shorter.

(b) Monitoring records maintained pursuant to paragraph (a) of this section must contain:

(1) The method of analysis.

(2) The results of the analysis, including data from the Quality Assurance Plan.

(3) Description of the sample matrix.

(4) The name of the analyst or analysts.

(5) The date and time of the analysis.

(6) Numbers for the lots from which the samples are taken.

(Sec. 6, Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605)

[49 FR 28193, July 10, 1984, as amended at 58 FR 34205, June 23, 1993]

## Subpart K—PCB Waste Disposal Records and Reports

SOURCE: 54 FR 52752, Dec. 21, 1989, unless otherwise noted.

### § 761.202 EPA identification numbers.

(a) *General.* Any generator, commercial storer, transporter, or disposer of PCB waste who is required to have an EPA identification number under this subpart must notify EPA of his/her PCB waste handling activities, using the notification procedures and form described in § 761.205. EPA will confirm

the EPA identification number of facilities already assigned one, and will assign an EPA identification number to facilities that do not have one.

(b) *Prohibitions.* After June 4, 1990:

(1) A generator of PCB waste shall not:

(i) Process, store, dispose of, transport, or offer for transportation PCB waste without having received an EPA identification number from the Agency. A generator of PCB waste who is exempted from notification under § 761.205(c)(1) or who notifies EPA in a timely manner under § 761.205(c)(2)(i), but has not yet received a unique identification number, shall be regarded as having received from EPA the identification number ''40 CFR PART 761.''

(ii) Offer the PCB waste to transporters, disposers, or commercial storers of PCB waste who have not received an EPA identification number.

(2) A transporter of PCB waste shall not:

(i) Transport PCB waste without having received an EPA identification number from EPA.

(ii) Deliver PCB waste to transporters, disposers, or commercial storers of PCB waste that have not received an EPA identification number.

(3) A commercial storer of PCB waste shall not accept any PCB waste for storage without having received an EPA identification number from EPA.

(4) A disposer of PCB waste shall not accept any PCB waste for disposal without having received an EPA identification number from EPA. A disposer of PCB waste who owns more than one disposal facility or mobile treatment unit shall not accept waste unless the disposer has received an EPA identification number for each facility or mobile unit.

(c) *PCB waste handled prior to effective date of this subpart.* Generators (other than generators exempt from notification under § 761.205(c)(1)), commercial storers, transporters, and disposers of PCB waste who are required to have EPA identification numbers under this subpart, and who were engaged in PCB waste handling activities on or prior to February 5, 1990, are not subject to the prohibitions of paragraph (b) of this section if they have applied for an EPA identification number in accordance with the applicable notification procedures of § 761.205. Such persons shall use the EPA identification number ''40 CFR PART 761,'' or a number assigned to the persons by EPA or a State under RCRA, until EPA issues to such persons a specific identification number under § 761.205(a), (b), or (c).

(d) *PCB waste first handled after effective date of this subpart.* Generators (other than generators exempt from notification under § 761.205(c)(1)), commercial storers, transporters, and disposers of PCB waste who are required to have EPA identification numbers under this subpart, and who first engage in PCB waste activities after February 5, 1990, are subject to the prohibitions in paragraph (b) of this section.

### § 761.205 Notification of PCB waste activity (EPA Form 7710–53).

(a)(1) All commercial storers, transporters, and disposers of PCB waste who were engaged in PCB waste handling activities on or prior to February 5, 1990 shall notify EPA of their PCB waste activities by filing EPA Form 7710–53 with EPA by no later than April 4, 1990. Upon receiving the notification form, EPA will assign an EPA identification number to each entity that notifies.

(2) All generators (other than generators exempt from notification under paragraph (c)(1) of this section), commercial storers, transporters, and disposers of PCB waste who first engage in PCB waste handling activities after February 5, 1990, shall notify EPA of their PCB waste activities by filing EPA Form 7710–53 with EPA prior to engaging in PCB waste handling activities.

(3) Any person required to notify EPA under this section shall file with EPA Form 7710–53. Copies of EPA Form 7710–53 are available from the Operation Branch (7404), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St. SW, Washington, DC 20460. Descriptive information and instructions for filling in the form are included in paragraphs (a)(4) (i) through (vii) of this section.

(4) All of the following information shall be provided to EPA on Form 7710–53:

(i) The name of the facility, and the name of the owner or operator of the facility.

(ii) EPA identification number, if any, previously issued to the facility.

(iii) The facility's mailing address.

(iv) The location of the facility.

(v) The facility's installation contact and telephone number.

(vi) The type of PCB waste activity engaged in at the facility.

(vii) Signature of the signer of the certification statement, typed or printed name and official title of signer, and date signed.

(viii) EPA has determined that the information in paragraphs (a)(4)(i) through (a)(4)(vii) of this section shall not be treated as confidential business information. This information will be disclosed to the public without further notice to the submitter unless the submitter provides a written justification (submitted with the notification form) which demonstrates extraordinary reasons why the information should be entitled to confidential treatment.

(b) Generators (other than those generators exempt from notification under paragraph (c)(1) of this section), commercial storers, transporters, and disposers of PCB waste who have previously notified EPA or a State of hazardous waste activities under RCRA shall notify EPA of their PCB waste activities under this part by filing EPA Form 7710–53 with EPA by no later than April 4, 1990. The notification shall include the EPA identification number previously issued by EPA or the State and upon receipt of the notification, EPA shall verify and authorize the use of the previously issued identification number for PCB waste activities.

(c)(1) Generators of PCB waste need not notify EPA and receive unique EPA identification numbers under this section, unless their PCB waste activities are described in paragraph (c)(2) of this section. Generators exempted from notifying EPA under this paragraph shall use the generic identification number ''40 CFR PART 761'' on the manifests, records, and reports which they shall prepare under this subpart, unless such generators elect to use a unique EPA identification number previously assigned to them under RCRA by EPA or a State.

(2) Generators of PCB waste who use, own, service, or process PCBs or PCB Items shall notify EPA of their PCB waste activities only if they own or operate PCB storage facilities subject to the storage requirements of § 761.65 (b) or (c)(7). Such generators shall notify EPA in the following manner:

(i) Generators storing PCB waste subject to the storage requirements of § 761.65 (b) or (c)(7) shall notify EPA by filing EPA Form 7710–53 with EPA by no later than April 4, 1990.

(ii) Generators who desire to commence storage of PCB waste after February 5, 1990 shall notify EPA and receive an EPA identification number before they may commence storage of PCBs at their facilities established under § 761.65 (b) or (c)(7).

(iii) A separate notification shall be submitted to EPA for each PCB storage facility owned or operated by generators of PCB waste. Upon receiving these notifications, EPA will assign generators unique EPA identification numbers for each storage facility notifying EPA under this section.

(d) Persons required to notify under this section shall file EPA Form 7710–53 with EPA by mailing the form to the following address: Chief, Operation Branch (7404), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW, Washington, DC 20460.

(e) The requirements under this section to notify EPA and obtain EPA identification numbers shall in no case excuse compliance by any person subject to the 1-year limit on storage prior to disposal under § 761.65(a).

[54 FR 52752, Dec. 21, 1989, as amended at 58 FR 15809, Mar. 24, 1993; 58 FR 34205, June 23, 1993; 59 FR 33697, June 30, 1994]

### § 761.207 The manifest—general requirements.

(a) A generator who relinquishes control over PCB wastes by transporting, or offering for transport by his own vehicle or by a vehicle owned by another person, PCB waste for commercial off-site storage or off-site disposal shall prepare a manifest on EPA Form 8700–22, and if necessary, a continuation sheet. The generator shall specify:

(1) For each bulk load of PCBs, the identity of the PCB waste, the earliest date of removal from service for disposal, and the weight in kilograms of the PCB waste.

(2) For each PCB Article Container or PCB Container, the unique identifying number, type of PCB waste (*e.g.*, soil, debris, small capacitors), earliest date of removal from service for disposal, and weight in kilograms of the PCB waste contained.

(3) For each PCB Article not in a PCB Container or PCB Article Container, the serial number if available, or other identification if there is no serial number, the date of removal from service for disposal, and weight in kilograms of the PCB waste in each PCB Article.

(b) EPA does not maintain supplies of printed copies of Form 8700–22 for public use, although printed copies of the manifest may be available from State offices. Camera-ready copies of the form are available for printing purposes from State offices, EPA Regional Offices, and EPA Headquarters.

(c) If the State to which the shipment is manifested (i.e., consignment State) supplies the manifest and requires its use, then the generator must use that manifest.

(d) If the consignment State does not supply the manifest, but the State in which the generator is located (i.e., generator State) supplies the manifest and requires its use, then the generator must use that State's manifest.

(e) If both the consignment State and the generator State supply manifests and require their use, the generator must use the consignment State's manifest.

(f) If neither the generator State nor the consignment State supplies the manifest, the generator may obtain the manifest from any source.

(g) A generator shall designate on the manifest one off-site commercial storage or disposal facility approved under this part for the commercial storage or disposal of the PCBs and PCB Items described on the manifest.

(h) If the transporter is unable to deliver the PCB waste to the designated disposer or commercial storer, the transporter must contact the generator of the PCB waste for instructions. The generator shall either designate another approved disposer or commercial storer, or instruct the transporter to return the PCB waste back to the generator.

(i) The manifest which accompanies the PCB waste shall consist of at a minimum the number of copies required to provide the generator, the initial transporter, each subsequent transporter, and the owner or operator of the designated commercial storage or disposal facility with one legible copy each for their records, and one additional copy to be returned to the generator by the owner or operator of the first designated commercial storage or disposal facility.

(j) The requirements of this section apply only to PCB wastes as defined in § 761.3. This includes PCB wastes with PCB concentrations below 50 ppm where the PCB concentration below 50 ppm was the result of dilution; these PCB wastes are required, under § 761.1(b), to be managed as if they contained PCB concentrations greater than 50 ppm. An example of such a PCB waste is spill cleanup material containing less than 50 ppm PCBs when the spill involved material containing greater than 50 ppm.

**§ 761.208 Use of the manifest.**

(a)(1) The generator of PCB waste shall:

(i) Sign the manifest certification by hand.

(ii) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest.

(iii) Retain one copy among its records in accordance with § 761.209(a).

(iv) Give to the transporter the remaining copies of the manifest that will accompany the shipment of PCB waste.

(2) For bulk shipments of PCB waste within the United States transported solely by water, the generator shall send three copies of the manifest dated and signed in accordance with this section directly to the owner or operator of the designated commercial storage or disposal facility. Copies of the manifest are not required for each transporter.

(3) For rail shipments of PCB waste within the United States which originate at the site of generation, the generator shall send at least three copies of the manifest dated and signed in accordance with this section to:

(i) The next non-rail transporter, if any.

(ii) The designated commercial storage or disposal facility if transported solely by rail.

(4) When a generator has employed an independent transporter to transport the PCB waste to a commercial storer or disposer, the generator shall confirm by telephone, or by other means of confirmation agreed to by both parties, that the commercial storer or disposer actually received the manifested waste. The generator shall confirm receipt of the waste by close of business the day after he receives the manifest hand-signed by the commercial storer or disposer, in accordance with paragraph (c)(1)(iv) of this section. If the generator has not received the hand-signed manifest within 35 days after the independent transporter accepted the PCB waste, the generator shall telephone, or communicate with by some other agreed-upon means, the disposer or commercial storer to determine whether the PCB waste has actually been received. If the PCB waste has not been received, the generator shall contact the independent transporter to determine the disposition of the PCB waste. If the generator has not received a hand-signed manifest from an EPA-approved facility within 10 days from the date of the telephone call or other agreed upon means of communication, to the independent transporter, the generator shall submit an exception report to the EPA Regional Administrator for the Region in which the generator is located, as specified in § 761.215. The generator shall retain a written record of all telephone or other confirmations to be included in the annual document log, in accordance with § 761.180.

(b)(1) A transporter shall not accept PCB waste from a generator unless it is accompanied by a manifest signed by the generator in accordance with paragraph (a)(1) of this section, except that a manifest is not required if any one of the following conditions exists:

(i) The shipment of PCB waste consists solely of PCB wastes with PCB concentrations below 50 ppm, unless the PCB concentration below 50 ppm was the result of dilution, in which case § 761.1(b) requires that the waste be managed as if it contained PCBs at the concentration prior to dilution.

(ii) The PCB waste is accepted by the transporter for transport only to a storage or disposal facility owned or operated by the generator of the PCB waste.

(2) Before transporting the PCB waste, the transporter shall sign and date the manifest acknowledging acceptance of the PCB waste from the generator. The transporter shall return a signed copy to the generator before leaving the generator's facility.

(3) The transporter shall ensure that the manifest accompanies the PCB waste.

(4) A transporter who delivers PCB waste to another transporter, or to the designated commercial storer or disposer of PCB waste, shall:

(i) Obtain the date of delivery and the handwritten signature of the subsequent transporter of PCB waste, or of the owner or operator of the designated commercial storage or disposal facility on the manifest.

(ii) Retain one copy of the manifest in accordance with § 761.209(b).

(iii) Give the remaining copies of the manifest to the accepting transporter of PCB waste, or to the designated commercial storage or disposal facility.

(5) The requirements of paragraphs (b) (3) and (4) of this section shall not apply to transporters of bulk shipments by water if all of the following conditions are met:

(i) The PCB waste is delivered by water (bulk shipment) to the designated commercial storage or disposal facility.

(ii) A shipping paper containing all the information required on the manifest (excluding EPA identification number, generator certification, and signatures) accompanies the PCB waste.

(iii) The transporter delivering the PCB waste obtains the date of delivery and handwritten signature of the owner or operator of the designated

commercial storage or disposal facility on either the manifest or the shipping paper.

(iv) The person delivering the PCB waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility.

(v) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with § 761.209(b).

(6) For shipments involving rail transportation, the requirements of paragraphs (b) (3) and (b)(4) of this section shall not apply. Instead, the requirements described at § 263.20(f) of this chapter for the rail transportation of hazardous waste apply to such shipments. The rail transporter shall retain one copy of the manifest or rail shipping paper in accordance with § 761.209(b).

(7) The transporter shall deliver the entire quantity of PCB waste accepted from a generator or transporter to either of the following destinations:

(i) The designated commercial storage or disposal facility listed on the manifest.

(ii) The next designated transporter of PCB waste.

(8) If the PCB waste cannot be delivered in accordance with paragraph (b)(7) of this section, the transporter shall contact the generator for further directions and shall revise the manifest and/or return the PCB waste according to the generator's instructions.

(9) No provision of this section shall be construed to affect or limit the applicability of any requirement applicable to transporters of PCB waste under regulations issued by the Department of Transportation (DOT) and set forth at 49 CFR part 171.

(c)(1) If a commercial storage or disposal facility receives an off-site shipment of PCB waste accompanied by a manifest, the owner or operator, or his agent, shall:

(i) Sign and date each copy of the manifest to certify that the PCB waste covered by the manifest was received.

(ii) Note any significant discrepancies in the manifest (as defined in § 761.210(a)(1)) on each copy of the manifest.

(iii) Immediately give the transporter at least one copy of the signed manifest.

(iv) Within 30 days after the delivery, send a copy of the manifest to the generator.

(v) Retain a copy of each manifest among the facility's records in accordance with § 761.209(d).

(2) If a commercial storage or disposal facility receives PCB waste from a rail or water (bulk shipment) transporter accompanied by a shipping paper containing all the information required on the manifest except the EPA identification numbers, generator's certification, and signatures, the owner or operator, or his agent, shall:

(i) Sign and date each copy of the manifest or shipping paper to certify that the PCB waste covered by the manifest or shipping paper was received.

(ii) Note any significant discrepancies in the manifest or shipping paper on each copy of the manifest or shipping paper.

(iii) Immediately give the rail or water transporter at least one copy of the manifest or shipping paper, if applicable.

(iv) Within 30 days after the delivery, send a copy of the signed and dated manifest to the generator; however, if the manifest has not been received within 30 days after delivery, the owner or operator shall send a copy of the shipping paper signed and dated to the generator.

(v) Retain at the commercial storage or disposal facility a copy of the manifest and shipping paper, if signed in lieu of the manifest, in accordance with § 761.209(d).

(3) Whenever an off-site shipment of PCB waste is initiated from a commercial storage or disposal facility, the owner or operator of the commercial storage or disposal facility shall comply with the manifest requirements that apply to generators of PCB waste.

### § 761.209 Retention of manifest records.

(a) A generator of PCB waste shall keep a copy of each manifest signed in accordance with § 761.208(a)(1) until the

generator receives a signed copy from the designated commercial storage or disposal facility which received the PCB waste. The copy signed by the commercial storer or disposer shall be retained for at least 3 years from the date the PCB waste was accepted by the initial transporter. A generator subject to annual document requirements under § 761.180 shall retain copies of each manifest for the period required by § 761.180(a).

(b)(1) A transporter of PCB waste shall keep a copy of the manifest signed by the generator, transporter, and the next designated transporter, if applicable, or the owner or operator of the designated commercial storage or disposal facility. This copy shall be retained for a period of at least 3 years from the date the PCB waste was accepted by the initial transporter.

(2) For shipments of PCB waste delivered to the designated commercial storage or disposal facility by water (bulk shipment), each water (bulk shipment) transporter shall retain a copy of the shipping paper described in § 761.208(b)(5)(ii) for a period of at least 3 years from the date the PCB waste was accepted by the initial transporter.

(3) For shipments of PCB waste by rail within the United States:

(i) The initial rail transporter shall keep a copy of the manifest and the shipping paper required to accompany the PCB waste for a period of at least 3 years from the date the PCB waste was accepted by the initial transporter.

(ii) The final rail transporter shall keep a copy of the signed manifest, or the required shipping paper if signed by the designated facility in lieu of the manifest, for a period of at least 3 years from the date the PCB waste was accepted by the initial transporter.

(c) The owner or operator of a PCB commercial storage or disposal facility that receives off-site shipments of PCB waste shall retain at the facility for at least 3 years a copy of each manifest or shipping paper that the owner or operator signs in accordance with § 761.208(c)(1) or (c)(3).

(d) The periods of record retention required by this section shall be extended automatically during the course of any outstanding enforcement action regarding the regulated activity.

[54 FR 52752, Dec. 21, 1989, as amended at 58 FR 34205, June 23, 1993]

### § 761.210 Manifest discrepancies.

(a) Manifest discrepancies are differences between the quantity or type of PCB waste designated on the manifest or shipping paper and the quantity or type of PCB waste actually delivered to and received by a designated facility.

(1) Significant discrepancies in quantity are:

(i) Variations greater than 10 percent in weight of PCB waste in containers.

(ii) Any variation in piece count, such as a discrepancy of one PCB Transformer or PCB Container or PCB Article Container in a truckload.

(2) Significant discrepancies in type of PCB waste are obvious differences which may be discovered by inspection or waste analysis, such as the substitution of solids for liquids or the substitution of high concentration PCBs (above 500 ppm) with lower concentration materials.

(b) Upon discovering a significant discrepancy, the owner or operator of the designated commercial storage or disposal facility shall attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the PCB waste, such owner or operator shall immediately submit to the Regional Administrator for the Region in which the designated facility is located a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

[54 FR 52752, Dec. 21, 1989, as amended at 58 FR 34205, June 23, 1993]

### § 761.211 Unmanifested waste report.

(a) After April 4, 1990, if a PCB commercial storage or disposal facility receives any shipment of PCB waste from an off-site source without an accompanying manifest or shipping paper (where required in place of a manifest), and any part of the shipment consists of any PCB waste regulated for disposal, then the owner or operator of

the commercial storage or disposal facility shall attempt to contact the generator, using information supplied by the transporter, to obtain a manifest or to return the PCB waste.

(b) If the owner or operator of the commercial storage or disposal facility cannot contact the generator of the PCB waste, he shall notify the Regional Administrator of the EPA region in which his facility is located of the unmanifested PCB waste so that the Regional Administrator can determine whether further actions are required before the owner or operator may store or dispose of the unmanifested PCB waste.

(c) Within 15 days after receiving the unmanifested PCB waste, the owner or operator shall prepare and submit a report to the Regional Administrator for the Region in which the commercial storage or disposal facility is located and to the Regional Administrator for the Region in which the PCB waste originated, if known. The report may be submitted on EPA Form 8700–13B, or by a written letter designated ''Unmanifested Waste Report.'' The report shall include the following information:

(1) The EPA identification number, name, and address of the PCB commercial storage or disposal facility.

(2) The date the commercial storage or disposal facility received the unmanifested PCB waste.

(3) The EPA identification number, name, and address of the generator and transporter, if available.

(4) A description of the type and quantity of the unmanifested PCB waste received at the facility.

(5) A brief explanation of why the waste was unmanifested, if known.

(6) The disposition made of the unmanifested waste by the commercial storage or disposal facility, including:

(i) If the waste was stored or disposed by that facility, was the generator identified and was a manifest subsequently supplied.

(ii) If the waste was sent back to the generator, why and when.

[54 FR 52752, Dec. 21, 1989, as amended at 58 FR 34205, June 23, 1993]

**§ 761.215 Exception reporting.**

(a) A generator of PCB waste, who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated PCB commercial storage or disposal facility within 35 days of the date the waste was accepted by the initial transporter, shall immediately contact the transporter and/or the owner or operator of the designated facility to determine the status of the PCB waste.

(b) A generator of PCB waste shall submit an Exception Report to the Regional Administrator for the Region in which the generator is located if the generator has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter. The Exception Report shall include the following:

(1) A legible copy of the manifest for which the generator does not have confirmation of delivery.

(2) A cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the PCB waste and the results of those efforts.

(c) A disposer of PCB waste shall submit a One-year Exception Report to the Regional Administrator for the Region in which the disposal facility is located whenever the following occurs:

(1) The disposal facility receives PCBs or PCB Items on a date more than 9 months from the date the PCBs or PCB Items were removed from service for disposal, as indicated on the manifest or continuation sheet; and

(2) Because of contractual commitments or other factors affecting the facility's disposal capacity, the disposer of PCB waste could not dispose of the affected PCBs or PCB Items within 1 year of the date of removal from service for disposal.

(d) A generator or commercial storer of PCB waste who manifests PCBs or PCB Items to a disposer of PCB waste shall submit a One-year Exception Report to the Regional Administrator for the Region in which the generator or commercial storer is located whenever the following occurs:

(1) The generator or commercial storer transferred the PCBs or PCB Items

to the disposer of PCB waste on a date within 9 months from the date of removal from service for disposal of the affected PCBs or PCB Items, as indicated on the manifest or continuation sheet; and

(2) The generator or commercial storer either has not received within 13 months from the date of removal from service for disposal a Certificate of Disposal confirming the disposal of the affected PCBs or PCB Items, or the generator or commercial storer receives a Certificate of Disposal confirming disposal of the affected PCBs or PCB Items on a date more than 1 year after the date of removal from service.

(e) The One-year Exception Report shall include:

(1) A legible copy of any manifest or other written communication relevant to the transfer and disposal of the affected PCBs or PCB Items.

(2) A cover letter signed by the submitter or an authorized representative explaining:

(i) The date(s) when the PCBs or PCB Items were removed from service for disposal.

(ii) The date(s) when the PCBs or PCB Items were received by the submitter of the report, if applicable.

(iii) The date(s) when the affected PCBs or PCB Items were transferred to a designated disposal facility.

(iv) The identity of the transporters, commercial storers, or disposers known to be involved with the transaction.

(v) The reason, if known, for the delay in bringing about the disposal of the affected PCBs or PCB Items within 1 year from the date of removal from service for disposal.

[54 FR 52752, Dec. 21, 1989, as amended at 55 FR 26205, June 27, 1990; 58 FR 34205, June 23, 1993]

### § 761.218 Certificate of disposal.

(a) For each shipment of manifested PCB waste that the owner or operator of a disposal facility accepts by signing the manifest, the owner or operator of the disposal facility shall prepare a Certificate of Disposal for the PCBs and PCB Items disposed of at the facility, which shall include:

(1) The identity of the disposal facility, by name, address, and EPA identification number.

(2) The identity of the PCB waste affected by the Certificate of Disposal including reference to the manifest number for the shipment.

(3) A statement certifying the fact of disposal of the identified PCB waste, including the date(s) of disposal, and identifying the disposal process used.

(4) A certification as defined in § 761.3.

(b) The Certificate of Disposal shall be sent to the generator identified on the manifest which accompanied the shipment of PCB waste within 30 days of the date that disposal of the PCB waste identified on the manifest was completed.

(c) The disposal facility shall keep a copy of each Certificate of Disposal among the records that it retains under § 761.180(b).

(d)(1) Generators of PCB waste shall keep a copy of each Certificate of Disposal that they receive from disposers of PCB waste among the records they retain under § 761.180(a).

(2) Commercial storers of PCB waste shall keep a copy of each Certificate of Disposal that they receive from disposers of PCB waste among the records they retain under § 761.180(b).

## PART 763—ASBESTOS

### Subparts A–C—[Reserved]

### Subpart D—[Reserved]

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AUTHORITY: 15 U.S.C. 2605, 2607(c), 2643, and 2646.

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## Subpart E—Asbestos-Containing Materials in Schools

SOURCE: 52 FR 41846, Oct. 30, 1987, unless otherwise noted.

### § 763.80 Scope and purpose.

(a) This rule requires local education agencies to identify friable and nonfriable asbestos-containing material (ACM) in public and private elementary and secondary schools by visually inspecting school buildings for such materials, sampling such materials if they are not assumed to be ACM, and having samples analyzed by appropriate techniques referred to in this rule. The rule requires local education agencies to submit management plans to the Governor of their State by October 12, 1988, begin to implement the plans by July 9, 1989, and complete implementation of the plans in a timely fashion. In addition, local education agencies are required to use persons who have been accredited to conduct inspections, reinspections, develop management plans, or perform response actions. The rule also includes recordkeeping requirements. Local education agencies may contractually delegate their duties under this rule, but they remain responsible for the proper performance of those duties. Local education agencies are encouraged to consult with EPA Regional Asbestos Coordinators, or if applicable, a State's lead agency designated by the State Governor, for assistance in complying with this rule.

(b) Local education agencies must provide for the transportation and disposal of asbestos in accordance with EPA's ''Asbestos Waste Management Guidance.'' For convenience, applicable sections of this guidance are reprinted as Appendix D of this subpart. There are regulations in place, however, that affect transportation and disposal of asbestos waste generated by this rule. The transportation of asbestos waste is covered by the Department of Transportation (49 CFR Part 173, subpart J) and disposal is covered by the National Emissions Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 61, subpart M).

### § 763.83 Definitions.

For purposes of this subpart:

*Act* means the Toxic Substances Control Act (TSCA), 15 U.S.C. 2601, *et seq.*

*Accessible* when referring to ACM means that the material is subject to

disturbance by school building occupants or custodial or maintenance personnel in the course of their normal activities.

*Accredited* or *accreditation* when referring to a person or laboratory means that such person or laboratory is accredited in accordance with section 206 of Title II of the Act.

*Air erosion* means the passage of air over friable ACBM which may result in the release of asbestos fibers.

*Asbestos* means the asbestiform varieties of: Chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonitegrunerite); anthophyllite; tremolite; and actinolite.

*Asbestos-containing material* (ACM) when referring to school buildings means any material or product which contains more than 1 percent asbestos.

*Asbestos-containing building material* (ACBM) means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

*Asbestos debris* means pieces of ACBM that can be identified by color, texture, or composition, or means dust, if the dust is determined by an accredited inspector to be ACM.

*Damaged friable miscellaneous ACM* means friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

*Damaged friable surfacing ACM* means friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

*Damaged or significantly damaged thermal system insulation ACM* means thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering, in whole or in part, is crushed, water-stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges or other signs of physical injury to ACM; occasional water damage on the protective coverings/jackets; or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.

*Encapsulation* means the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

*Enclosure* means an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air.

*Fiber release episode* means any uncontrolled or unintentional disturbance of ACBM resulting in visible emission.

*Friable* when referring to material in a school building means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously nonfriable material after such previously nonfriable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

*Functional space* means a room, group of rooms, or homogeneous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), a cafeteria, gymnasium, hallway(s), designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

*High-efficiency particulate air* (HEPA) refers to a filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 µm in diameter or larger.

*Homogeneous area* means an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.

*Local education agency* means:

(1) Any local educational agency as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 3381).

(2) The owner of any nonpublic, nonprofit elementary, or secondary school building.

(3) The governing authority of any school operated under the defense dependent's education system provided for under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921, et seq.).

*Miscellaneous ACM* means miscellaneous material that is ACM in a school building.

*Miscellaneous material* means interior building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation.

*Nonfriable* means material in a school building which when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.

*Operations and maintenance program* means a program of work practices to maintain friable ACBM in good condition, ensure clean up of asbestos fibers previously released, and prevent further release by minimizing and controlling friable ACBM disturbance or damage.

*Potential damage* means circumstances in which:

(1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities.

(2) There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

*Potential significant damage* means circumstances in which:

(1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities.

(2) There are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

(3) The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.

*Preventive measures* means actions taken to reduce disturbance of ACBM or otherwise eliminate the reasonable likelihood of the material's becoming damaged or significantly damaged.

*Removal* means the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school building.

*Repair* means returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

*Response action* means a method, including removal, encapsulation, enclosure, repair, operations and maintenance, that protects human health and the environment from friable ACBM.

*Routine maintenance area* means an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

*School* means any elementary or secondary school as defined in section 198

of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2854).

*School building* means:

(1) Any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the preparation of food.

(2) Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education.

(3) Any other facility used for the instruction or housing of students or for the administration of educational or research programs.

(4) Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described in this definition of ''school building'' under paragraphs (1), (2), or (3).

(5) Any portico or covered exterior hallway or walkway.

(6) Any exterior portion of a mechanical system used to condition interior space.

*Significantly damaged friable miscellaneous ACM* means damaged friable miscellaneous ACM where the damage is extensive and severe.

*Significantly damaged friable surfacing ACM* means damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

*State* means a State, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Northern Marianas, the Trust Territory of the Pacific Islands, and the Virgin Islands.

*Surfacing ACM* means surfacing material that is ACM.

*Surfacing material* means material in a school building that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

*Thermal system insulation* means material in a school building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

*Thermal system insulation ACM* means thermal system insulation that is ACM.

*Vibration* means the periodic motion of friable ACBM which may result in the release of asbestos fibers.

### § 763.84 General local education agency responsibilities.

Each local education agency shall:

(a) Ensure that the activities of any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with subpart E of this part.

(b) Ensure that all custodial and maintenance employees are properly trained as required by this subpart E and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).

(c) Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.

(d) Ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM.

(e) Ensure that warning labels are posted in accordance with § 763.95.

(f) Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under § 763.93(g).

(g)(1) Designate a person to ensure that requirements under this section are properly implemented.

(2) Ensure that the designated person receives adequate training to perform duties assigned under this section. Such training shall provide, as necessary, basic knowledge of:

(i) Health effects of asbestos.

(ii) Detection, identification, and assessment of ACM.

(iii) Options for controlling ACBM.

(iv) Asbestos management programs.

(v) Relevant Federal and State regulations concerning asbestos, including those in this subpart E and those of the Occupational Safety and Health Administration, U.S. Department of Labor, the U.S. Department of Transportation and the U.S. Environmental Protection Agency.

(h) Consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under this subpart.

**§763.85 Inspection and reinspections.**

(a) *Inspection*. (1) Except as provided in paragraph (a)(2) of this section, before October 12, 1988, local education agencies shall inspect each school building that they lease, own, or otherwise use as a school building to identify all locations of friable and nonfriable ACBM.

(2) Any building leased or acquired on or after October 12, 1988, that is to be used as a school building shall be inspected as described under paragraphs (a) (3) and (4) of this section prior to use as a school building. In the event that emergency use of an uninspected building as a school building is necessitated, such buildings shall be inspected within 30 days after commencement of such use.

(3) Each inspection shall be made by an accredited inspector.

(4) For each area of a school building, except as excluded under §763.99, each person performing an inspection shall:

(i) Visually inspect the area to identify the locations of all suspected ACBM.

(ii) Touch all suspected ACBM to determine whether they are friable.

(iii) Identify all homogeneous areas of friable suspected ACBM and all homogeneous areas of nonfriable suspected ACBM.

(iv) Assume that some or all of the homogeneous areas are ACM, and, for each homogeneous area that is not assumed to be ACM, collect and submit for analysis bulk samples under §§763.86 and 763.87.

(v) Assess, under §763.88, friable material in areas where samples are collected, friable material in areas that are assumed to be ACBM, and friable ACBM identified during a previous inspection.

(vi) Record the following and submit to the person designated under §763.84 a copy of such record for inclusion in the management plan within 30 days of the inspection:

(A) An inspection report with the date of the inspection signed by each accredited person making the inspection, State of accreditation, and if applicable, his or her accreditation number.

(B) An inventory of the locations of the homogeneous areas where samples are collected, exact location where each bulk sample is collected, dates that samples are collected, homogeneous areas where friable suspected ACBM is assumed to be ACM, and homogeneous areas where nonfriable suspected ACBM is assumed to be ACM.

(C) A description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and, if applicable, his or her accreditation number.

(D) A list of whether the homogeneous areas identified under paragraph (a)(4)(vi)(B) of this section, are surfacing material, thermal system insulation, or miscellaneous material.

(E) Assessments made of friable material, the name and signature of each accredited inspector making the assessment, State of accreditation, and if applicable, his or her accreditation number.

(b) *Reinspection*. (1) At least once every 3 years after a management plan is in effect, each local education agency shall conduct a reinspection of all friable and nonfriable known or assumed ACBM in each school building that they lease, own, or otherwise use as a school building.

(2) Each inspection shall be made by an accredited inspector.

(3) For each area of a school building, each person performing a reinspection shall:

(i) Visually reinspect, and reassess, under §763.88, the condition of all friable known or assumed ACBM.

(ii) Visually inspect material that was previously considered nonfriable ACBM and touch the material to determine whether it has become friable since the last inspection or reinspection.

(iii) Identify any homogeneous areas with material that has become friable since the last inspection or reinspection.

(iv) For each homogeneous area of newly friable material that is already assumed to be ACBM, bulk samples may be collected and submitted for analysis in accordance with §§ 763.86 and 763.87.

(v) Assess, under § 763.88, the condition of the newly friable material in areas where samples are collected, and newly friable materials in areas that are assumed to be ACBM.

(vi) Reassess, under § 763.88, the condition of friable known or assumed ACBM previously identified.

(vii) Record the following and submit to the person designated under § 763.84 a copy of such record for inclusion in the management plan within 30 days of the reinspection:

(A) The date of the reinspection, the name and signature of the person making the reinspection, State of accreditation, and if applicable, his or her accreditation number, and any changes in the condition of known or assumed ACBM.

(B) The exact locations where samples are collected during the reinspection, a description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and, if applicable, his or her accreditation number.

(C) Any assessments or reassessments made of friable material, the name and signature of the accredited inspector making the assessments, State of accreditation, and if applicable, his or her accreditation number.

(c) *General.* Thermal system insulation that has retained its structural integrity and that has an undamaged protective jacket or wrap that prevents fiber release shall be treated as nonfriable and therefore is subject only to periodic surveillance and preventive measures as necessary.

**§ 763.86 Sampling.**

(a) *Surfacing material.* An accredited inspector shall collect, in a statistically random manner that is representative of the homogeneous area, bulk samples from each homogeneous area of friable surfacing material that is not assumed to be ACM, and shall collect the samples as follows:

(1) At least three bulk samples shall be collected from each homogeneous area that is 1,000 $ft^2$ or less, except as provided in § 763.87(c)(2).

(2) At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 $ft^2$ but less than or equal to 5,000 $ft^2$, except as provided in § 763.87(c)(2).

(3) At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 $ft^2$, except as provided in § 763.87(c)(2).

(b) *Thermal system insulation.* (1) Except as provided in paragraphs (b) (2) through (4) of this section and § 763.87(c), an accredited inspector shall collect, in a randomly distributed manner, at least three bulk samples from each homogeneous area of thermal system insulation that is not assumed to be ACM.

(2) Collect at least one bulk sample from each homogeneous area of patched thermal system insulation that is not assumed to be ACM if the patched section is less than 6 linear or square feet.

(3) In a manner sufficient to determine whether the material is ACM or not ACM, collect bulk samples from each insulated mechanical system that is not assumed to be ACM where cement or plaster is used on fittings such as tees, elbows, or valves, except as provided under § 763.87(c)(2).

(4) Bulk samples are not required to be collected from any homogeneous area where the accredited inspector has determined that the thermal system insulation is fiberglass, foam glass, rubber, or other non-ACBM.

(c) *Miscellaneous material.* In a manner sufficient to determine whether material is ACM or not ACM, an accredited inspector shall collect bulk samples from each homogeneous area of friable miscellaneous material that is not assumed to be ACM.

(d) *Nonfriable suspected ACBM.* If any homogeneous area of nonfriable suspected ACBM is not assumed to be ACM, then an accredited inspector shall collect, in a manner sufficient to determine whether the material is ACM or not ACM, bulk samples from the homogeneous area of nonfriable suspected ACBM that is not assumed to be ACM.

**§763.87 Analysis.**

(a) Local education agencies shall have bulk samples, collected under §763.86 and submitted for analysis, analyzed for asbestos using laboratories accredited by the National Bureau of Standards (NBS). Local education agencies shall use laboratories which have received interim accreditation for polarized light microscopy (PLM) analysis under the EPA Interim Asbestos Bulk Sample Analysis Quality Assurance Program until the NBS PLM laboratory accreditation program for PLM is operational.

(b) Bulk samples shall not be composited for analysis and shall be analyzed for asbestos content by PLM, using the ''Interim Method for the Determination of Asbestos in Bulk Insulation Samples'' found at Appendix E to subpart E of this Part.

(c)(1) A homogeneous area is considered not to contain ACM only if the results of all samples required to be collected from the area show asbestos in amounts of 1 percent or less.

(2) A homogeneous area shall be determined to contain ACM based on a finding that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1 percent.

(d) The name and address of each laboratory performing an analysis, the date of analysis, and the name and signature of the person performing the analysis shall be submitted to the person designated under §763.84 for inclusion into the management plan within 30 days of the analysis.

[52 FR 41846, Oct. 30, 1987, as amended at 60 FR 31922, June 19, 1995]

**§763.88 Assessment.**

(a)(1) For each inspection and reinspection conducted under §763.85 (a) and (c) and previous inspections specified under §763.99, the local education agency shall have an accredited inspector provide a written assessment of all friable known or assumed ACBM in the school building.

(2) Each accredited inspector providing a written assessment shall sign and date the assessment, provide his or her State of accreditation, and if applicable, accreditation number, and submit a copy of the assessment to the person designated under §763.84 for inclusion in the management plan within 30 days of the assessment.

(b) The inspector shall classify and give reasons in the written assessment for classifying the ACBM and suspected ACBM assumed to be ACM in the school building into one of the following categories:

(1) Damaged or significantly damaged thermal system insulation ACM.

(2) Damaged friable surfacing ACM.

(3) Significantly damaged friable surfacing ACM.

(4) Damaged or significantly damaged friable miscellaneous ACM.

(5) ACBM with potential for damage.

(6) ACBM with potential for significant damage.

(7) Any remaining friable ACBM or friable suspected ACBM.

(c) Assessment may include the following considerations:

(1) Location and the amount of the material, both in total quantity and as a percentage of the functional space.

(2) Condition of the material, specifying:

(i) Type of damage or significant damage (e.g., flaking, blistering, water damage, or other signs of physical damage).

(ii) Severity of damage (e.g., major flaking, severely torn jackets, as opposed to occasional flaking, minor tears to jackets).

(iii) Extent or spread of damage over large areas or large percentages of the homogeneous area.

(3) Whether the material is accessible.

(4) The material's potential for disturbance.

(5) Known or suspected causes of damage or significant damage (e.g., air erosion, vandalism, vibration, water).

(6) Preventive measures which might eliminate the reasonable likelihood of

undamaged ACM from becoming significantly damaged.

(d) The local education agency shall select a person accredited to develop management plans to review the results of each inspection, reinspection, and assessment for the school building and to conduct any other necessary activities in order to recommend in writing to the local education agency appropriate response actions. The accredited person shall sign and date the recommendation, provide his or her State of accreditation, and, if applicable, provide his or her accreditation number, and submit a copy of the recommendation to the person designated under § 763.84 for inclusion in the management plan.

**§ 763.90 Response actions.**

(a) The local education agency shall select and implement in a timely manner the appropriate response actions in this section consistent with the assessment conducted in § 763.88. The response actions selected shall be sufficient to protect human health and the environment. The local education agency may then select, from the response actions which protect human health and the environment, that action which is the least burdensome method. Nothing in this section shall be construed to prohibit removal of ACBM from a school building at any time, should removal be the preferred response action of the local education agency.

(b) If damaged or significantly damaged thermal system insulation ACM is present in a building, the local education agency shall:

(1) At least repair the damaged area.

(2) Remove the damaged material if it is not feasible, due to technological factors, to repair the damage.

(3) Maintain all thermal system insulation ACM and its covering in an intact state and undamaged condition.

(c)(1) If damaged friable surfacing ACM or damaged friable miscellaneous ACM is present in a building, the local education agency shall select from among the following response actions: encapsulation, enclosure, removal, or repair of the damaged material.

(2) In selecting the response action from among those which meet the definitional standards in § 763.83, the local education agency shall determine which of these response actions protects human health and the environment. For purposes of determining which of these response actions are the least burdensome, the local education agency may then consider local circumstances, including occupancy and use patterns within the school building, and its economic concerns, including short- and long-term costs.

(d) If significantly damaged friable surfacing ACM or significantly damaged friable miscellaneous ACM is present in a building the local education agency shall:

(1) Immediately isolate the functional space and restrict access, unless isolation is not necessary to protect human health and the environment.

(2) Remove the material in the functional space or, depending upon whether enclosure or encapsulation would be sufficient to protect human health and the environment, enclose or encapsulate.

(e) If any friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous ACM that has potential for damage is present in a building, the local education agency shall at least implement an operations and maintenance (O&M) program, as described under § 763.91.

(f) If any friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous ACM that has potential for significant damage is present in a building, the local education agency shall:

(1) Implement an O&M program, as described under § 763.91.

(2) Institute preventive measures appropriate to eliminate the reasonable likelihood that the ACM or its covering will become significantly damaged, deteriorated, or delaminated.

(3) Remove the material as soon as possible if appropriate preventive measures cannot be effectively implemented, or unless other response actions are determined to protect human health and the environment. Immediately isolate the area and restrict access if necessary to avoid an imminent and substantial endangerment to human health or the environment.

(g) Response actions including removal, encapsulation, enclosure, or repair, other than small-scale, short-duration repairs, shall be designed and conducted by persons accredited to design and conduct response actions.

(h) The requirements of this subpart E in no way supersede the worker protection and work practice requirements under 29 CFR 1926.58 (Occupational Safety and Health Administration (OSHA) asbestos worker protection standards for construction), 40 CFR Part 763, subpart G (EPA asbestos worker protection standards for public employees), and 40 CFR Part 61, subpart M (National Emission Standards for Hazardous Air Pollutants—Asbestos).

(i) Completion of response actions. (1) At the conclusion of any action to remove, encapsulate, or enclose ACBM or material assumed to be ACBM, a person designated by the local education agency shall visually inspect each functional space where such action was conducted to determine whether the action has been properly completed.

(2)(i) A person designated by the local education agency shall collect air samples using aggressive sampling as described in Appendix A to this subpart E to monitor air for clearance after each removal, encapsulation, and enclosure project involving ACBM, except for projects that are of small-scale, short-duration.

(ii) Local education agencies shall have air samples collected under this section analyzed for asbestos using laboratories accredited by the National Bureau of Standards to conduct such analysis using transmission electron microscopy (TEM) or, under circumstances permitted in this section, laboratories enrolled in the American Industrial Hygiene Association Proficiency Analytical Testing Program for phase contrast microscopy (PCM).

(iii) Until the National Bureau of Standards TEM laboratory accreditation program is operational, local educational agencies shall use laboratories that use the protocol described in Appendix A to subpart E of this part.

(3) Except as provided in paragraphs (i)(4), and (i)(5), of this section, an action to remove, encapsulate, or enclose ACBM shall be considered complete when the average concentration of asbestos of five air samples collected within the affected functional space and analyzed by the TEM method in Appendix A of this subpart E, is not statistically significantly different, as determined by the Z-test calculation found in Appendix A of this subpart E, from the average asbestos concentration of five air samples collected at the same time outside the affected functional space and analyzed in the same manner, and the average asbestos concentration of the three field blanks described in Appendix A of this subpart E is below the filter background level, as defined in Appendix A of this subpart E, of 70 structures per square millimeter (70 s/mm$^2$).

(4) An action may also be considered complete if the volume of air drawn for each of the five samples collected within the affected functional space is equal to or greater than 1,199 L of air for a 25 mm filter or equal to or greater than 2,799 L of air for a 37 mm filter, and the average concentration of asbestos as analyzed by the TEM method in Appendix A of this subpart E, for the five air samples does not exceed the filter background level, as defined in Appendix A, of 70 structures per square millimeter (70 s/mm$^2$). If the average concentration of asbestos of the five air samples within the affected functional space exceeds 70 s/mm$^2$, or if the volume of air in each of the samples is less than 1,199 L of air for a 25 mm filter or less than 2,799 L of air for a 37 mm filter, the action shall be considered complete only when the requirements of paragraph (i)(3) or (i)(5), of this section are met.

(5) At any time, a local education agency may analyze air monitoring samples collected for clearance purposes by phase contrast microscopy (PCM) to confirm completion of removal, encapsulation, or enclosure of ACBM that is greater than small-scale, short-duration and less than or equal to 160 square feet or 260 linear feet. The action shall be considered complete when the results of samples collected in the affected functional space and analyzed by phase contrast microscopy using the National Institute for Occupational Safety and Health (NIOSH)

Method 7400 entitled ''Fibers'' published in the NIOSH Manual of Analytical Methods, 3rd Edition, Second Supplement, August 1987, show that the concentration of fibers for each of the five samples is less than or equal to a limit of quantitation for PCM (0.01 fibers per cubic centimeter (0.01 f/cm $^3$) of air). The method is available for public inspection at the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington, DC, 20408, and the Non-Confidential Information Center (NCIC) (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room B–607 NEM, 401 M Street, SW., Washington, DC, 20460, between the hours of 12 p.m. and 4 p.m. weekdays excluding legal holidays. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. The method is incorporated as it exists on the effective date of this rule, and a notice of any change to the method will be published in the FEDERAL REGISTER.

(6) To determine the amount of ACBM affected under paragraph (i)(5) of this section, the local education agency shall add the total square or linear footage of ACBM within the containment barriers used to isolate the functional space for the action to remove, encapsulate, or enclose the ACBM. Contiguous portions of material subject to such action conducted concurrently or at approximately the same time within the same school building shall not be separated to qualify under paragraph (i)(5), of this section.

[52 FR 41846, Oct. 30, 1987, as amended at 53 FR 12525, Apr. 15, 1988; 60 FR 31922, June 19, 1995; 60 FR 34465, July 3, 1995]

### § 763.91 Operations and maintenance.

(a) *Applicability*. The local education agency shall implement an operations, maintenance, and repair (O&M) program under this section whenever any friable ACBM is present or assumed to be present in a building that it leases, owns, or otherwise uses as a school building. Any material identified as nonfriable ACBM or nonfriable assumed ACBM must be treated as friable ACBM for purposes of this section when the material is about to become friable as a result of activities performed in the school building.

(b) *Worker protection*. The protection provided by EPA at 40 CFR 763.121 for worker protection during asbestos abatement projects is extended to employees of local education agencies who perform operations, maintenance, and repair (O&M) activities involving ACM and who are not covered by the OSHA asbestos construction standard at 29 CFR 1926.58 or an asbestos worker approved by OSHA under section 19 of the Occupational Safety and Health Act. Local education agencies may consult Appendix B of this subpart if their employees are performing operations, maintenance, and repair activities that are of small-scale, short-duration.

(c) *Cleaning*—(1) *Initial cleaning.* Unless the building has been cleaned using equivalent methods within the previous 6 months, all areas of a school building where friable ACBM, damaged or significantly damaged thermal system insulation ACM, or friable suspected ACBM assumed to be ACM are present shall be cleaned at least once after the completion of the inspection required by § 763.85(a) and before the initiation of any response action, other than O&M activities or repair, according to the following procedures:

(i) HEPA-vacuum or steam-clean all carpets.

(ii) HEPA-vacuum or wet-clean all other floors and all other horizontal surfaces.

(iii) Dispose of all debris, filters, mopheads, and cloths in sealed, leak-tight containers.

(2) *Additional cleaning.* The accredited management planner shall make a written recommendation to the local education agency whether additional cleaning is needed, and if so, the methods and frequency of such cleaning.

(d) *Operations and maintenance activities.* The local education agency shall ensure that the procedures described below to protect building occupants shall be followed for any operations and maintenance activities disturbing friable ACBM:

(1) Restrict entry into the area by persons other than those necessary to

perform the maintenance project, either by physically isolating the area or by scheduling.

(2) Post signs to prevent entry by unauthorized persons.

(3) Shut off or temporarily modify the air-handling system and restrict other sources of air movement.

(4) Use work practices or other controls, such as, wet methods, protective clothing, HEPA-vacuums, mini-enclosures, glove bags, as necessary to inhibit the spread of any released fibers.

(5) Clean all fixtures or other components in the immediate work area.

(6) Place the asbestos debris and other cleaning materials in a sealed, leak-tight container.

(e) *Maintenance activities other than small-scale, short-duration.* The response action for any maintenance activities disturbing friable ACBM, other than small-scale, short-duration maintenance activities, shall be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.

(f) *Fiber release episodes*—(1) *Minor fiber release episode.* The local education agency shall ensure that the procedures described below are followed in the event of a minor fiber release episode (i.e., the falling or dislodging of 3 square or linear feet or less of friable ACBM): 5

(i) Thoroughly saturate the debris using wet methods.

(ii) Clean the area, as described in paragraph (e) of this section.

(iii) Place the asbestos debris in a sealed, leak-tight container.

(iv) Repair the area of damaged ACM with materials such as asbestos-free spackling, plaster, cement, or insulation, or seal with latex paint or an encapsulant, or immediately have the appropriate response action implemented as required by § 763.90.

(2) *Major fiber release episode.* The local education agency shall ensure that the procedures described below are followed in the event of a major fiber release episode (i.e., the falling or dislodging of more than 3 square or linear feet of friable ACBM):

(i) Restrict entry into the area and post signs to prevent entry into the area by persons other than those necessary to perform the response action.

(ii) Shut off or temporarily modify the air-handling system to prevent the distribution of fibers to other areas in the building.

(iii) The response action for any major fiber release episode must be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.

### § 763.92 Training and periodic surveillance.

(a) *Training.* (1) The local education agency shall ensure, prior to the implementation of the O&M provisions of the management plan, that all members of its maintenance and custodial staff (custodians, electricians, heating/air conditioning engineers, plumbers, etc.) who may work in a building that contains ACBM receive awareness training of at least 2 hours, whether or not they are required to work with ACBM. New custodial and maintenance employees shall be trained within 60 days after commencement of employment. Training shall include, but not be limited to:

(i) Information regarding asbestos and its various uses and forms.

(ii) Information on the health effects associated with asbestos exposure.

(iii) Locations of ACBM identified throughout each school building in which they work.

(iv) Recognition of damage, deterioration, and delamination of ACBM.

(v) Name and telephone number of the person designated to carry out general local education agency responsibilities under § 763.84 and the availability and location of the management plan.

(2) The local education agency shall ensure that all members of its maintenance and custodial staff who conduct any activities that will result in the disturbance of ACBM shall receive training described in paragraph (a)(1) of this section and 14 hours of additional training. Additional training shall include, but not be limited to:

(i) Descriptions of the proper methods of handling ACBM.

(ii) Information on the use of respiratory protection as contained in the EPA/NIOSH *Guide to Respiratory Protection for the Asbestos Abatement Industry,*

September 1986 (EPA 560/OPPTS–86–001), available from the Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room E–543B, 401 M St., SW., Washington, DC, 20460, Telephone: (202) 554–1404, TDD: (202) 544–0551 and other personal protection measures.

(iii) The provisions of this section and § 763.91, Appendices A, B, C, D of this subpart E of this part, EPA regulations contained in 40 CFR part 763, subpart G, and in 40 CFR part 61, subpart M, and OSHA regulations contained in 29 CFR 1926.58.

(iv) Hands-on training in the use of respiratory protection, other personal protection measures, and good work practices.

(3) Local education agency maintenance and custodial staff who have attended EPA-approved asbestos training or received equivalent training for O&M and periodic surveillance activities involving asbestos shall be considered trained for the purposes of this section.

(b) *Periodic surveillance.* (1) At least once every 6 months after a management plan is in effect, each local education agency shall conduct periodic surveillance in each building that it leases, owns, or otherwise uses as a school building that contains ACBM or is assumed to contain ACBM.

(2) Each person performing periodic surveillance shall:

(i) Visually inspect all areas that are identified in the management plan as ACBM or assumed ACBM.

(ii) Record the date of the surveillance, his or her name, and any changes in the condition of the materials.

(iii) Submit to the person designated to carry out general local education agency responsibilities under § 763.84 a copy of such record for inclusion in the management plan.

[52 FR 41846, Oct. 30, 1987, as amended at 60 FR 34465, July 3, 1995]

### § 763.93 Management plans.

(a)(1) On or before October 12, 1988, each local education agency shall develop an asbestos management plan for each school, including all buildings that they lease, own, or otherwise use as school buildings, and submit the plan to an Agency designated by the Governor of the State in which the local education agency is located. The plan may be submitted in stages that cover a portion of the school buildings under the authority of the local education agency.

(2) If a building to be used as part of a school is leased or otherwise acquired after October 12, 1988, the local education agency shall include the new building in the management plan for the school prior to its use as a school building. The revised portions of the management plan shall be submitted to the Agency designated by the Governor.

(3) If a local education agency begins to use a building as a school after October 12, 1988, the local education agency shall submit a management plan for the school to the Agency designated by the Governor prior to its use as a school.

(b) On or before October 17, 1987, the Governor of each State shall notify local education agencies in the State regarding where to submit their management plans. States may establish administrative procedures for reviewing management plans. If the Governor does not disapprove a management plan within 90 days after receipt of the plan, the local education agency shall implement the plan.

(c) Each local education agency must begin implementation of its management plan on or before July 9, 1989, and complete implementation in a timely fashion.

(d) Each local education agency shall maintain and update its management plan to keep it current with ongoing operations and maintenance, periodic surveillance, inspection, reinspection, and response action activities. All provisions required to be included in the management plan under this section shall be retained as part of the management plan, as well as any information that has been revised to bring the plan up-to-date.

(e) The management plan shall be developed by an accredited management planner and shall include:

(1) A list of the name and address of each school building and whether the school building contains friable ACBM,

nonfriable ACBM, and friable and nonfriable suspected ACBM assumed to be ACM.

(2) For each inspection conducted before the December 14, 1987:

(i) The date of the inspection.

(ii) A blueprint, diagram, or written description of each school building that identifies clearly each location and approximate square or linear footage of any homogeneous or sampling area where material was sampled for ACM, and, if possible, the exact locations where bulk samples were collected, and the dates of collection.

(iii) A copy of the analyses of any bulk samples, dates of analyses, and a copy of any other laboratory reports pertaining to the analyses.

(iv) A description of any response actions or preventive measures taken to reduce asbestos exposure, including if possible, the names and addresses of all contractors involved, start and completion dates of the work, and results of any air samples analyzed during and upon completion of the work.

(v) A description of assessments, required to be made under §763.88, of material that was identified before December 14, 1987, as friable ACBM or friable suspected ACBM assumed to be ACM, and the name and signature, State of accreditation, and if applicable, accreditation number of each accredited person making the assessments.

(3) For each inspection and reinspection conducted under §763.85:

(i) The date of the inspection or reinspection and the name and signature, State of accreditation and, if applicable, the accreditation number of each accredited inspector performing the inspection or reinspection.

(ii) A blueprint, diagram, or written description of each school building that identifies clearly each location and approximate square or linear footage of homogeneous areas where material was sampled for ACM, the exact location where each bulk sample was collected, date of collection, homogeneous areas where friable suspected ACBM is assumed to be ACM, and where nonfriable suspected ACBM is assumed to be ACM.

(iii) A description of the manner used to determine sampling locations, and the name and signature of each accredited inspector collecting samples, the State of accreditation, and if applicable, his or her accreditation number.

(iv) A copy of the analyses of any bulk samples collected and analyzed, the name and address of any laboratory that analyzed bulk samples, a statement that the laboratory meets the applicable requirements of §763.87(a) the date of analysis, and the name and signature of the person performing the analysis.

(v) A description of assessments, required to be made under §763.88, of all ACBM and suspected ACBM assumed to be ACM, and the name, signature, State of accreditation, and if applicable, accreditation number of each accredited person making the assessments.

(4) The name, address, and telephone number of the person designated under §763.84 to ensure that the duties of the local education agency are carried out, and the course name, and dates and hours of training taken by that person to carry out the duties.

(5) The recommendations made to the local education agency regarding response actions, under §763.88(d), the name, signature, State of accreditation of each person making the recommendations, and if applicable, his or her accreditation number.

(6) A detailed description of preventive measures and response actions to be taken, including methods to be used, for any friable ACBM, the locations where such measures and action will be taken, reasons for selecting the response action or preventive measure, and a schedule for beginning and completing each preventive measure and response action.

(7) With respect to the person or persons who inspected for ACBM and who will design or carry out response actions, except for operations and maintenance, with respect to the ACBM, one of the following statements:

(i) If the State has adopted a contractor accreditation program under section 206(b) of Title II of the Act, a statement that the person(s) is accredited under such plan.

(ii) A statement that the local education agency used (or will use) persons who have been accredited by another State which has adopted a contractor

accreditation plan under section 206(b) of Title II of the Act or is accredited by an EPA-approved course under section 206(c) of Title II of the Act.

(8) A detailed description in the form of a blueprint, diagram, or in writing of any ACBM or suspected ACBM assumed to be ACM which remains in the school once response actions are undertaken pursuant to § 763.90. This description shall be updated as response actions are completed.

(9) A plan for reinspection under § 763.85, a plan for operations and maintenance activities under § 763.91, and a plan for periodic surveillance under § 763.92, a description of the recommendation made by the management planner regarding additional cleaning under § 763.91(c)(2) as part of an operations and maintenance program, and the response of the local education agency to that recommendation.

(10) A description of steps taken to inform workers and building occupants, or their legal guardians, about inspections, reinspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.

(11) An evaluation of the resources needed to complete response actions successfully and carry out reinspection, operations and maintenance activities, periodic surveillance and training.

(12) With respect to each consultant who contributed to the management plan, the name of the consultant and one of the following statements:

(i) If the State has adopted a contractor accreditation plan under section 206(b) of Title II of the Act, a statement that the consultant is accredited under such plan.

(ii) A statement that the contractor is accredited by another State which has adopted a contractor accreditation plan under section 206(b) of Title II of the Act, or is accredited by an EPA-approved course developed under section 206(c) of Title II of the Act.

(f) A local education agency may require each management plan to contain a statement signed by an accredited management plan developer that such person has prepared or assisted in the preparation of such plan or has reviewed such plan, and that such plan is in compliance with this subpart E. Such statement may not be signed by a person who, in addition to preparing or assisting in preparing the management plan, also implements (or will implement) the management plan.

(g)(1) Upon submission of a management plan to the Governor for review, a local education agency shall keep a copy of the plan in its administrative office. The management plans shall be available, without cost or restriction, for inspection by representatives of EPA and the State, the public, including teachers, other school personnel and their representatives, and parents. The local education agency may charge a reasonable cost to make copies of management plans.

(2) Each local education agency shall maintain in its administrative office a complete, updated copy of a management plan for each school under its administrative control or direction. The management plans shall be available, during normal business hours, without cost or restriction, for inspection by representatives of EPA and the State, the public, including teachers, other school personnel and their representatives, and parents. The local education agency may charge a reasonable cost to make copies of management plans.

(3) Each school shall maintain in its administrative office a complete, updated copy of the management plan for that school. Management plans shall be available for inspection, without cost or restriction, to workers before work begins in any area of a school building. The school shall make management plans available for inspection to representatives of EPA and the State, the public, including parents, teachers, and other school personnel and their representatives within 5 working days after receiving a request for inspection. The school may charge a reasonable cost to make copies of the management plan.

(4) Upon submission of its management plan to the Governor and at least once each school year, the local education agency shall notify in writing parent, teacher, and employee organizations of the availability of management plans and shall include in the

management plan a description of the steps taken to notify such organizations, and a dated copy of the notification. In the absence of any such organizations for parents, teachers, or employees, the local education agency shall provide written notice to that relevant group of the availability of management plans and shall include in the management plan a description of the steps taken to notify such groups, and a dated copy of the notification.

(h) Records required under §763.94 shall be made by local education agencies and maintained as part of the management plan.

(i) Each management plan must contain a true and correct statement, signed by the individual designated by the local education agency under §763.84, which certifies that the general, local education agency responsibilities, as stipulated by §763.84, have been met or will be met.

**§763.94 Recordkeeping.**

(a) Records required under this section shall be maintained in a centralized location in the administrative office of both the school and the local education agency as part of the management plan. For each homogeneous area where all ACBM has been removed, the local education agency shall ensure that such records are retained for 3 years after the next reinspection required under §763.85(b)(1), or for an equivalent period.

(b) For each preventive measure and response action taken for friable and nonfriable ACBM and friable and nonfriable suspected ACBM assumed to be ACM, the local education agency shall provide:

(1) A detailed written description of the measure or action, including methods used, the location where the measure or action was taken, reasons for selecting the measure or action, start and completion dates of the work, names and addresses of all contractors involved, and if applicable, their State of accreditation, and accreditation numbers, and if ACBM is removed, the name and location of storage or disposal site of the ACM.

(2) The name and signature of any person collecting any air sample required to be collected at the completion of certain response actions specified by §763.90(i), the locations where samples were collected, date of collection, the name and address of the laboratory analyzing the samples, the date of analysis, the results of the analysis, the method of analysis, the name and signature of the person performing the analysis, and a statement that the laboratory meets the applicable requirements of §763.90(i)(2)(ii).

(c) For each person required to be trained under §763.92(a) (1) and (2), the local education agency shall provide the person's name and job title, the date that training was completed by that person, the location of the training, and the number of hours completed in such training.

(d) For each time that periodic surveillance under §763.92(b) is performed, the local education agency shall record the name of each person performing the surveillance, the date of the surveillance, and any changes in the conditions of the materials.

(e) For each time that cleaning under §763.91(c) is performed, the local education agency shall record the name of each person performing the cleaning, the date of such cleaning, the locations cleaned, and the methods used to perform such cleaning.

(f) For each time that operations and maintenance activities under §763.91(d) are performed, the local education agency shall record the name of each person performing the activity, the start and completion dates of the activity, the locations where such activity occurred, a description of the activity including preventive measures used, and if ACBM is removed, the name and location of storage or disposal site of the ACM.

(g) For each time that major asbestos activity under §763.91(e) is performed, the local education agency shall provide the name and signature, State of accreditation, and if applicable, the accreditation number of each person performing the activity, the start and completion dates of the activity, the locations where such activity occurred, a description of the activity including preventive measures used, and if ACBM is removed, the name and location of storage or disposal site of the ACM.

(h) For each fiber release episode under § 763.91(f), the local education agency shall provide the date and location of the episode, the method of repair, preventive measures or response action taken, the name of each person performing the work, and if ACBM is removed, the name and location of storage or disposal site of the ACM.

(Approved by the Office of Management and Budget under control number 2070–0091)

### § 763.95 Warning labels.

(a) The local education agency shall attach a warning label immediately adjacent to any friable and nonfriable ACBM and suspected ACBM assumed to be ACM located in routine maintenance areas (such as boiler rooms) at each school building. This shall include:

(1) Friable ACBM that was responded to by a means other than removal.

(2) ACBM for which no response action was carried out.

(b) All labels shall be prominently displayed in readily visible locations and shall remain posted until the ACBM that is labeled is removed.

(c) The warning label shall read, in print which is readily visible because of large size or bright color, as follows:

CAUTION: ASBESTOS. HAZARDOUS. DO NOT DISTURB WITHOUT PROPER TRAINING AND EQUIPMENT.

### § 763.97 Compliance and enforcement.

(a) *Compliance with Title II of the Act.* (1) Section 207(a) of Title II of the Act (15 U.S.C. 2647) makes it unlawful for any local education agency to:

(i) Fail to conduct inspections pursuant to section 203(b) of Title II of the Act, including failure to follow procedures and failure to use accredited personnel and laboratories.

(ii) Knowingly submit false information to the Governor regarding any inspection pursuant to regulations under section 203(i) of Title II of the Act.

(iii) Fail to develop a management plan pursuant to regulations under section 203(i) of Title II of the Act.

(2) Section 207(a) of Title II of the Act (15 U.S.C. 2647) also provides that any local education agency which violates any provision of section 207 shall be liable for a civil penalty of not more than $5,000 for each day during which the violation continues. For the purposes of this subpart, a ''violation'' means a failure to comply with respect to a single school building.

(b) *Compliance with Title I of the Act.* (1) Section 15(1)(D) of Title I of the Act (15 U.S.C. 2614) makes it unlawful for any person to fail or refuse to comply with any requirement of Title II or any rule promulgated or order issued under Title II. Therefore, any person who violates any requirement of this subpart is in violation of section 15 of Title I of the Act.

(2) Section 15(3) of Title I of the Act (15 U.S.C. 2614) makes it unlawful for any person to fail or refuse to establish or maintain records, submit reports, notices or other information, or permit access to or copying of records, as required by this Act or a rule thereunder.

(3) Section 15(4) (15 U.S.C. 2614) of Title I of the Act makes it unlawful for any person to fail or refuse to permit entry or inspection as required by section 11 of Title I of the Act.

(4) Section 16(a) of Title I of the Act (15 U.S.C. 2615) provides that any person who violates any provision of section 15 of Title I of the Act shall be liable to the United States for a civil penalty in an amount not to exceed $25,000 for each such violation. Each day such a violation continues shall, for purposes of this paragraph, constitute a separate violation of section 15. A local education agency is not liable for any civil penalty under Title I of the Act for failing or refusing to comply with any rule promulgated or order issued under Title II of the Act.

(c) *Criminal penalties.* If any violation committed by any person (including a local education agency) is knowing or willful, criminal penalties may be assessed under section 16(b) of Title I of the Act.

(d) *Injunctive relief.* The Agency may obtain injunctive relief under section 208(b) of Title II of the Act to respond to a hazard which poses an imminent and substantial endangerment to human health or the environment or section 17 (15 U.S.C. 2616) of Title I of the Act to restrain any violation of section 15 of Title I of the Act or to compel the taking of any action required by or under Title I of the Act.

(e) *Citizen complaints.* Any citizen who wishes to file a complaint pursuant to section 207(d) of Title II of the Act should direct the complaint to the Governor of the State or the EPA Asbestos Ombudsman, 401 M Street, SW., Washington, DC 20460. The citizen complaint should be in writing and identified as a citizen complaint pursuant to section 207(d) of Title II of TSCA. The EPA Asbestos Ombudsman or the Governor shall investigate and respond to the complaint within a reasonable period of time if the allegations provide a reasonable basis to believe that a violation of the Act has occurred.

(f) *Inspections.* EPA may conduct inspections and review management plans under section 11 of Title I of the Act (15 U.S.C. 2610) to ensure compliance.

**§ 763.98 Waiver; delegation to State.**

(a) *General.* (1) Upon request from a State Governor and after notice and comment and an opportunity for a public hearing in accordance with paragraphs (b) and (c) of this section, EPA may waive some or all of the requirements of this subpart E if the State has established and is implementing or intends to implement a program of asbestos inspection and management that contains requirements that are at least as stringent as the requirements of this subpart E.

(2) A waiver from any requirement of this subpart E shall apply only to the specific provision for which a waiver has been granted under this section. All requirements of this subpart E shall apply until a waiver is granted under this section.

(b) *Request.* Each request by a Governor to waive any requirement of this subpart E shall be sent with three complete copies of the request to the Regional Administrator for the EPA Region in which the State is located and shall include:

(1) A copy of the State provisions or proposed provisions relating to its program of asbestos inspection and management in schools for which the request is made.

(2)(i) The name of the State agency that is or will be responsible for administering and enforcing the requirements for which a waiver is requested, the names and job titles of responsible officials in that agency, and phone numbers where the officials can be contacted.

(ii) In the event that more than one agency is or will be responsible for administering and enforcing the requirements for which a waiver is requested, a description of the functions to be performed by each agency, how the program will be coordinated by the lead agency to ensure consistency and effective administration in the asbestos inspection and management program within the State, the names and job titles of responsible officials in the agencies, and phone numbers where the officials can be contacted. The lead agency will serve as the central contact point for the EPA.

(3) Detailed reasons, supporting papers, and the rationale for concluding that the State's asbestos inspection and management program provisions for which the request is made are at least as stringent as the requirements of this subpart E.

(4) A discussion of any special situations, problems, and needs pertaining to the waiver request accompanied by an explanation of how the State intends to handle them.

(5) A statement of the resources that the State intends to devote to the administration and enforcement of the provisions relating to the waiver request.

(6) Copies of any specific or enabling State laws (enacted and pending enactment) and regulations (promulgated and pending promulgation) relating to the request, including provisions for assessing criminal and/or civil penalties.

(7) Assurance from the Governor, the Attorney General, or the legal counsel of the lead agency that the lead agency or other cooperating agencies have the legal authority necessary to carry out the requirements relating to the request.

(c) *General notice—hearing.* (1) Within 30 days after receipt of a request for a waiver, EPA will determine the completeness of the request. If EPA does not request further information within the 30-day period, the request will be deemed complete.

(2) Within 30 days after EPA determines that a request is complete, EPA will issue for publication in the FEDERAL REGISTER a notice that announces receipt of the request, describes the information submitted under paragraph (b) of this section, and solicits written comment from interested members of the public. Comments must be submitted within 60 days.

(3) If, during the comment period, EPA receives a written objection to a Governor's request and a request for a public hearing detailing specific objections to the granting of a waiver, EPA will schedule a public hearing to be held in the affected State after the close of the comment period and will announce the public hearing date in the FEDERAL REGISTER before the date of the hearing. Each comment shall include the name and address of the person submitting the comment.

(d) *Criteria.* EPA may waive some or all of the requirements of subpart E of this part if:

(1) The State's lead agency and other cooperating agencies have the legal authority necessary to carry out the provisions of asbestos inspection and management in schools relating to the waiver request.

(2) The State's program of asbestos inspection and management in schools relating to the waiver request and implementation of the program are or will be at least as stringent as the requirements of this subpart E.

(3) The State has an enforcement mechanism to allow it to implement the program described in the waiver request.

(4) The lead agency and any cooperating agencies have or will have qualified personnel to carry out the provisions relating to the waiver request.

(5) The State will devote adequate resources to the administration and enforcement of the asbestos inspection and management provisions relating to the waiver request.

(6) When specified by EPA, the State gives satisfactory assurances that necessary steps, including specific actions it proposes to take and a time schedule for their accomplishment, will be taken within a reasonable time to conform with applicable criteria under paragraphs (d) (2) through (4) of this section.

(e) *Decision.* EPA will issue for publication in the FEDERAL REGISTER a notice announcing its decision to grant or deny, in whole or in part, a Governor's request for a waiver from some or all of the requirements of this subpart E within 30 days after the close of the comment period or within 30 days following a public hearing, whichever is applicable. The notice will include the Agency's reasons and rationale for granting or denying the Governor's request. The 30-day period may be extended if mutually agreed upon by EPA and the State.

(f) *Modifications.* When any substantial change is made in the administration or enforcement of a State program for which a waiver was granted under this section, a responsible official in the lead agency shall submit such changes to EPA.

(g) *Reports.* The lead agency in each State that has been granted a waiver by EPA from any requirement of subpart E of this part shall submit a report to the Regional Administrator for the Region in which the State is located at least once every 12 months to include the following information:

(1) A summary of the State's implementation and enforcement activities during the last reporting period relating to provisions waived under this section, including enforcement actions taken.

(2) Any changes in the administration or enforcement of the State program implemented during the last reporting period.

(3) Other reports as may be required by EPA to carry out effective oversight of any requirement of this subpart E that was waived under this section.

(h) *Oversight.* EPA may periodically evaluate the adequacy of a State's implementation and enforcement of and resources devoted to carrying out requirements relating to the waiver. This evaluation may include, but is not limited to, site visits to local education agencies without prior notice to the State.

(i) *Informal conference.* (1) EPA may request that an informal conference be held between appropriate State and

EPA officials when EPA has reason to believe that a State has failed to:

(i) Substantially comply with the terms of any provision that was waived under this section.

(ii) Meet the criteria under paragraph (d) of this section, including the failure to carry out enforcement activities or act on violations of the State program.

(2) EPA will:

(i) Specify to the State those aspects of the State's program believed to be inadequate.

(ii) Specify to the State the facts that underlie the belief of inadequacy.

(3) If EPA finds, on the basis of information submitted by the State at the conference, that deficiencies did not exist or were corrected by the State, no further action is required.

(4) Where EPA finds that deficiencies in the State program exist, a plan to correct the deficiencies shall be negotiated between the State and EPA. The plan shall detail the deficiencies found in the State program, specify the steps the State has taken or will take to remedy the deficiencies, and establish a schedule for each remedial action to be initiated.

(j) *Rescission*. (1) If the State fails to meet with EPA or fails to correct deficiencies raised at the informal conference, EPA will deliver to the Governor of the State and a responsible official in the lead agency a written notice of its intent to rescind, in whole or part, the waiver.

(2) EPA will issue for publication in the FEDERAL REGISTER a notice that announces the rescission of the waiver, describes those aspects of the State's program determined to be inadequate, and specifies the facts that underlie the findings of inadequacy.

**§763.99 Exclusions.**

(a) A local education agency shall not be required to perform an inspection under §763.85(a) in any sampling area as defined in 40 CFR 763.103 or homogeneous area of a school building where:

(1) An accredited inspector has determined that, based on sampling records, friable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her State of accreditation and if applicable, accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under §763.84 for inclusion in the management plan. However, an accredited inspector shall assess the friable ACBM under §763.88.

(2) An accredited inspector has determined that, based on sampling records, nonfriable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her State of accreditation and if applicable, accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under §763.84 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was nonfriable has become friable since that previous inspection and shall assess the newly-friable ACBM under §763.88.

(3) Based on sampling records and inspection records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area and the records show that the area was sampled, before December 14, 1987 in substantial compliance with §763.85(a), which for purposes of this section means in a random manner and with a sufficient number of samples to reasonably ensure that the area is not ACBM.

(i) The accredited inspector shall sign and date a statement, with his or her State of accreditation and if applicable, accreditation number that the homogeneous or sampling area determined not to be ACBM was sampled in substantial compliance with §763.85(a).

(ii) Within 30 days after the inspector's determination, the local education agency shall submit a copy of the inspector's statement to the EPA Regional Office and shall include the statement in the management plan for that school.

(4) The lead agency responsible for asbestos inspection in a State that has been granted a waiver from §763.85(a) has determined that, based on sampling records and inspection records,

no ACBM is present in the homogeneous or sampling area and the records show that the area was sampled before December 14, 1987, in substantial compliance with §763.85(a). Such determination shall be included in the management plan for that school.

(5) An accredited inspector has determined that, based on records of an inspection conducted before December 14, 1987, suspected ACBM identified in that homogeneous or sampling area is assumed to be ACM. The inspector shall sign and date a statement to that effect, with his or her State of accreditation and if applicable, accreditation number and, within 30 days of such determination, submit a copy of the statement to the person designated under §763.84 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was nonfriable suspected ACBM assumed to be ACM has become friable since the previous inspection and shall assess the newly friable material and previously identified friable suspected ACBM assumed to be ACM under §763.88.

(6) Based on inspection records and contractor and clearance records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area where asbestos removal operations have been conducted before December 14, 1987, and shall sign and date a statement to that effect and include his or her State of accreditation and, if applicable, accreditation number. The local education agency shall submit a copy of the statement to the EPA Regional Office and shall include the statement in the management plan for that school.

(7) An architect or project engineer responsible for the construction of a new school building built after October 12, 1988, or an accredited inspector signs a statement that no ACBM was specified as a building material in any construction document for the building, or, to the best of his or her knowledge, no ACBM was used as a building material in the building. The local education agency shall submit a copy of the signed statement of the architect, project engineer, or accredited inspector to the EPA Regional Office and shall include the statement in the management plan for that school.

(b) The exclusion, under paragraphs (a) (1) through (4) of this section, from conducting the inspection under §763.85(a) shall apply only to homogeneous or sampling areas of a school building that were inspected and sampled before October 17, 1987. The local education agency shall conduct an inspection under §763.85(a) of all areas inspected before October 17, 1987, that were not sampled or were not assumed to be ACM.

(c) If ACBM is subsequently found in a homogeneous or sampling area of a local education agency that had been identified as receiving an exclusion by an accredited inspector under paragraphs (a) (3), (4), (5) of this section, or an architect, project engineer or accredited inspector under paragraph (a)(7) of this section, the local education agency shall have 180 days following the date of identification of ACBM to comply with this subpart E.

## APPENDIX A TO SUBPART E—INTERIM TRANSMISSION ELECTRON MICROSCOPY ANALYTICAL METHODS—MANDATORY AND NONMANDATORY—AND MANDATORY SECTION TO DETERMINE COMPLETION OF RESPONSE ACTIONS

### *I. Introduction*

The following appendix contains three units. The first unit is the mandatory transmission electron microscopy (TEM) method which all laboratories must follow; it is the minimum requirement for analysis of air samples for asbestos by TEM. The mandatory method contains the essential elements of the TEM method. The second unit contains the complete non-mandatory method. The non-mandatory method supplements the mandatory method by including additional steps to improve the analysis. EPA recommends that the non-mandatory method be employed for analyzing air filters; however, the laboratory may choose to employ the mandatory method. The non-mandatory method contains the same minimum requirements as are outlined in the mandatory method. Hence, laboratories may choose either of the two methods for analyzing air samples by TEM.

The final unit of this Appendix A to subpart E defines the steps which must be taken to determine completion of response actions. This unit is mandatory.

*II. Mandatory Transmission Electron Microscopy Method*

A. Definitions of Terms

1. *Analytical sensitivity*—Airborne asbestos concentration represented by each fiber counted under the electron microscope. It is determined by the air volume collected and the proportion of the filter examined. This method requires that the analytical sensitivity be no greater than 0.005 structures/$cm^3$.

2. *Asbestiform*—A specific type of mineral fibrosity in which the fibers and fibrils possess high tensile strength and flexibility.

3. *Aspect ratio*—A ratio of the length to the width of a particle. Minimum aspect ratio as defined by this method is equal to or greater than 5:1.

4. *Bundle*—A structure composed of three or more fibers in a parallel arrangement with each fiber closer than one fiber diameter.

5. *Clean area*—A controlled environment which is maintained and monitored to assure a low probability of asbestos contamination to materials in that space. Clean areas used in this method have HEPA filtered air under positive pressure and are capable of sustained operation with an open laboratory blank which on subsequent analysis has an average of less than 18 structures/$mm^2$ in an area of 0.057 $mm^2$ (nominally 10 200-mesh grid openings) and a maximum of 53 structures/$mm^2$ for any single preparation for that same area.

6. *Cluster*—A structure with fibers in a random arrangement such that all fibers are intermixed and no single fiber is isolated from the group. Groupings must have more than two intersections.

7. *ED*—Electron diffraction.

8. *EDXA*—Energy dispersive X-ray analysis.

9. *Fiber*—A structure greater than or equal to 0.5 µm in length with an aspect ratio (length to width) of 5:1 or greater and having substantially parallel sides.

10. *Grid*—An open structure for mounting on the sample to aid in its examination in the TEM. The term is used here to denote a 200-mesh copper lattice approximately 3 mm in diameter.

11. *Intersection*—Nonparallel touching or crossing of fibers, with the projection having an aspect ratio of 5:1 or greater.

12. *Laboratory sample coordinator*—That person responsible for the conduct of sample handling and the certification of the testing procedures.

13. *Filter background level*—The concentration of structures per square millimeter of filter that is considered indistinguishable from the concentration measured on a blank (filters through which no air has been drawn). For this method the filter background level is defined as 70 structures/$mm^2$.

14. *Matrix*—Fiber or fibers with one end free and the other end embedded in or hidden by a particulate. The exposed fiber must meet the fiber definition.

15. *NSD*—No structure detected.

16. *Operator*—A person responsible for the TEM instrumental analysis of the sample.

17. *PCM*—Phase contrast microscopy.

18. *SAED*—Selected area electron diffraction.

19. *SEM*—Scanning electron microscope.

20. *STEM*—Scanning transmission electron microscope.

21. *Structure*—a microscopic bundle, cluster, fiber, or matrix which may contain asbestos.

22. *S/$cm^3$*—Structures per cubic centimeter.

23. *S/$mm^2$*—Structures per square millimeter.

24. *TEM*—Transmission electron microscope.

B. Sampling

1. The sampling agency must have written quality control procedures and documents which verify compliance.

2. Sampling operations must be performed by qualified individuals completely independent of the abatement contractor to avoid possible conflict of interest (References 1, 2, 3, and 5 of Unit II.J.).

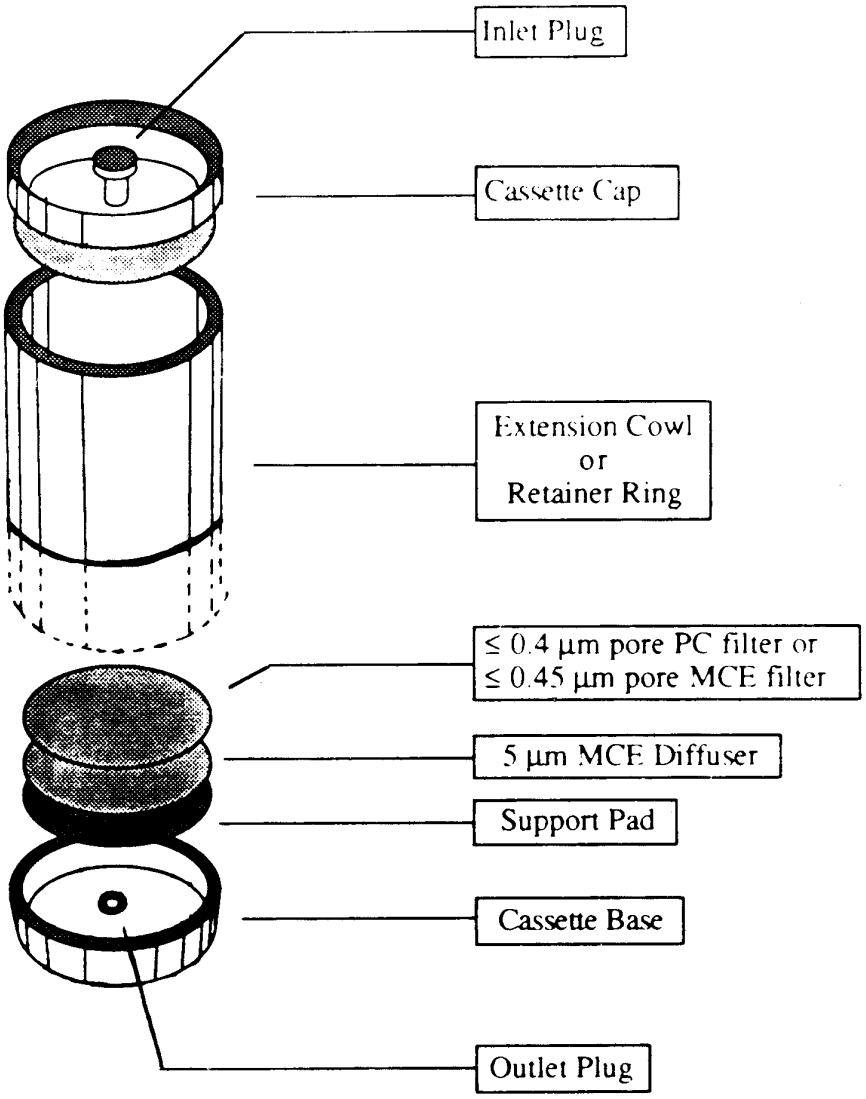
3. Sampling for airborne asbestos following an abatement action must use commercially available cassettes.

4. Prescreen the loaded cassette collection filters to assure that they do not contain concentrations of asbestos which may interfere with the analysis of the sample. A filter blank average of less than 18 s/$mm^2$ in an area of 0.057 $mm^2$ (nominally 10 200-mesh grid openings) and a single preparation with a maximum of 53 s/$mm^2$ for that same area is acceptable for this method.

5. Use sample collection filters which are either polycarbonate having a pore size less than or equal to 0.4 µm or mixed cellulose ester having a pore size less than or equal to 0.45 µm.

6. Place these filters in series with a 5.0 µm backup filter (to serve as a diffuser) and a support pad. See the following Figure 1:

FIGURE I--SAMPLING CASSETTE CONFIGURATION



7. Reloading of used cassettes is not permitted.

8. Orient the cassette downward at approximately 45 degrees from the horizontal.

9. Maintain a log of all pertinent sampling information.

10. Calibrate sampling pumps and their flow indicators over the range of their intended use with a recognized standard. Assemble the sampling system with a representative filter (not the filter which will be used in sampling) before and after the sampling operation.

11. Record all calibration information.

12. Ensure that the mechanical vibrations from the pump will be minimized to prevent transferral of vibration to the cassette.

13. Ensure that a continuous smooth flow of negative pressure is delivered by the pump by damping out any pump action fluctuations if necessary.

14. The final plastic barrier around the abatement area remains in place for the sampling period.

15. After the area has passed a thorough visual inspection, use aggressive sampling conditions to dislodge any remaining dust. (See suggested protocol in Unit III.B.7.d.)

16. Select an appropriate flow rate equal to or greater than 1 liter per minute (L/min) or less than 10 L/min for 25 mm cassettes. Larger filters may be operated at proportionally higher flow rates.

17. A minimum of 13 samples are to be collected for each testing site consisting of the following:

a. A minimum of five samples per abatement area.

b. A minimum of five samples per ambient area positioned at locations representative of the air entering the abatement site.

c. Two field blanks are to be taken by removing the cap for not more than 30 seconds and replacing it at the time of sampling before sampling is initiated at the following places:

i. Near the entrance to each abatement area.

ii. At one of the ambient sites. (DO NOT leave the field blanks open during the sampling period.)

d. A sealed blank is to be carried with each sample set. This representative cassette is not to be opened in the field.

18. Perform a leak check of the sampling system at each indoor and outdoor sampling site by activating the pump with the closed sampling cassette in line. Any flow indicates a leak which must be eliminated before initiating the sampling operation.

19. The following Table I specifies volume ranges to be used:

TABLE 1--NUMBER OF 200 MESH EM GRID OPENINGS ($0.0057\ MM^2$) THAT NEED TO BE ANALYZED TO MAINTAIN SENSITIVITY OF 0.005 STRUCTURES/CC BASED ON VOLUME AND EFFECTIVE FILTER AREA

| | Effective Filter Area 385 sq mm | | Effective Filter Area 855 sq mm | |
|---|---|---|---|---|
| | Volume (liters) | # of grid openings | Volume (liters) | # of grid openings |
| | *560* | *24* | *1,250* | *24* |
| | 600 | 23 | 1,300 | 23 |
| | 700 | 19 | 1,400 | 21 |
| | 800 | 17 | 1,600 | 19 |
| | 900 | 15 | 1,800 | 17 |
| | 1,000 | 14 | 2,000 | 15 |
| | 1,100 | 12 | 2,200 | 14 |
| Recommended Volume Range | **1,200** | **11** | 2,400 | 13 |
| | **1,300** | **10** | 2,600 | 12 |
| | **1,400** | **10** | **2,800** | **11** |
| | **1,500** | **9** | **3,000** | **10** |
| | **1,600** | **8** | **3,200** | **9** |
| | **1,700** | **8** | **3,400** | **9** |
| | **1,800** | **8** | **3,600** | **8** |
| | 1,900 | 7 | **3,800** | **8** |
| | 2,000 | 7 | **4,000** | **8** |
| | 2,100 | 6 | 4,200 | 7 |
| | 2,200 | 6 | 4,400 | 7 |
| | 2,300 | 6 | 4,600 | 7 |
| | 2,400 | 6 | 4,800 | 6 |
| | 2,500 | 5 | 5,000 | 6 |
| | 2,600 | 5 | 5,200 | 6 |
| | 2,700 | 5 | 5,400 | 6 |
| | 2,800 | 5 | 5,600 | 5 |
| | 2,900 | 5 | 5,800 | 5 |
| | 3,000 | 5 | 6,000 | 5 |
| | 3,100 | 4 | 6,200 | 5 |
| | 3,200 | 4 | 6,400 | 5 |
| | 3,300 | 4 | 6,600 | 5 |
| | 3,400 | 4 | 6,800 | 4 |
| | 3,500 | 4 | 7,000 | 4 |
| | 3,600 | 4 | 7,200 | 4 |
| | 3,700 | 4 | 7,400 | 4 |
| | 3,800 | 4 | 7,600 | 4 |

Recommended Volume Range

Note minimum volumes required:
25 mm : 560 liters
37 mm : 1250 liters

Filter diameter of 25 mm = effective area of 385 sq mm
Filter diameter of 37 mm = effective area of 855 sq mm

20. Ensure that the sampler is turned upright before interrupting the pump flow.

21. Check that all samples are clearly labeled and that all pertinent information has been enclosed before transfer of the samples to the laboratory.

22. Ensure that the samples are stored in a secure and representative location.

23. Do not change containers if portions of these filters are taken for other purposes.

24. A summary of Sample Data Quality Objectives is shown in the following Table II:

TABLE II--SUMMARY OF SAMPLING AGENCY DATA QUALITY OBJECTIVES

This table summarizes the data quality objectives from the performance of this method in terms of precision, accuracy, completeness, representativeness, and comparability. These objectives are assured by the periodic control checks and reference checks listed here and described in the text of the method.

| Unit Operation | QC Check | Frequency | Conformance Expectation |
|---|---|---|---|
| Sampling materials | Sealed blank | 1 per I/O site | 95% |
| Sample procedures | Field blanks | 2 per I/O site | 95% |
| | Pump calibration | Before and after each field series | 90% |
| Sample custody | Review of chain-of-custody record | Each sample | 95% complete |
| Sample shipment | Review of sending report | Each sample | 95% complete |

C. Sample Shipment

Ship bulk samples to the analytical laboratory in a separate container from air samples.

D. Sample Receiving

1. Designate one individual as sample coordinator at the laboratory. While that individual will normally be available to receive samples, the coordinator may train and supervise others in receiving procedures for those times when he/she is not available.

2. Bulk samples and air samples delivered to the analytical laboratory in the same container shall be rejected.

E. Sample Preparation

1. All sample preparation and analysis shall be performed by a laboratory independent of the abatement contractor.

2. Wet-wipe the exterior of the cassettes to minimize contamination possibilities before taking them into the clean room facility.

3. Perform sample preparation in a well-equipped clean facility.

NOTE: The clean area is required to have the following minimum characteristics. The area or hood must be capable of maintaining a positive pressure with make-up air being HEPA-filtered. The cumulative analytical blank concentration must average less than 18 s/mm² in an area of 0.057 mm² (nominally 10 200-mesh grid openings) and a single preparation with a maximum of 53 s/mm² for that same area.

4. Preparation areas for air samples must not only be separated from preparation areas for bulk samples, but they must be prepared in separate rooms.

5. Direct preparation techniques are required. The object is to produce an intact film containing the particulates of the filter surface which is sufficiently clear for TEM analysis.

a. TEM Grid Opening Area measurement must be done as follows:

i. The filter portion being used for sample preparation must have the surface collapsed using an acetone vapor technique.

ii. Measure 20 grid openings on each of 20 random 200-mesh copper grids by placing a grid on a glass and examining it under the PCM. Use a calibrated graticule to measure the average field diameters. From the data, calculate the field area for an average grid opening.

iii. Measurements can also be made on the TEM at a properly calibrated low magnification or on an optical microscope at a magnification of approximately 400X by using an eyepiece fitted with a scale that has been calibrated against a stage micrometer. Optical microscopy utilizing manual or automated procedures may be used providing instrument calibration can be verified.

b. TEM specimen preparation from polycarbonate (PC) filters. Procedures as described in Unit III.G. or other equivalent methods may be used.

c. TEM specimen preparation from mixed cellulose ester (MCE) filters.

i. Filter portion being used for sample preparation must have the surface collapsed using an acetone vapor technique or the Burdette procedure (Ref. 7 of Unit II.J.)

ii. Plasma etching of the collapsed filter is required. The microscope slide to which the collapsed filter pieces are attached is placed in a plasma asher. Because plasma ashers vary greatly in their performance, both from unit to unit and between different positions in the asher chamber, it is difficult to specify the conditions that should be used. Insufficient etching will result in a failure to expose embedded filters, and too much etching may result in loss of particulate from the surface. As an interim measure, it is recommended that the time for ashing of a known weight of a collapsed filter be established and that the etching rate be calculated in terms of micrometers per second. The actual etching time used for the particulate asher and operating conditions will then be set such that a 1–2 µm (10 percent) layer of collapsed surface will be removed.

iii. Procedures as described in Unit III. or other equivalent methods may be used to prepare samples.

F. TEM Method

1. An 80–120 kV TEM capable of performing electron diffraction with a fluorescent screen inscribed with calibrated gradations is required. If the TEM is equipped with EDXA it must either have a STEM attachment or be capable of producing a spot less than 250 nm in diameter at crossover. The microscope shall be calibrated routinely for magnification and camera constant.

2. *Determination of Camera Constant and ED Pattern Analysis.* The camera length of the TEM in ED operating mode must be calibrated before ED patterns on unknown samples are observed. This can be achieved by using a carbon-coated grid on which a thin film of gold has been sputtered or evaporated. A thin film of gold is evaporated on the specimen TEM grid to obtain zone-axis ED patterns superimposed with a ring pattern from the polycrystalline gold film. In practice, it is desirable to optimize the thickness of the gold film so that only one or two sharp rings are obtained on the superimposed ED pattern. Thicker gold film would normally give multiple gold rings, but it will tend to mask weaker diffraction spots from the unknown fibrous particulate. Since the unknown d-spacings of most interest in asbestos analysis are those which lie closest to the transmitted beam, multiple gold rings are unnecessary on zone-axis ED patterns. An average camera constant using multiple

gold rings can be determined. The camera constant is one-half the diameter of the rings times the interplanar spacing of the ring being measured.

3. *Magnification Calibration*. The magnification calibration must be done at the fluorescent screen. The TEM must be calibrated at the grid opening magnification (if used) and also at the magnification used for fiber counting. This is performed with a cross grating replica (e.g., one containing 2,160 lines/mm). Define a field of view on the fluorescent screen either by markings or physical boundaries. The field of view must be measurable or previously inscribed with a scale or concentric circles (all scales should be metric). A logbook must be maintained, and the dates of calibration and the values obtained must be recorded. The frequency of calibration depends on the past history of the particular microscope. After any maintenance of the microscope that involved adjustment of the power supplied to the lenses or the high-voltage system or the mechanical disassembly of the electron optical column apart from filament exchange, the magnification must be recalibrated. Before the TEM calibration is performed, the analyst must ensure that the cross grating replica is placed at the same distance from the objective lens as the specimens are. For instruments that incorporate a eucentric tilting specimen stage, all specimens and the cross grating replica must be placed at the eucentric position.

4. While not required on every microscope in the laboratory, the laboratory must have either one microscope equipped with energy dispersive X-ray analysis or access to an equivalent system on a TEM in another laboratory.

5. Microscope settings: 80–120 kV, grid assessment 250–1,000X, then 15,000–20,000X screen magnification for analysis.

6. Approximately one-half (0.5) of the predetermined sample area to be analyzed shall be performed on one sample grid preparation and the remaining half on a second sample grid preparation.

7. Individual grid openings with greater than 5 percent openings (holes) or covered with greater than 25 percent particulate matter or obviously having nonuniform loading must not be analyzed.

8. Reject the grid if:

a. Less than 50 percent of the grid openings covered by the replica are intact.

b. The replica is doubled or folded.

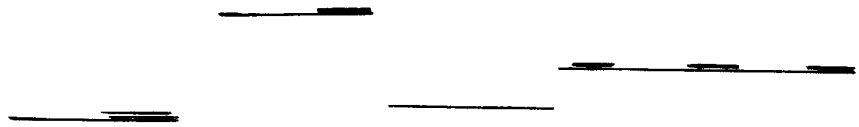
c. The replica is too dark because of incomplete dissolution of the filter.

9. *Recording Rules.*

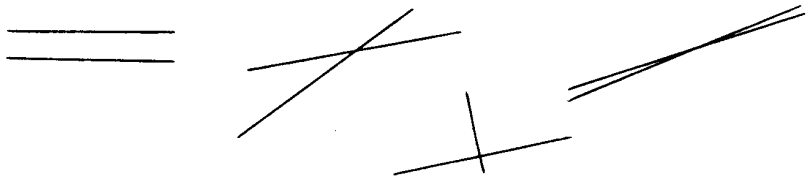
a. Any continuous grouping of particles in which an asbestos fiber with an aspect ratio greater than or equal to 5:1 and a length greater than or equal to 0.5 µm is detected shall be recorded on the count sheet. These will be designated asbestos structures and will be classified as fibers, bundles, clusters, or matrices. Record as individual fibers any contiguous grouping having 0, 1, or 2 definable intersections. Groupings having more than 2 intersections are to be described as cluster or matrix. An intersection is a nonparallel touching or crossing of fibers, with the projection having an aspect ratio of 5:1 or greater. See the following Figure 2:

FIGURE 2--COUNTING GUIDELINES USED IN DETERMINING ASBESTOS STRUCTURES

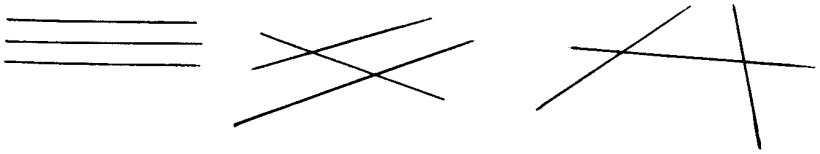
Count as 1 fiber; 1 Structure; no intersections.



Count as 2 fibers if space between fibers is greater than width of 1 fiber diameter or number of intersections is equal to or less than 1.

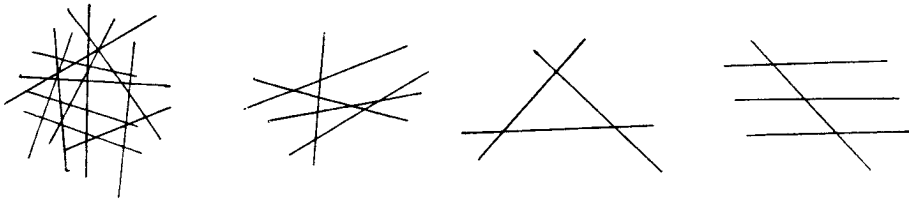


Count as 3 structures if space between fibers is greater than width of 1 fiber diameter or if the number of intersections is equal to or less than 2.

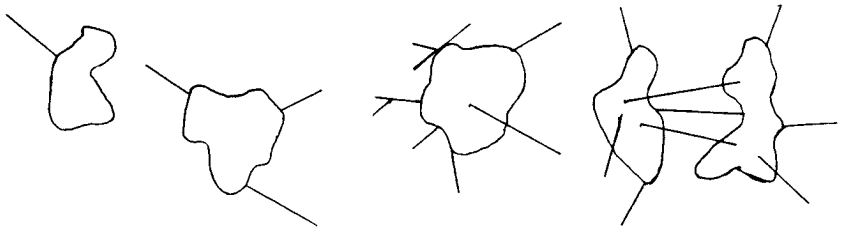


Count bundles as 1 structure; 3 or more parallel fibrils less than 1 fiber diameter separation.

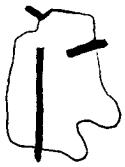
Count clusters as 1 structure; fibers having greater than or equal to 3 intersections.



Count matrix as 1 structure.



DO NOT COUNT AS STRUCTURES:



Fiber protrusion
<5:1 Aspect Ratio

No fiber protusion

Fiber protrusion
<0.5 micrometer

<0.5 micrometer in length
<5:1 Aspect Ratio

i. *Fiber.* A structure having a minimum length greater than or equal to 0.5 µm and an aspect ratio (length to width) of 5:1 or greater and substantially parallel sides. Note the appearance of the end of the fiber, i.e., whether it is flat, rounded or dovetailed.

ii. *Bundle.* A structure composed of three or more fibers in a parallel arrangement with each fiber closer than one fiber diameter.

iii. *Cluster.* A structure with fibers in a random arrangement such that all fibers are intermixed and no single fiber is isolated from the group. Groupings must have more than two intersections.

iv. *Matrix.* Fiber or fibers with one end free and the other end embedded in or hidden by a particulate. The exposed fiber must meet the fiber definition.

b. Separate categories will be maintained for fibers less than 5 µm and for fibers equal to or greater than 5 µm in length.

c. Record NSD when no structures are detected in the field.

d. Visual identification of electron diffraction (ED) patterns is required for each asbestos structure counted which would cause the analysis to exceed the 70 s/mm² concentration. (Generally this means the first four fibers identified as asbestos must exhibit an identifiable diffraction pattern for chrysotile or amphibole.)

e. The micrograph number of the recorded diffraction patterns must be reported to the client and maintained in the laboratory's quality assurance records. In the event that examination of the pattern by a qualified individual indicates that the pattern has been misidentified visually, the client shall be contacted.

f. Energy Dispersive X-ray Analysis (EDXA) is required of all amphiboles which would cause the analysis results to exceed the 70 s/mm² concentration. (Generally speaking, the first 4 amphiboles would require EDXA.)

g. If the number of fibers in the nonasbestos class would cause the analysis to exceed the 70 s/mm² concentration, the fact that they are not asbestos must be confirmed by EDXA or measurement of a zone axis diffraction pattern.

h. Fibers classified as chrysotile must be identified by diffraction or X-ray analysis and recorded on a count sheet. X-ray analysis alone can be used only after 70 s/mm² have been exceeded for a particular sample.

i. Fibers classified as amphiboles must be identified by X-ray analysis and electron diffraction and recorded on the count sheet. (X-ray analysis alone can be used only after 70 s/mm² have been exceeded for a particular sample.)

j. If a diffraction pattern was recorded on film, record the micrograph number on the count sheet.

k. If an electron diffraction was attempted but no pattern was observed, record N on the count sheet.

l. If an EDXA spectrum was attempted but not observed, record N on the count sheet.

m. If an X-ray analysis spectrum is stored, record the file and disk number on the count sheet.

10. Classification Rules.

a. *Fiber.* A structure having a minimum length greater than or equal to 0.5 µm and an aspect ratio (length to width) of 5:1 or greater and substantially parallel sides. Note the appearance of the end of the fiber, i.e., whether it is flat, rounded or dovetailed.

b. *Bundle.* A structure composed of three or more fibers in a parallel arrangement with each fiber closer than one fiber diameter.

c. *Cluster.* A structure with fibers in a random arrangement such that all fibers are intermixed and no single fiber is isolated from the group. Groupings must have more than two intersections.

d. *Matrix.* Fiber or fibers with one end free and the other end embedded in or hidden by a particulate. The exposed fiber must meet the fiber definition.

11. After finishing with a grid, remove it from the microscope, and replace it in the appropriate grid holder. Sample grids must be stored for a minimum of 1 year from the date of the analysis; the sample cassette must be retained for a minimum of 30 days by the laboratory or returned at the client's request.

G. Sample Analytical Sequence

1. Under the present sampling requirements a minimum of 13 samples is to be collected for the clearance testing of an abatement site. These include five abatement area samples, five ambient samples, two field blanks, and one sealed blank.

2. Carry out visual inspection of work site prior to air monitoring.

3. Collect a minimum of 5 air samples inside the work site and 5 samples outside the work site. The indoor and outdoor samples shall be taken during the same time period.

4. Remaining steps in the analytical sequence are contained in Unit IV of this Appendix.

H. Reporting

1. The following information must be reported to the client for each sample analyzed:

a. Concentration in structures per square millimeter and structures per cubic centimeter.

b. Analytical sensitivity used for the analysis.

c. Number of asbestos structures.

d. Area analyzed.

e. Volume of air sampled (which must be initially supplied to lab by client).

f. Copy of the count sheet must be included with the report.

g. Signature of laboratory official to indicate that the laboratory met specifications of the method.

h. Report form must contain official laboratory identification (e.g., letterhead).

i. Type of asbestos.

I. Quality Control/Quality Assurance Procedures (Data Quality Indicators)

Monitoring the environment for airborne asbestos requires the use of sensitive sampling and analysis procedures. Because the test is sensitive, it may be influenced by a variety of factors. These include the supplies used in the sampling operation, the performance of the sampling, the preparation of the grid from the filter and the actual examination of this grid in the microscope. Each of these unit operations must produce a product of defined quality if the analytical result is to be a reliable and meaningful test result. Accordingly, a series of control checks and reference standards are to be performed along with the sample analysis as indicators that the materials used are adequate and the operations are within acceptable limits. In this way, the quality of the data is defined and the results are of known value. These checks and tests also provide timely and specific warning of any problems which might develop within the sampling and analysis operations. A description of these quality control/quality assurance procedures is summarized in the following Table III:

TABLE III--SUMMARY OF LABORATORY DATA QUALITY OBJECTIVES

| Unit Operation | QC Check | Frequency | Conformance Expectation |
|---|---|---|---|
| Sample receiving | Review of receiving report | Each sample | 95% complete |
| Sample custody | Review of chain-of-custody record | Each sample | 95% complete |
| Sample preparation | Supplies and reagents | On receipt | Meet specs. or reject |
| | Grid opening size | 20 openings/20 grids/lot of 1000 or 1 opening/sample | 100% |
| | Special clean area monitoring | After cleaning or service | Meet specs or reclean |
| | Laboratory blank | 1 per prep series or 10% | Meet specs. or reanalyze series |
| | Plasma etch blank | 1 per 20 samples | 75% |
| | Multiple preps (3 per sample) | Each sample | One with cover of 15 complete grid sqs. |
| Sample analysis | System check | Each day | Each day |
| | Alignment check | Each day | Each day |
| | Magnification calibration with low and high standards | Each month or after service | 95% |
| | ED calibration by gold standard | Weekly | 95% |
| | EDS calibration by copper line | Daily | 95% |
| Performance check | Laboratory blank (measure of cleanliness) | Prep 1 per series or 10% read 1 per 25 samples | Meet specs or reanalyze series |
| | Replicate counting (measure of precision) | 1 per 100 samples | 1.5 x Poisson Std. Dev. |
| | Duplicate analysis (measure of reproducibility) | 1 per 100 samples | 2 x Poisson Std. Dev. |
| | Known samples of typical materials (working standards) | Training and for comparison with unknowns | 100% |
| | Analysis of NBS SRM 1876 and/or RM 8410 (measure of accuracy and comparability) | 1 per analyst per year | 1.5 x Poisson Std. Dev. |
| | Data entry review (data validation and measure of completeness) | Each sample | 95% |
| | Record and verify ID electron diffraction pattern of structure | 1 per 5 samples | 80% accuracy |
| Calculations and data reduction | Hand calculation of automated data reduction procedure or independent recalculation of hand-calculated data | 1 per 100 samples | 85% |

1. When the samples arrive at the laboratory, check the samples and documentation for completeness and requirements before initiating the analysis.

2. Check all laboratory reagents and supplies for acceptable asbestos background levels.

3. Conduct all sample preparation in a clean room environment monitored by laboratory blanks. Testing with blanks must also be done after cleaning or servicing the room.

4. Prepare multiple grids of each sample.

5. Provide laboratory blanks with each sample batch. Maintain a cumulative average of these results. If there are more than 53 fibers/mm$^2$ per 10 200-mesh grid openings, the system must be checked for possible sources of contamination.

6. Perform a system check on the transmission electron microscope daily.

7. Make periodic performance checks of magnification, electron diffraction and energy dispersive X-ray systems as set forth in Table III under Unit II.I.

8. Ensure qualified operator performance by evaluation of replicate analysis and standard sample comparisons as set forth in Table III under Unit II.I.

9. Validate all data entries.

10. Recalculate a percentage of all computations and automatic data reduction steps as specified in Table III under Unit II.I.

11. Record an electron diffraction pattern of one asbestos structure from every five samples that contain asbestos. Verify the identification of the pattern by measurement or comparison of the pattern with patterns collected from standards under the same conditions. The records must also demonstrate that the identification of the pattern has been verified by a qualified individual and that the operator who made the identification is maintaining at least an 80 percent correct visual identification based on his measured patterns.

12. Appropriate logs or records must be maintained by the analytical laboratory verifying that it is in compliance with the mandatory quality assurance procedures.

### J. References

For additional background information on this method, the following references should be consulted.

1. ''Guidance for Controlling Asbestos-Containing Materials in Buildings,'' EPA 560/5–85–024, June 1985.

2. ''Measuring Airborne Asbestos Following an Abatement Action,'' USEPA, Office of Pollution Prevention and Toxics, EPA 600/4–85–049, 1985.

3. Small, John and E. Steel. Asbestos Standards: Materials and Analytical Methods. N.B.S. Special Publication 619, 1982.

4. Campbell, W.J., R.L. Blake, L.L. Brown, E.E. Cather, and J.J. Sjoberg. Selected Silicate Minerals and Their Asbestiform Varieties. Information Circular 8751, U.S. Bureau of Mines, 1977.

5. Quality Assurance Handbook for Air Pollution Measurement System. Ambient Air Methods, EPA 600/4–77–027a, USEPA, Office of Research and Development, 1977.

6. Method 2A: Direct Measurement of Gas Volume through Pipes and Small Ducts. 40 CFR Part 60 Appendix A.

7. Burdette, G.J., Health & Safety Exec. Research & Lab. Services Div., London, ''Proposed Analytical Method for Determination of Asbestos in Air.''

8. Chatfield, E.J., Chatfield Tech. Cons., Ltd., Clark, T., PEI Assoc., ''Standard Operating Procedure for Determination of Airborne Asbestos Fibers by Transmission Electron Microscopy Using Polycarbonate Membrane Filters,'' WERL SOP 87–1, March 5, 1987.

9. NIOSH Method 7402 for Asbestos Fibers, 12–11–86 Draft.

10. Yamate, G., Agarwall, S.C., Gibbons, R.D., IIT Research Institute, ''Methodology for the Measurement of Airborne Asbestos by Electron Microscopy,'' Draft report, USEPA Contract 68–02–3266, July 1984.

11. ''Guidance to the Preparation of Quality Assurance Project Plans,'' USEPA, Office of Pollution Prevention and Toxics, 1984.

## *III. Nonmandatory Transmission Electron Microscopy Method*

### A. Definitions of Terms

1. *Analytical sensitivity*—Airborne asbestos concentration represented by each fiber counted under the electron microscope. It is determined by the air volume collected and the proportion of the filter examined. This method requires that the analytical sensitivity be no greater than 0.005 s/cm$^3$.

2. *Asbestiform*—A specific type of mineral fibrosity in which the fibers and fibrils possess high tensile strength and flexibility.

3. *Aspect ratio*—A ratio of the length to the width of a particle. Minimum aspect ratio as defined by this method is equal to or greater than 5:1.

4. *Bundle*—A structure composed of three or more fibers in a parallel arrangement with each fiber closer than one fiber diameter.

5. *Clean area*—A controlled environment which is maintained and monitored to assure a low probability of asbestos contamination to materials in that space. Clean areas used in this method have HEPA filtered air under positive pressure and are capable of sustained operation with an open laboratory blank which on subsequent analysis has an average of less than 18 structures/mm$^2$ in an area of 0.057 mm$^2$ (nominally 10 200 mesh grid openings) and a maximum of 53 structures/mm$^2$ for no more than one single preparation for that same area.

6. *Cluster*—A structure with fibers in a random arrangement such that all fibers are intermixed and no single fiber is isolated from the group. Groupings must have more than two intersections.

7. *ED*—Electron diffraction.

8. *EDXA*—Energy dispersive X-ray analysis.

9. *Fiber*—A structure greater than or equal to 0.5 µm in length with an aspect ratio (length to width) of 5:1 or greater and having substantially parallel sides.

10. *Grid*—An open structure for mounting on the sample to aid in its examination in the TEM. The term is used here to denote a 200-mesh copper lattice approximately 3 mm in diameter.

11. *Intersection*—Nonparallel touching or crossing of fibers, with the projection having an aspect ratio of 5:1 or greater.

12. *Laboratory sample coordinator*—That person responsible for the conduct of sample handling and the certification of the testing procedures.

13. *Filter background level*—The concentration of structures per square millimeter of filter that is considered indistinguishable from the concentration measured on blanks (filters through which no air has been drawn). For this method the filter background level is defined as 70 structures/mm$^2$.

14. *Matrix*—Fiber or fibers with one end free and the other end embedded in or hidden by a particulate. The exposed fiber must meet the fiber definition.

15. *NSD*—No structure detected.

16. *Operator*—A person responsible for the TEM instrumental analysis of the sample.

17. *PCM*—Phase contrast microscopy.

18. *SAED*—Selected area electron diffraction.

19. *SEM*—Scanning electron microscope.

20. *STEM*—Scanning transmission electron microscope.

21. *Structure*—a microscopic bundle, cluster, fiber, or matrix which may contain asbestos.

22. *S/cm$^3$*—Structures per cubic centimeter.

23. *S/mm$^2$*—Structures per square millimeter.

24. *TEM*—Transmission electron microscope.

B. Sampling

1. Sampling operations must be performed by qualified individuals completely independent of the abatement contractor to avoid possible conflict of interest (See References 1, 2, and 5 of Unit III.L.) Special precautions should be taken to avoid contamination of the sample. For example, materials that have not been prescreened for their asbestos background content should not be used; also, sample handling procedures which do not take cross contamination possibilities into account should not be used.

2. Material and supply checks for asbestos contamination should be made on all critical supplies, reagents, and procedures before their use in a monitoring study.

3. Quality control and quality assurance steps are needed to identify problem areas and isolate the cause of the contamination (see Reference 5 of Unit III.L.). Control checks shall be permanently recorded to document the quality of the information produced. The sampling firm must have written quality control procedures and documents which verify compliance. Independent audits by a qualified consultant or firm should be performed once a year. All documentation of compliance should be retained indefinitely to provide a guarantee of quality. A summary of Sample Data Quality Objectives is shown in Table II of Unit II.B.

4. Sampling materials.

a. Sample for airborne asbestos following an abatement action using commercially available cassettes.

b. Use either a cowling or a filter-retaining middle piece. Conductive material may reduce the potential for particulates to adhere to the walls of the cowl.

c. Cassettes must be verified as ''clean'' prior to use in the field. If packaged filters are used for loading or preloaded cassettes are purchased from the manufacturer or a distributor, the manufacturer's name and lot number should be entered on all field data sheets provided to the laboratory, and are required to be listed on all reports from the laboratory.

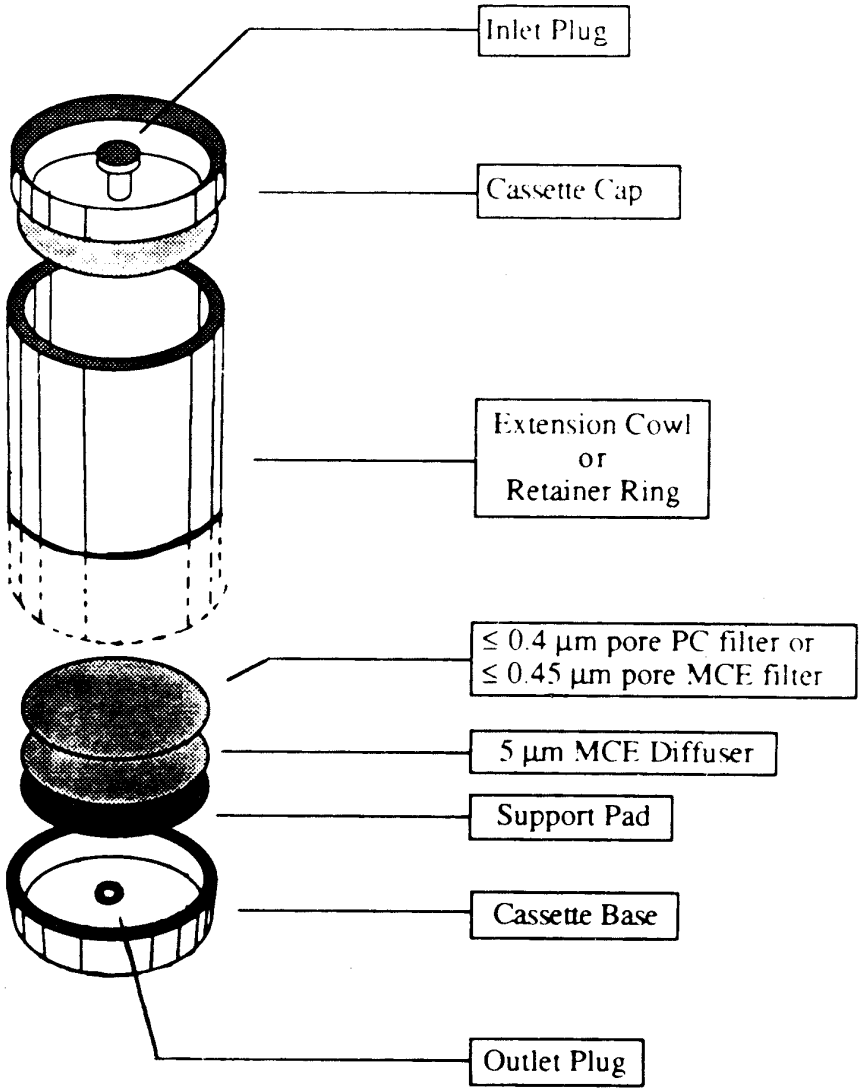
d. Assemble the cassettes in a clean facility (See definition of clean area under Unit III.A.).

e. Reloading of used cassettes is not permitted.

f. Use sample collection filters which are either polycarbonate having a pore size of less than or equal to 0.4 µm or mixed cellulose ester having a pore size of less than or equal to 0.45 µm.

g. Place these filters in series with a backup filter with a pore size of 5.0 µm (to serve as a diffuser) and a support pad. See the following Figure 1:

FIGURE I--SAMPLING CASSETTE CONFIGURATION



h. When polycarbonate filters are used, position the highly reflective face such that the incoming particulate is received on this surface.

i. Seal the cassettes to prevent leakage around the filter edges or between cassette part joints. A mechanical press may be useful to achieve a reproducible leak-free seal. Shrink fit gel-bands may be used for this purpose and are available from filter manufacturers and their authorized distributors.

j. Use wrinkle-free loaded cassettes in the sampling operation.

5. Pump setup.

a. Calibrate the sampling pump over the range of flow rates and loads anticipated for the monitoring period with this flow measuring device in series. Perform this calibration using guidance from EPA Method 2A each time the unit is sent to the field (See Reference 6 of Unit III.L.).

b. Configure the sampling system to preclude pump vibrations from being transmitted to the cassette by using a sampling stand separate from the pump station and making connections with flexible tubing.

c. Maintain continuous smooth flow conditions by damping out any pump action fluctuations if necessary.

d. Check the sampling system for leaks with the end cap still in place and the pump operating before initiating sample collection. Trace and stop the source of any flow indicated by the flowmeter under these conditions.

e. Select an appropriate flow rate equal to or greater than 1 L/min or less than 10 L/min for 25 mm cassettes. Larger filters may be operated at proportionally higher flow rates.

f. Orient the cassette downward at approximately 45 degrees from the horizontal.

g. Maintain a log of all pertinent sampling information, such as pump identification number, calibration data, sample location, date, sample identification number, flow rates at the beginning, middle, and end, start and stop times, and other useful information or comments. Use of a sampling log form is recommended. See the following Figure 2:

FIGURE 2--SAMPLING LOG FORM

| Sample Number | Location of Sample | Pump I.D. | Start Time | Middle Time | End Time | Flow Rate |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
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Inspector: _____ Date: _____

h. Initiate a chain of custody procedure at the start of each sampling, if this is requested by the client.

i. Maintain a close check of all aspects of the sampling operation on a regular basis.

j. Continue sampling until at least the minimum volume is collected, as specified in the following Table I:

TABLE 1--NUMBER OF 200 MESH EM GRID OPENINGS ($0.0057\ MM^2$) THAT NEED TO BE ANALYZED TO MAINTAIN SENSITIVITY OF 0.005 STRUCTURES/CC BASED ON VOLUME AND EFFECTIVE FILTER AREA

| | Effective Filter Area 385 sq mm | | Effective Filter Area 855 sq mm | |
|---|---|---|---|---|
| | Volume (liters) | # of grid openings | Volume (liters) | # of grid openings |
| | *560* | *24* | *1,250* | *24* |
| | 600 | 23 | 1,300 | 23 |
| | 700 | 19 | 1,400 | 21 |
| | 800 | 17 | 1,600 | 19 |
| | 900 | 15 | 1,800 | 17 |
| | 1,000 | 14 | 2,000 | 15 |
| | 1,100 | 12 | 2,200 | 14 |
| Recommended Volume Range | **1,200** | **11** | 2,400 | 13 |
| | **1,300** | **10** | 2,600 | 12 |
| | **1,400** | **10** | **2,800** | **11** |
| | **1,500** | **9** | **3,000** | **10** |
| | **1,600** | **8** | **3,200** | **9** |
| | **1,700** | **8** | **3,400** | **9** |
| | **1,800** | **8** | **3,600** | **8** |
| | 1,900 | 7 | **3,800** | **8** |
| | 2,000 | 7 | **4,000** | **8** |
| | 2,100 | 6 | 4,200 | 7 |
| | 2,200 | 6 | 4,400 | 7 |
| | 2,300 | 6 | 4,600 | 7 |
| | 2,400 | 6 | 4,800 | 6 |
| | 2,500 | 5 | 5,000 | 6 |
| | 2,600 | 5 | 5,200 | 6 |
| | 2,700 | 5 | 5,400 | 6 |
| | 2,800 | 5 | 5,600 | 5 |
| | 2,900 | 5 | 5,800 | 5 |
| | 3,000 | 5 | 6,000 | 5 |
| | 3,100 | 4 | 6,200 | 5 |
| | 3,200 | 4 | 6,400 | 5 |
| | 3,300 | 4 | 6,600 | 5 |
| | 3,400 | 4 | 6,800 | 4 |
| | 3,500 | 4 | 7,000 | 4 |
| | 3,600 | 4 | 7,200 | 4 |
| | 3,700 | 4 | 7,400 | 4 |
| | 3,800 | 4 | 7,600 | 4 |

Note minimum volumes required:
25 mm : 560 liters
37 mm : 1250 liters

Filter diameter of 25 mm = effective area of 385 sq mm
Filter diameter of 37 mm = effective area of 855 sq mm

k. At the conclusion of sampling, turn the cassette upward before stopping the flow to minimize possible particle loss. If the sampling is resumed, restart the flow before reorienting the cassette downward. Note the condition of the filter at the conclusion of sampling.

l. Double check to see that all information has been recorded on the data collection forms and that the cassette is securely closed and appropriately identified using a waterproof label. Protect cassettes in individual clean resealed polyethylene bags. Bags are to be used for storing cassette caps when they are removed for sampling purposes. Caps and plugs should only be removed or replaced using clean hands or clean disposable plastic gloves.

m. Do not change containers if portions of these filters are taken for other purposes.

6. Minimum sample number per site. A minimum of 13 samples are to be collected for each testing consisting of the following:

a. A minimum of five samples per abatement area.

b. A minimum of five samples per ambient area positioned at locations representative of the air entering the abatement site.

c. Two field blanks are to be taken by removing the cap for not more than 30 sec and replacing it at the time of sampling before sampling is initiated at the following places:

i. Near the entrance to each ambient area.

ii. At one of the ambient sites.

(NOTE: Do not leave the blank open during the sampling period.)

d. A sealed blank is to be carried with each sample set. This representative cassette is not to be opened in the field.

7. Abatement area sampling.

a. Conduct final clearance sampling only after the primary containment barriers have been removed; the abatement area has been thoroughly dried; and, it has passed visual inspection tests by qualified personnel. (See Reference 1 of Unit III.L.)

b. Containment barriers over windows, doors, and air passageways must remain in place until the TEM clearance sampling and analysis is completed and results meet clearance test criteria. The final plastic barrier remains in place for the sampling period.

c. Select sampling sites in the abatement area on a random basis to provide unbiased and representative samples.

d. After the area has passed a thorough visual inspection, use aggressive sampling conditions to dislodge any remaining dust.

i. Equipment used in aggressive sampling such as a leaf blower and/or fan should be properly cleaned and decontaminated before use.

ii. Air filtration units shall remain on during the air monitoring period.

iii. Prior to air monitoring, floors, ceiling and walls shall be swept with the exhaust of a minimum one (1) horsepower leaf blower.

iv. Stationary fans are placed in locations which will not interfere with air monitoring equipment. Fan air is directed toward the ceiling. One fan shall be used for each 10,000 $ft^3$ of worksite.

v. Monitoring of an abatement work area with high-volume pumps and the use of circulating fans will require electrical power. Electrical outlets in the abatement area may be used if available. If no such outlets are available, the equipment must be supplied with electricity by the use of extension cords and strip plug units. All electrical power supply equipment of this type must be approved Underwriter Laboratory equipment that has not been modified. All wiring must be grounded. Ground fault interrupters should be used. Extreme care must be taken to clean up any residual water and ensure that electrical equipment does not become wet while operational.

vi. Low volume pumps may be carefully wrapped in 6-mil polyethylene to insulate the pump from the air. High volume pumps cannot be sealed in this manner since the heat of the motor may melt the plastic. The pump exhausts should be kept free.

vii. If recleaning is necessary, removal of this equipment from the work area must be handled with care. It is not possible to completely decontaminate the pump motor and parts since these areas cannot be wetted. To minimize any problems in this area, all equipment such as fans and pumps should be carefully wet wiped prior to removal from the abatement area. Wrapping and sealing low volume pumps in 6-mil polyethylene will provide easier decontamination of this equipment. Use of clean water and disposable wipes should be available for this purpose.

e. Pump flow rate equal to or greater than 1 L/min or less than 10 L/min may be used for 25 mm cassettes. The larger cassette diameters may have comparably increased flow.

f. Sample a volume of air sufficient to ensure the minimum quantitation limits. (See Table I of Unit III.B.5.j.)

8. Ambient sampling.

a. Position ambient samplers at locations representative of the air entering the abatement site. If makeup air entering the abatement site is drawn from another area of the building which is outside of the abatement area, place the pumps in the building, pumps should be placed out of doors located near the building and away from any obstructions that may influence wind patterns. If construction is in progress immediately outside the enclosure, it may be necessary to select another ambient site. Samples should be representative of any air entering the work site.

b. Locate the ambient samplers at least 3 ft apart and protect them from adverse weather conditions.

c. Sample same volume of air as samples taken inside the abatement site.

C. Sample Shipment

1. Ship bulk samples in a separate container from air samples. Bulk samples and air samples delivered to the analytical laboratory in the same container shall be rejected.

2. Select a rigid shipping container and pack the cassettes upright in a noncontaminating nonfibrous medium such as a bubble pack. The use of resealable polyethylene bags may help to prevent jostling of individual cassettes.

3. Avoid using expanded polystyrene because of its static charge potential. Also avoid using particle-based packaging materials because of possible contamination.

4. Include a shipping bill and a detailed listing of samples shipped, their descriptions and all identifying numbers or marks, sampling data, shipper's name, and contact information. For each sample set, designate which are the ambient samples, which are the abatement area samples, which are the field blanks, and which is the sealed blank if sequential analysis is to be performed.

5. Hand-carry samples to the laboratory in an upright position if possible; otherwise choose that mode of transportation least likely to jar the samples in transit.

6. Address the package to the laboratory sample coordinator by name when known and alert him or her of the package description, shipment mode, and anticipated arrival as part of the chain of custody and sample tracking procedures. This will also help the laboratory schedule timely analysis for the samples when they are received.

D. Quality Control/Quality Assurance Procedures (Data Quality Indicators)

Monitoring the environment for airborne asbestos requires the use of sensitive sampling and analysis procedures. Because the test is sensitive, it may be influenced by a variety of factors. These include the supplies used in the sampling operation, the performance of the sampling, the preparation of the grid from the filter and the actual examination of this grid in the microscope. Each of these unit operations must produce a product of defined quality if the analytical result is to be a reliable and meaningful test result. Accordingly, a series of control checks and reference standards is performed along with the sample analysis as indicators that the materials used are adequate and the operations are within acceptable limits. In this way, the quality of the data is defined, and the results are of known value. These checks and tests also provide timely and specific warning of any problems which might develop within the sampling and analysis operations. A description of these quality control/quality assurance procedures is summarized in the text below.

1. Prescreen the loaded cassette collection filters to assure that they do not contain concentrations of asbestos which may interfere with the analysis of the sample. A filter blank average of less than 18 s/mm$^2$ in an area of 0.057 mm$^2$ (nominally 10 200-mesh grid openings) and a maximum of 53 s/mm$^2$ for that same area for any single preparation is acceptable for this method.

2. Calibrate sampling pumps and their flow indicators over the range of their intended use with a recognized standard. Assemble the sampling system with a representative filter—not the filter which will be used in sampling—before and after the sampling operation.

3. Record all calibration information with the data to be used on a standard sampling form.

4. Ensure that the samples are stored in a secure and representative location.

5. Ensure that mechanical calibrations from the pump will be minimized to prevent transferral of vibration to the cassette.

6. Ensure that a continuous smooth flow of negative pressure is delivered by the pump by installing a damping chamber if necessary.

7. Open a loaded cassette momentarily at one of the indoor sampling sites when sampling is initiated. This sample will serve as an indoor field blank.

8. Open a loaded cassette momentarily at one of the outdoor sampling sites when sampling is initiated. This sample will serve as an outdoor field blank.

9. Carry a sealed blank into the field with each sample series. Do not open this cassette in the field.

10. Perform a leak check of the sampling system at each indoor and outdoor sampling site by activating the pump with the closed sampling cassette in line. Any flow indicates a leak which must be eliminated before initiating the sampling operation.

11. Ensure that the sampler is turned upright before interrupting the pump flow.

12. Check that all samples are clearly labeled and that all pertinent information has been enclosed before transfer of the samples to the laboratory.

E. Sample Receiving

1. Designate one individual as sample coordinator at the laboratory. While that individual will normally be available to receive samples, the coordinator may train and supervise others in receiving procedures for those times when he/she is not available.

2. Adhere to the following procedures to ensure both the continued chain-of-custody and the accountability of all samples passing through the laboratory:

a. Note the condition of the shipping package and data written on it upon receipt.

b. Retain all bills of lading or shipping slips to document the shipper and delivery time.

c. Examine the chain-of-custody seal, if any, and the package for its integrity.

d. If there has been a break in the seal or substantive damage to the package, the sample coordinator shall immediately notify the shipper and a responsible laboratory manager before any action is taken to unpack the shipment.

e. Packages with significant damage shall be accepted only by the responsible laboratory manager after discussions with the client.

3. Unwrap the shipment in a clean, uncluttered facility. The sample coordinator or his or her designee will record the contents, including a description of each item and all identifying numbers or marks. A Sample Receiving Form to document this information is attached for use when necessary. (See the following Figure 3.)

FIGURE 3--SAMPLE RECEIVING FORM

Date of package delivery _____ Package shipped from _____

Carrier _____ Shipping bill retained _____

*Condition of package on receipt_____

*Condition of custody seal _____

Number of samples received _____ Shipping manifest attached _____

Purchase Order No. _____ Project I.D. _____

Comments _____

| No. | Description | Sampling Medium PC | Sampling Medium MCE | Sampled Volume Liters | Receiving ID # | Assigned # |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |

(Use as many additional sheets as needed.)

Comments _____

Date of acceptance into sample bank _____

Signature of chain-of-custody recipient _____

Disposition of samples_____

*Note: If the package has sustained substantial damage or the custody seal is broken, stop and contact the project manager and the shipper.

NOTE: The person breaking the chain-of-custody seal and itemizing the contents assumes responsibility for the shipment and signs documents accordingly.

4. Assign a laboratory number and schedule an analysis sequence.

5. Manage all chain-of-custody samples within the laboratory such that their integrity can be ensured and documented.

F. Sample Preparation

1. Personnel not affiliated with the Abatement Contractor shall be used to prepare samples and conduct TEM analysis. Wet-wipe the exterior of the cassettes to minimize contamination possibilities before taking them to the clean sample preparation facility.

2. Perform sample preparation in a well-equipped clean facility.

NOTE: The clean area is required to have the following minimum characteristics. The area or hood must be capable of maintaining a positive pressure with make-up air being HEPA filtered. The cumulative analytical blank concentration must average less than 18 s/mm$^2$ in an area of 0.057 s/mm$^2$ (nominally 10 200-mesh grid openings) with no more than one single preparation to exceed 53 s/mm$^2$ for that same area.

3. Preparation areas for air samples must be separated from preparation areas for bulk samples. Personnel must not prepare air samples if they have previously been preparing bulk samples without performing appropriate personal hygiene procedures, i.e., clothing change, showering, etc.

4. *Preparation.* Direct preparation techniques are required. The objective is to produce an intact carbon film containing the particulates from the filter surface which is sufficiently clear for TEM analysis. Currently recommended direct preparation procedures for polycarbonate (PC) and mixed cellulose ester (MCE) filters are described in Unit III.F.7. and 8. Sample preparation is a subject requiring additional research. Variation on those steps which do not substantively change the procedure, which improve filter clearing or which reduce contamination problems in a laboratory are permitted.

a. Use only TEM grids that have had grid opening areas measured according to directions in Unit III.J.

b. Remove the inlet and outlet plugs prior to opening the cassette to minimize any pressure differential that may be present.

c. Examples of techniques used to prepare polycarbonate filters are described in Unit III.F.7.

d. Examples of techniques used to prepare mixed cellulose ester filters are described in Unit III.F.8.

e. Prepare multiple grids for each sample.

f. Store the three grids to be measured in appropriately labeled grid holders or polyethylene capsules.

5. Equipment.

a. Clean area.

b. Tweezers. Fine-point tweezers for handling of filters and TEM grids.

c. Scalpel Holder and Curved No. 10 Surgical Blades.

d. Microscope slides.

e. Double-coated adhesive tape.

f. Gummed page reinforcements.

g. Micro-pipet with disposal tips 10 to 100 µL variable volume.

h. Vacuum coating unit with facilities for evaporation of carbon. Use of a liquid nitrogen cold trap above the diffusion pump will minimize the possibility of contamination of the filter surface by oil from the pumping system. The vacuum-coating unit can also be used for deposition of a thin film of gold.

i. *Carbon rod electrodes.* Spectrochemically pure carbon rods are required for use in the vacuum evaporator for carbon coating of filters.

j. *Carbon rod sharpener.* This is used to sharpen carbon rods to a neck. The use of necked carbon rods (or equivalent) allows the carbon to be applied to the filters with a minimum of heating.

k. *Low-temperature plasma asher.* This is used to etch the surface of collapsed mixed cellulose ester (MCE) filters. The asher should be supplied with oxygen, and should be modified as necessary to provide a throttle or bleed valve to control the speed of the vacuum to minimize disturbance of the filter. Some early models of ashers admit air too rapidly, which may disturb particulates on the surface of the filter during the etching step.

l. *Glass petri dishes, 10 cm in diameter, 1 cm high.* For prevention of excessive evaporation of solvent when these are in use, a good seal must be provided between the base and the lid. The seal can be improved by grinding the base and lid together with an abrasive grinding material.

m. Stainless steel mesh.

n. Lens tissue.

o. Copper 200-mesh TEM grids, 3 mm in diameter, or equivalent.

p. Gold 200-mesh TEM grids, 3 mm in diameter, or equivalent.

q. Condensation washer.

r. Carbon-coated, 200-mesh TEM grids, or equivalent.

s. Analytical balance, 0.1 mg sensitivity.

t. Filter paper, 9 cm in diameter.

u. Oven or slide warmer. Must be capable of maintaining a temperature of 65–70 °C.

v. Polyurethane foam, 6 mm thickness.

w. Gold wire for evaporation.

6. Reagents.

a. *General.* A supply of ultra-clean, fiber-free water must be available for washing of all components used in the analysis. Water

that has been distilled in glass or filtered or deionized water is satisfactory for this purpose. Reagents must be fiber-free.

b. Polycarbonate preparation method—chloroform.

c. Mixed Cellulose Ester (MCE) preparation method—acetone or the Burdette procedure (Ref. 7 of Unit III.L.).

7. TEM specimen preparation from polycarbonate filters.

a. *Specimen preparation laboratory*. It is most important to ensure that contamination of TEM specimens by extraneous asbestos fibers is minimized during preparation.

b. Cleaning of sample cassettes. Upon receipt at the analytical laboratory and before they are taken into the clean facility or laminar flow hood, the sample cassettes must be cleaned of any contamination adhering to the outside surfaces.

c. Preparation of the carbon evaporator. If the polycarbonate filter has already been carbon-coated prior to receipt, the carbon coating step will be omitted, unless the analyst believes the carbon film is too thin. If there is a need to apply more carbon, the filter will be treated in the same way as an uncoated filter. Carbon coating must be performed with a high-vacuum coating unit. Units that are based on evaporation of carbon filaments in a vacuum generated only by an oil rotary pump have not been evaluated for this application, and must not be used. The carbon rods should be sharpened by a carbon rod sharpener to necks of about 4 mm long and 1 mm in diameter. The rods are installed in the evaporator in such a manner that the points are approximately 10 to 12 cm from the surface of a microscope slide held in the rotating and tilting device.

d. Selection of filter area for carbon coating. Before preparation of the filters, a 75 mm x 50 mm microscope slide is washed and dried. This slide is used to support strips of filter during the carbon evaporation. Two parallel strips of double-sided adhesive tape are applied along the length of the slide. Polycarbonate filters are easily stretched during handling, and cutting of areas for further preparation must be performed with great care. The filter and the MCE backing filter are removed together from the cassette and placed on a cleaned glass microscope slide. The filter can be cut with a curved scalpel blade by rocking the blade from the point placed in contact with the filter. The process can be repeated to cut a strip approximately 3 mm wide across the diameter of the filter. The strip of polycarbonate filter is separated from the corresponding strip of backing filter and carefully placed so that it bridges the gap between the adhesive tape strips on the microscope slide. The filter strip can be held with fine-point tweezers and supported underneath by the scalpel blade during placement on the microscope slide. The analyst can place several such strips on the same microscope slide, taking care to rinse and wet-wipe the scalpel blade and tweezers before handling a new sample. The filter strips should be identified by etching the glass slide or marking the slide using a marker insoluble in water and solvents. After the filter strip has been cut from each filter, the residual parts of the filter must be returned to the cassette and held in position by reassembly of the cassette. The cassette will then be archived for a period of 30 days or returned to the client upon request.

e. Carbon coating of filter strips. The glass slide holding the filter strips is placed on the rotation-tilting device, and the evaporator chamber is evacuated. The evaporation must be performed in very short bursts, separated by some seconds to allow the electrodes to cool. If evaporation is too rapid, the strips of polycarbonate filter will begin to curl, which will lead to cross-linking of the surface material and make it relatively insoluble in chloroform. An experienced analyst can judge the thickness of carbon film to be applied, and some test should be made first on unused filters. If the film is too thin, large particles will be lost from the TEM specimen, and there will be few complete and undamaged grid openings on the specimen. If the coating is too thick, the filter will tend to curl when exposed to chloroform vapor and the carbon film may not adhere to the support mesh. Too thick a carbon film will also lead to a TEM image that is lacking in contrast, and the ability to obtain ED patterns will be compromised. The carbon film should be as thin as possible and remain intact on most of the grid openings of the TEM specimen intact.

f. Preparation of the Jaffe washer. The precise design of the Jaffe washer is not considered important, so any one of the published designs may be used. A washer consisting of a simple stainless steel bridge is recommended. Several pieces of lens tissue approximately 1.0 cm x 0.5 cm are placed on the stainless steel bridge, and the washer is filled with chloroform to a level where the meniscus contacts the underside of the mesh, which results in saturation of the lens tissue. See References 8 and 10 of Unit III.L.

g. Placing of specimens into the Jaffe washer. The TEM grids are first placed on a piece of lens tissue so that individual grids can be picked up with tweezers. Using a curved scalpel blade, the analyst excises three 3 mm square pieces of the carbon-coated polycarbonate filter from the filter strip. The three squares are selected from the center of the strip and from two points between the outer periphery of the active surface and the center. The piece of filter is placed on a TEM specimen grid with the shiny side of the TEM grid facing upwards, and the whole assembly is placed boldly onto the saturated lens tissue in the Jaffe washer. If carbon-coated grids are used, the filter should be

placed carbon-coated side down. The three excised squares of filters are placed on the same piece of lens tissue. Any number of separate pieces of lens tissue may be placed in the same Jaffe washer. The lid is then placed on the Jaffe washer, and the system is allowed to stand for several hours, preferably overnight.

h. *Condensation washing.* It has been found that many polycarbonate filters will not dissolve completely in the Jaffe washer, even after being exposed to chloroform for as long as 3 days. This problem becomes more serious if the surface of the filter was overheated during the carbon evaporation. The presence of undissolved filter medium on the TEM preparation leads to partial or complete obscuration of areas of the sample, and fibers that may be present in these areas of the specimen will be overlooked; this will lead to a low result. Undissolved filter medium also compromises the ability to obtain ED patterns. Before they are counted, TEM grids must be examined critically to determine whether they are adequately cleared of residual filter medium. It has been found that condensation washing of the grids after the initial Jaffe washer treatment, with chloroform as the solvent, clears all residual filter medium in a period of approximately 1 hour. In practice, the piece of lens tissue supporting the specimen grids is transferred to the cold finger of the condensation washer, and the washer is operated for about 1 hour. If the specimens are cleared satisfactorily by the Jaffe washer alone, the condensation washer step may be unnecessary.

8. TEM specimen preparation from MCE filters.

a. This method of preparing TEM specimens from MCE filters is similar to that specified in NIOSH Method 7402. See References 7, 8, and 9 of Unit III.L.

b. Upon receipt at the analytical laboratory, the sample cassettes must be cleaned of any contamination adhering to the outside surfaces before entering the clean sample preparation area.

c. Remove a section from any quadrant of the sample and blank filters.

d. Place the section on a clean microscope slide. Affix the filter section to the slide with a gummed paged reinforcement or other suitable means. Label the slide with a water and solvent-proof marking pen.

e. Place the slide in a petri dish which contains several paper filters soaked with 2 to 3 mL acetone. Cover the dish. Wait 2 to 4 minutes for the sample filter to fuse and clear.

f. Plasma etching of the collapsed filter is required.

i. The microscope slide to which the collapsed filter pieces are attached is placed in a plasma asher. Because plasma ashers vary greatly in their performance, both from unit to unit and between different positions in the asher chamber, it is difficult to specify the conditions that should be used. This is one area of the method that requires further evaluation. Insufficient etching will result in a failure to expose embedded filters, and too much etching may result in loss of particulate from the surface. As an interim measure, it is recommended that the time for ashing of a known weight of a collapsed filter be established and that the etching rate be calculated in terms of micrometers per second. The actual etching time used for a particular asher and operating conditions will then be set such that a 1–2 μm (10 percent) layer of collapsed surface will be removed.

ii. Place the slide containing the collapsed filters into a low-temperature plasma asher, and etch the filter.

g. Transfer the slide to a rotating stage inside the bell jar of a vacuum evaporator. Evaporate a 1 mm x 5 mm section of graphite rod onto the cleared filter. Remove the slide to a clean, dry, covered petri dish.

h. Prepare a second petri dish as a Jaffe washer with the wicking substrate prepared from filter or lens paper placed on top of a 6 mm thick disk of clean spongy polyurethane foam. Cut a V-notch on the edge of the foam and filter paper. Use the V-notch as a reservoir for adding solvent. The wicking substrate should be thin enough to fit into the petri dish without touching the lid.

i. Place carbon-coated TEM grids face up on the filter or lens paper. Label the grids by marking with a pencil on the filter paper or by putting registration marks on the petri dish lid and marking with a waterproof marker on the dish lid. In a fume hood, fill the dish with acetone until the wicking substrate is saturated. The level of acetone should be just high enough to saturate the filter paper without creating puddles.

j. Remove about a quarter section of the carbon-coated filter samples from the glass slides using a surgical knife and tweezers. Carefully place the section of the filter, carbon side down, on the appropriately labeled grid in the acetone-saturated petri dish. When all filter sections have been transferred, slowly add more solvent to the wedge-shaped trough to bring the acetone level up to the highest possible level without disturbing the sample preparations. Cover the petri dish. Elevate one side of the petri dish by placing a slide under it. This allows drops of condensed solvent vapors to form near the edge rather than in the center where they would drip onto the grid preparation.

G. TEM Method

1. *Instrumentation.*

a. Use an 80–120 kV TEM capable of performing electron diffraction with a fluorescent screen inscribed with calibrated gradations. If the TEM is equipped with EDXA it must either have a STEM attachment or be capable of producing a spot less than 250 nm

in diameter at crossover. The microscope shall be calibrated routinely (see Unit III.J.) for magnification and camera constant.

b. While not required on every microscope in the laboratory, the laboratory must have either one microscope equipped with energy dispersive X-ray analysis or access to an equivalent system on a TEM in another laboratory. This must be an Energy Dispersive X-ray Detector mounted on TEM column and associated hardware/software to collect, save, and read out spectral information. Calibration of Multi-Channel Analyzer shall be checked regularly for A1 at 1.48 KeV and Cu at 8.04 KeV, as well as the manufacturer's procedures.

i. Standard replica grating may be used to determine magnification (e.g., 2160 lines/mm).

ii. Gold standard may be used to determine camera constant.

c. Use a specimen holder with single tilt and/or double tilt capabilities.

2. Procedure.

a. Start a new Count Sheet for each sample to be analyzed. Record on count sheet: analyst's initials and date; lab sample number; client sample number microscope identification; magnification for analysis; number of predetermined grid openings to be analyzed; and grid identification. See the following Figure 4:

FIGURE 4--COUNT SHEET

Lab Sample No. _____ Filter Type _____ Operator _____
Client Sample No. _____ Filter Area _____ Date _____
Instrument I.D. _____ Grid I.D. _____ Comments _____
Magnification _____ Grid Opening (GO) Area _____ _____
Acc. Voltage _____ No. GO to be Analyzed _____ _____

| GO | Structure No. | Structure Type* | Length | | ED Observation | | | | EDAX |
|---|---|---|---|---|---|---|---|---|---|
| | | | < 5µm | ≥ 5 µm | Chrys. | Amph. | Nonasb. | Neg. ID | |
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| GO | Structure No. | Structure Type* | Length | | ED Observation | | | | EDAX |
|---|---|---|---|---|---|---|---|---|---|
| | | | < 5µm | ≥ 5 µm | Chrys. | Amph. | Nonasb. | Neg. ID | |
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*B = Bundle
C = Cluster
F = Fiber
M = Matrix

NFD = No fibers detected
N = No diffraction obtained

b. Check that the microscope is properly aligned and calibrated according to the manufacturer's specifications and instructions.

c. Microscope settings: 80–120 kV, grid assessment 250–1000X, then 15,000–20,000X screen magnification for analysis.

d. Approximately one-half (0.5) of the predetermined sample area to be analyzed shall be performed on one sample grid preparation and the remaining half on a second sample grid preparation.

e. Determine the suitability of the grid.

i. Individual grid openings with greater than 5 percent openings (holes) or covered with greater than 25 percent particulate matter or obviously having nonuniform loading shall not be analyzed.

ii. Examine the grid at low magnification (<1000X) to determine its suitability for detailed study at higher magnifications.

iii. Reject the grid if:

(1) Less than 50 percent of the grid openings covered by the replica are intact.

(2) It is doubled or folded.

(3) It is too dark because of incomplete dissolution of the filter.

iv. If the grid is rejected, load the next sample grid.

v. If the grid is acceptable, continue on to Step 6 if mapping is to be used; otherwise proceed to Step 7.

f. Grid Map (Optional).

i. Set the TEM to the low magnification mode.

ii. Use flat edge or finder grids for mapping.

iii. Index the grid openings (fields) to be counted by marking the acceptable fields for one-half (0.5) of the area needed for analysis on each of the two grids to be analyzed. These may be marked just before examining each grid opening (field), if desired.

iv. Draw in any details which will allow the grid to be properly oriented if it is reloaded into the microscope and a particular field is to be reliably identified.

g. Scan the grid.

i. Select a field to start the examination.

ii. Choose the appropriate magnification (15,000 to 20,000X screen magnification).

iii. Scan the grid as follows.

(1) At the selected magnification, make a series of parallel traverses across the field. On reaching the end of one traverse, move the image one window and reverse the traverse.

NOTE: A slight overlap should be used so as not to miss any part of the grid opening (field).

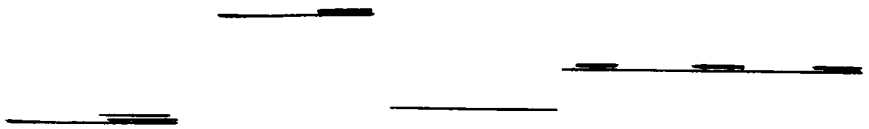
(2) Make parallel traverses until the entire grid opening (field) has been scanned.

h. Identify each structure for appearance and size.

i. Appearance and size: Any continuous grouping of particles in which an asbestos fiber within aspect ratio greater than or equal to 5:1 and a length greater than or equal to 0.5 µm is detected shall be recorded on the count sheet. These will be designated asbestos structures and will be classified as fibers, bundles, clusters, or matrices. Record as individual fibers any contiguous grouping having 0, 1, or 2 definable intersections. Groupings having more than 2 intersections are to be described as cluster or matrix. See the following Figure 5:

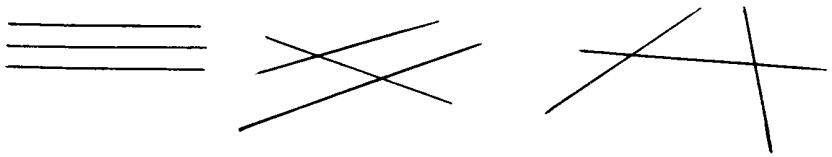
FIGURE 5--COUNTING GUIDELINES USED IN DETERMINING ASBESTOS STRUCTURES

Count as 1 fiber; 1 Structure; no intersections.



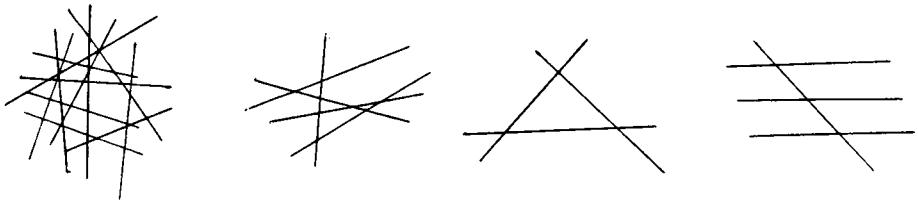
Count as 2 fibers if space between fibers is greater than width of 1 fiber diameter or number of intersections is equal to or less than 1.

Count as 3 structures if space between fibers is greater than width of 1 fiber diameter or if the number of intersections is equal to or less than 2.

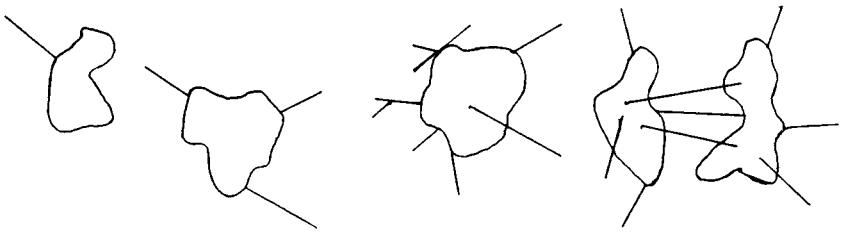


Count bundles as 1 structure; 3 or more parallel fibrils less than 1 fiber diameter separation.

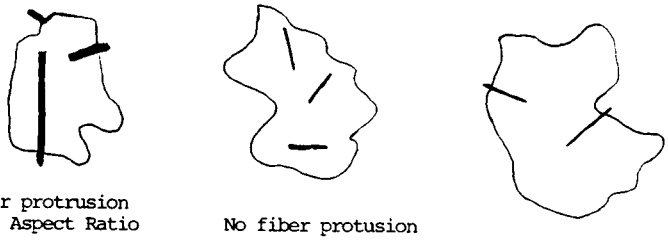
Count clusters as 1 structure; fibers having greater than or equal to 3 intersections.



Count matrix as 1 structure.



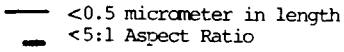
DO NOT COUNT AS STRUCTUPES:



Fiber protrusion
<5:1 Aspect Ratio

No fiber protusion

Fiber protrusion
<0.5 micrometer



<0.5 micrometer in length
<5:1 Aspect Ratio

An intersection is a non-parallel touching or crossing of fibers, with the projection having an aspect ratio of 5:1 or greater. Combinations such as a matrix and cluster, matrix and bundle, or bundle and cluster are categorized by the dominant fiber quality—cluster, bundle, and matrix, respectively. Separate categories will be maintained for fibers less than 5 µm and for fibers greater than or equal to 5 µm in length. Not required, but useful, may be to record the fiber length in 1 µm intervals. (Identify each structure morphologically and analyze it as it enters the ''window''.)

(1) *Fiber.* A structure having a minimum length greater than 0.5 µm and an aspect ratio (length to width) of 5:1 or greater and substantially parallel sides. Note the appearance of the end of the fiber, i.e., whether it is flat, rounded or dovetailed, no intersections.

(2) *Bundle.* A structure composed of 3 or more fibers in a parallel arrangement with each fiber closer than one fiber diameter.

(3) *Cluster.* A structure with fibers in a random arrangement such that all fibers are intermixed and no single fiber is isolated from the group; groupings must have more than 2 intersections.

(4) *Matrix.* Fiber or fibers with one end free and the other end embedded in or hidden by a particulate. The exposed fiber must meet the fiber definition.

(5) *NSD.* Record NSD when no structures are detected in the field.

(6) *Intersection.* Non-parallel touching or crossing of fibers, with the projection having an aspect ratio 5:1 or greater.

ii. Structure Measurement.

(1) Recognize the structure that is to be sized.

(2) Memorize its location in the ''window'' relative to the sides, inscribed square and to other particulates in the field so this exact location can be found again when scanning is resumed.

(3) Measure the structure using the scale on the screen.

(4) Record the length category and structure type classification on the count sheet after the field number and fiber number.

(5) Return the fiber to its original location in the window and scan the rest of the field for other fibers; if the direction of travel is not remembered, return to the right side of the field and begin the traverse again.

i. Visual identification of Electron Diffraction (ED) patterns is required for each asbestos structure counted which would cause the analysis to exceed the 70 s/mm$^2$ concentration. (Generally this means the first four fibers identified as asbestos must exhibit an identifiable diffraction pattern for chrysotile or amphibole.)

i. Center the structure, focus, and obtain an ED pattern. (See Microscope Instruction Manual for more detailed instructions.)

ii. From a visual examination of the ED pattern, obtained with a short camera length, classify the observed structure as belonging to one of the following classifications: chrysotile, amphibole, or nonasbestos.

(1) Chrysotile: The chrysotile asbestos pattern has characteristic streaks on the layer lines other than the central line and some streaking also on the central line. There will be spots of normal sharpness on the central layer line and on alternate lines (2nd, 4th, etc.). The repeat distance between layer lines is 0.53 nm and the center doublet is at 0.73 nm. The pattern should display (002), (110), (130) diffraction maxima; distances and geometry should match a chrysotile pattern and be measured semiquantitatively.

(2) Amphibole Group [includes grunerite (amosite), crocidolite, anthophyllite, tremolite, and actinolite]: Amphibole asbestos fiber patterns show layer lines formed by very closely spaced dots, and the repeat distance between layer lines is also about 0.53 nm. Streaking in layer lines is occasionally present due to crystal structure defects.

(3) Nonasbestos: Incomplete or unobtainable ED patterns, a nonasbestos EDXA, or a nonasbestos morphology.

iii. The micrograph number of the recorded diffraction patterns must be reported to the client and maintained in the laboratory's quality assurance records. The records must also demonstrate that the identification of the pattern has been verified by a qualified individual and that the operator who made the identification is maintaining at least an 80 percent correct visual identification based on his measured patterns. In the event that examination of the pattern by the qualified individual indicates that the pattern had been misidentified visually, the client shall be contacted. If the pattern is a suspected chrysotile, take a photograph of the diffraction pattern at 0 degrees tilt. If the structure is suspected to be amphibole, the sample may have to be tilted to obtain a simple geometric array of spots.

j. Energy Dispersive X-Ray Analysis (EDXA).

i. Required of all amphiboles which would cause the analysis results to exceed the 70 s/mm$^2$ concentration. (Generally speaking, the first 4 amphiboles would require EDXA.)

ii. Can be used alone to confirm chrysotile after the 70 s/mm$^2$ concentration has been exceeded.

iii. Can be used alone to confirm all nonasbestos.

iv. Compare spectrum profiles with profiles obtained from asbestos standards. The closest match identifies and categorizes the structure.

v. If the EDXA is used for confirmation, record the properly labeled spectrum on a computer disk, or if a hard copy, file with analysis data.

vi. If the number of fibers in the nonasbestos class would cause the analysis to exceed the 70 s/mm² concentration, their identities must be confirmed by EDXA or measurement of a zone axis diffraction pattern to establish that the particles are nonasbestos.

k. Stopping Rules.

i. If more than 50 asbestiform structures are counted in a particular grid opening, the analysis may be terminated.

ii. After having counted 50 asbestiform structures in a minimum of 4 grid openings, the analysis may be terminated. The grid opening in which the 50th fiber was counted must be completed.

iii. For blank samples, the analysis is always continued until 10 grid openings have been analyzed.

iv. In all other samples the analysis shall be continued until an analytical sensitivity of 0.005 s/cm³ is reached.

l. Recording Rules. The count sheet should contain the following information:

i. Field (grid opening): List field number.

ii. Record ''NSD'' if no structures are detected.

iii. Structure information.

(1) If fibers, bundles, clusters, and/or matrices are found, list them in consecutive numerical order, starting over with each field.

(2) Length. Record length category of asbestos fibers examined. Indicate if less than 5 µm or greater than or equal to 5 µm.

(3) Structure Type. Positive identification of asbestos fibers is required by the method. At least one diffraction pattern of each fiber type from every five samples must be recorded and compared with a standard diffraction pattern. For each asbestos fiber reported, both a morphological descriptor and an identification descriptor shall be specified on the count sheet.

(4) Fibers classified as chrysotile must be identified by diffraction and/or X-ray analysis and recorded on the count sheet. X-ray analysis alone can be used as sole identification only after 70s/mm² have been exceeded for a particular sample.

(5) Fibers classified as amphiboles must be identified by X-ray analysis and electron diffraction and recorded on the count sheet. (X-ray analysis alone can be used as sole identification only after 70s/mm² have been exceeded for a particular sample.)

(6) If a diffraction pattern was recorded on film, the micrograph number must be indicated on the count sheet.

(7) If an electron diffraction was attempted and an appropriate spectra is not observed, N should be recorded on the count sheet.

(8) If an X-ray analysis is attempted but not observed, N should be recorded on the count sheet.

(9) If an X-ray analysis spectrum is stored, the file and disk number must be recorded on the count sheet.

m. Classification Rules.

i. *Fiber.* A structure having a minimum length greater than or equal to 0.5 µm and an aspect ratio (length to width) of 5:1 or greater and substantially parallel sides. Note the appearance of the end of the fiber, i.e., whether it is flat, rounded or dovetailed.

ii. *Bundle.* A structure composed of three or more fibers in a parallel arrangement with each fiber closer than one fiber diameter.

iii. *Cluster.* A structure with fibers in a random arrangement such that all fibers are intermixed and no single fiber is isolated from the group. Groupings must have more than two intersections.

iv. *Matrix.* Fiber or fibers with one end free and the other end embedded in or hidden by a particulate. The exposed fiber must meet the fiber definition.

v. *NSD.* Record NSD when no structures are detected in the field.

n. After all necessary analyses of a particle structure have been completed, return the goniometer stage to 0 degrees, and return the structure to its original location by recall of the original location.

o. Continue scanning until all the structures are identified, classified and sized in the field.

p. Select additional fields (grid openings) at low magnification; scan at a chosen magnification (15,000 to 20,000X screen magnification); and analyze until the stopping rule becomes applicable.

q. Carefully record all data as they are being collected, and check for accuracy.

r. After finishing with a grid, remove it from the microscope, and replace it in the appropriate grid hold. Sample grids must be stored for a minimum of 1 year from the date of the analysis; the sample cassette must be retained for a minimum of 30 days by the laboratory or returned at the client's request.

### H. Sample Analytical Sequence

1. Carry out visual inspection of work site prior to air monitoring.

2. Collect a minimum of five air samples inside the work site and five samples outside the work site. The indoor and outdoor samples shall be taken during the same time period.

3. Analyze the abatement area samples according to this protocol. The analysis must meet the 0.005 s/cm³ analytical sensitivity.

4. Remaining steps in the analytical sequence are contained in Unit IV. of this Appendix.

### I. Reporting

The following information must be reported to the client. See the following Table II:

TABLE II--EXAMPLE LABORATORY LETTERHEAD

| Laboratory I.D. | Client I.D. | FILTER MEDIA DATA | | | | Analyzed Area, $mm^2$ | Sample Volume, cc |
|---|---|---|---|---|---|---|---|
| | | Type | Diameter, mm | Effective Area, $mm^2$ | Pore Size, µm | | |
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INDIVIDUAL ANALYTICAL RESULTS

| Laboratory I.D. | Client I.D. | # Asbestos Structures | Analytical Sensitivity, s/cc | CONCENTRATION | |
|---|---|---|---|---|---|
| | | | | Structures/$mm^2$ | Structures/cc |
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The analysis was carried out to the approved TEM method. This laboratory is in compliance with the quality specified by the method.

Authorized Signature

1. Concentration in structures per square millimeter and structures per cubic centimeter.
2. Analytical sensitivity used for the analysis.
3. Number of asbestos structures.
4. Area analyzed.
5. Volume of air samples (which was initially provided by client).
6. Average grid size opening.
7. Number of grids analyzed.
8. Copy of the count sheet must be included with the report.
9. Signature of laboratory official to indicate that the laboratory met specifications of the AHERA method.
10. Report form must contain official laboratory identification (e.g., letterhead).
11. Type of asbestos.

J. Calibration Methodology

NOTE: Appropriate implementation of the method requires a person knowledgeable in electron diffraction and mineral identification by ED and EDXA. Those inexperienced laboratories wishing to develop capabilities may acquire necessary knowledge through analysis of appropriate standards and by following detailed methods as described in References 8 and 10 of Unit III.L.

1. *Equipment Calibration*. In this method, calibration is required for the air-sampling equipment and the transmission electron microscope (TEM).

a. *TEM Magnification*. The magnification at the fluorescent screen of the TEM must be calibrated at the grid opening magnification (if used) and also at the magnification used for fiber counting. This is performed with a cross grating replica. A logbook must be maintained, and the dates of calibration depend on the past history of the particular microscope; no frequency is specified. After any maintenance of the microscope that involved adjustment of the power supplied to the lenses or the high-voltage system or the mechanical disassembly of the electron optical column apart from filament exchange, the magnification must be recalibrated. Before the TEM calibration is performed, the analyst must ensure that the cross grating replica is placed at the same distance from the objective lens as the specimens are. For instruments that incorporate an eucentric tilting specimen stage, all speciments and the cross grating replica must be placed at the eucentric position.

b. Determination of the TEM magnification on the fluorescent screen.

i. Define a field of view on the fluorescent screen either by markings or physical boundaries. The field of view must be measurable or previously inscribed with a scale or concentric circles (all scales should be metric).

ii. Insert a diffraction grating replica (for example a grating containing 2,160 lines/mm) into the specimen holder and place into the microscope. Orient the replica so that the grating lines fall perpendicular to the scale on the TEM fluorescent screen. Ensure that the goniometer stage tilt is 0 degrees.

iii. Adjust microscope magnification to 10,000X or 20,000X. Measure the distance (mm) between two widely separated lines on the grating replica. Note the number of spaces between the lines. Take care to measure between the same relative positions on the lines (e.g., between left edges of lines).

NOTE: The more spaces included in the measurement, the more accurate the final calculation. On most microscopes, however, the magnification is substantially constant only within the central 8–10 cm diameter region of the fluorescent screen.

iv. Calculate the true magnification (M) on the fluorescent screen:

$$M=XG/Y$$

where:

X=total distance (mm) between the designated grating lines;
G=calibration constant of the grating replica (lines/mm):
Y=number of grating replica spaces counted along X.

c. Calibration of the EDXA System. Initially, the EDXA system must be calibrated by using two reference elements to calibrate the energy scale of the instrument. When this has been completed in accordance with the manufacturer's instructions, calibration in terms of the different types of asbestos can proceed. The EDXA detectors vary in both solid angle of detection and in window thickness. Therefore, at a particular accelerating voltage in use on the TEM, the count rate obtained from specific dimensions of fiber will vary both in absolute X-ray count rate and in the relative X-ray peak heights for different elements. Only a few minerals are relevant for asbestos abatement work, and in this procedure the calibration is specified in terms of a ''fingerprint'' technique. The EDXA spectra must be recorded from individual fibers of the relevant minerals, and identifications are made on the basis of semiquantitative comparisons with these reference spectra.

d. Calibration of Grid Openings.

i. Measure 20 grid openings on each of 20 random 200-mesh copper grids by placing a grid on a glass slide and examining it under the PCM. Use a calibrated graticule to measure the average field diameter and use this number to calculate the field area for an average grid opening. Grids are to be randomly selected from batches up to 1,000.

NOTE: A grid opening is considered as one field.

ii. The mean grid opening area must be measured for the type of specimen grids in

use. This can be accomplished on the TEM at a properly calibrated low magnification or on an optical microscope at a magnification of approximately 400X by using an eyepiece fitted with a scale that has been calibrated against a stage micrometer. Optical microscopy utilizing manual or automated procedures may be used providing instrument calibration can be verified.

e. Determination of Camera Constant and ED Pattern Analysis.

i. The camera length of the TEM in ED operating mode must be calibrated before ED patterns on unknown samples are observed. This can be achieved by using a carbon-coated grid on which a thin film of gold has been sputtered or evaporated. A thin film of gold is evaporated on the specimen TEM grid to obtain zone-axis ED patterns superimposed with a ring pattern from the polycrystalline gold film.

ii. In practice, it is desirable to optimize the thickness of the gold film so that only one or two sharp rings are obtained on the superimposed ED pattern. Thicker gold film would normally give multiple gold rings, but it will tend to mask weaker diffraction spots from the unknown fibrous particulates. Since the unknown d-spacings of most interest in asbestos analysis are those which lie closest to the transmitted beam, multiple gold rings are unnecessary on zone-axis ED patterns. An average camera constant using multiple gold rings can be determined. The camera constant is one-half the diameter, D, of the rings times the interplanar spacing, d, of the ring being measured.

K. Quality Control/Quality Assurance Procedures (Data Quality Indicators)

Monitoring the environment for airborne asbestos requires the use of sensitive sampling and analysis procedures. Because the test is sensitive, it may be influenced by a variety of factors. These include the supplies used in the sampling operation, the performance of the sampling, the preparation of the grid from the filter and the actual examination of this grid in the microscope. Each of these unit operations must produce a product of defined quality if the analytical result is to be a reliable and meaningful test result. Accordingly, a series of control checks and reference standards is performed along with the sample analysis as indicators that the materials used are adequate and the operations are within acceptable limits. In this way, the quality of the data is defined and the results are of known value. These checks and tests also provide timely and specific warning of any problems which might develop within the sampling and analysis operations. A description of these quality control/quality assurance procedures is summarized in the following Table III:

TABLE III--SUMMARY OF LABORATORY DATA QUALITY OBJECTIVES

| Unit Operation | QC Check | Frequency | Conformance Expectation |
|---|---|---|---|
| Sample receiving | Review of receiving report | Each sample | 95% complete |
| Sample custody | Review of chain-of-custody record | Each sample | 95% complete |
| Sample preparation | Supplies and reagents | On receipt | Meet specs. or reject |
| | Grid opening size | 20 openings/20 grids/lot of 1000 or 1 opening/sample | 100% |
| | Special clean area monitoring | After cleaning or service | Meet specs or reclean |
| | Laboratory blank | 1 per prep series or 10% | Meet specs. or reanalyze series |
| | Plasma etch blank | 1 per 20 samples | 75% |
| | Multiple preps (3 per sample) | Each sample | One with cover of 15 complete grid sqs. |
| Sample analysis | System check | Each day | Each day |
| | Alignment check | Each day | Each day |
| | Magnification calibration with low and high standards | Each month or after service | 95% |
| | ED calibration by gold standard | Weekly | 95% |
| | EDS calibration by copper line | Daily | 95% |
| Performance check | Laboratory blank (measure of cleanliness) | Prep 1 per series or 10% read 1 per 25 samples | Meet specs or reanalyze series |
| | Replicate counting (measure of precision) | 1 per 100 samples | 1.5 x Poisson Std. Dev. |
| | Duplicate analysis (measure of reproducibility) | 1 per 100 samples | 2 x Poisson Std. Dev. |
| | Known samples of typical materials (working standards) | Training and for comparison with unknowns | 100% |
| | Analysis of NBS SRM 1876 and/or RM 8410 (measure of accuracy and comparability) | 1 per analyst per year | 1.5 x Poisson Std. Dev. |
| | Data entry review (data validation and measure of completeness) | Each sample | 95% |
| | Record and verify ID electron diffraction pattern of structure | 1 per 5 samples | 80% accuracy |
| Calculations and data reduction | Hand calculation of automated data reduction procedure or independent recalculation of hand-calculated data | 1 per 100 samples | 85% |

1. When the samples arrive at the laboratory, check the samples and documentation for completeness and requirements before initiating the analysis.

2. Check all laboratory reagents and supplies for acceptable asbestos background levels.

3. Conduct all sample preparation in a clean room environment monitored by laboratory blanks and special testing after cleaning or servicing the room.

4. Prepare multiple grids of each sample.

5. Provide laboratory blanks with each sample batch. Maintain a cumulative average of these results. If this average is greater than 53 f/mm$^2$ per 10 200-mesh grid openings, check the system for possible sources of contamination.

6. Check for recovery of asbestos from cellulose ester filters submitted to plasma asher.

7. Check for asbestos carryover in the plasma asher by including a blank alongside the positive control sample.

8. Perform a systems check on the transmission electron microscope daily.

9. Make periodic performance checks of magnification, electron diffraction and energy dispersive X-ray systems as set forth in Table III of Unit III.K.

10. Ensure qualified operator performance by evaluation of replicate counting, duplicate analysis, and standard sample comparisons as set forth in Table III of Unit III.K.

11. Validate all data entries.

12. Recalculate a percentage of all computations and automatic data reduction steps as specified in Table III.

13. Record an electron diffraction pattern of one asbestos structure from every five samples that contain asbestos. Verify the identification of the pattern by measurement or comparison of the pattern with patterns collected from standards under the same conditions.

The outline of quality control procedures presented above is viewed as the minimum required to assure that quality data is produced for clearance testing of an asbestos abated area. Additional information may be gained by other control tests. Specifics on those control procedures and options available for environmental testing can be obtained by consulting References 6, 7, and 11 of Unit III.L.

### L. References

For additional background information on this method the following references should be consulted.

1. ''Guidelines for Controlling Asbestos-Containing Materials in Buildings,'' EPA 560/5–85–024, June 1985.

2. ''Measuring Airborne Asbestos Following an Abatement Action,'' USEP/Office of Pollution Prevention and Toxics, EPA 600/4–85–049, 1985.

3. Small, John and E. Steel. Asbestos Standards: Materials and Analytical Methods. N.B.S. Special Publication 619, 1982.

4. Campbell, W.J., R.L. Blake, L.L. Brown, E.E. Cather, and J.J. Sjoberg. Selected Silicate Minerals and Their Asbestiform Varieties. Information Circular 8751, U.S. Bureau of Mines, 1977.

5. Quality Assurance Handbook for Air Pollution Measurement System. Ambient Air Methods, EPA 600/4–77–027a, USEPA, Office of Research and Development, 1977.

6. Method 2A: Direct Measurement of Gas Volume Through Pipes and Small Ducts. 40 CFR Part 60 Appendix A.

7. Burdette, G.J. Health & Safety Exec., Research & Lab. Services Div., London, ''Proposed Analytical Method for Determination of Asbestos in Air.''

8. Chatfield, E.J., Chatfield Tech. Cons., Ltd., Clark, T., PEI Assoc. ''Standard Operating Procedure for Determination of Airborne Asbestos Fibers by Transmission Electron Microscopy Using Polycarbonate Membrane Filters.'' WERL SOP 87–1, March 5, 1987.

9. NIOSH. Method 7402 for Asbestos Fibers, December 11, 1986 Draft.

10. Yamate, G., S.C. Agarwall, R.D. Gibbons, IIT Research Institute, ''Methodology for the Measurement of Airborne Asbestos by Electron Microscopy.'' Draft report, USEPA Contract 68–02–3266, July 1984.

11. Guidance to the Preparation of Quality Assurance Project Plans. USEPA, Office of Pollution Prevention and Toxics, 1984.

## *IV. Mandatory Interpretation of Transmission Electron Microscopy Results to Determine Completion of Response Actions*

### A. Introduction

A response action is determined to be completed by TEM when the abatement area has been cleaned and the airborne asbestos concentration inside the abatement area is no higher than concentrations at locations outside the abatement area. ''Outside'' means outside the abatement area, but not necessarily outside the building. EPA reasons that an asbestos removal contractor cannot be expected to clean an abatement area to an airborne asbestos concentration that is lower than the concentration of air entering the abatement area from outdoors or from other parts of the building. After the abatement area has passed a thorough visual inspection, and before the outer containment barrier is removed, a minimum of five air samples inside the abatement area and a minimum of five air samples outside the abatement area must be collected. Hence, the response action is determined to be completed when the average airborne asbestos

concentration measured inside the abatement area is not statistically different from the average airborne asbestos concentration measured outside the abatement area.

The inside and outside concentrations are compared by the Z-test, a statistical test that takes into account the variability in the measurement process. A minimum of five samples inside the abatement area and five samples outside the abatement area are required to control the false negative error rate, i.e., the probability of declaring the removal complete when, in fact, the air concentration inside the abatement area is significantly higher than outside the abatement area. Additional quality control is provided by requiring three blanks (filters through which no air has been drawn) to be analyzed to check for unusually high filter contamination that would distort the test results.

When volumes greater than or equal to 1,199 L for a 25 mm filter and 2,799 L for a 37 mm filter have been collected and the average number of asbestos structures on samples inside the abatement area is no greater than 70 s/mm$^2$ of filter, the response action may be considered complete without comparing the inside samples to the outside samples. EPA is permitting this initial screening test to save analysis costs in situations where the airborne asbestos concentration is sufficiently low so that it cannot be distinguished from the filter contamination/background level (fibers deposited on the filter that are unrelated to the air being sampled). The screening test cannot be used when volumes of less than 1,199 L for 25 mm filter or 2,799 L for a 37 mm filter are collected because the ability to distinguish levels significantly different from filter background is reduced at low volumes.

The initial screening test is expressed in structures per square millimeter of filter because filter background levels come from sources other than the air being sampled and cannot be meaningfully expressed as a concentration per cubic centimeter of air. The value of 70 s/mm$^2$ is based on the experience of the panel of microscopists who consider one structure in 10 grid openings (each grid opening with an area of 0.0057 mm$^2$) to be comparable with contamination/background levels of blank filters. The decision is based, in part, on Poisson statistics which indicate that four structures must be counted on a filter before the fiber count is statistically distinguishable from the count for one structure. As more information on the performance of the method is collected, this criterion may be modified. Since different combinations of the number and size of grid openings are permitted under the TEM protocol, the criterion is expressed in structures per square millimeter of filter to be consistent across all combinations. Four structures per 10 grid openings corresponds to approximately 70 s/mm$^2$.

B. Sample Collection and Analysis

1. A minimum of 13 samples is required: five samples collected inside the abatement area, five samples collected outside the abatement area, two field blanks, and one sealed blank.

2. Sampling and TEM analysis must be done according to either the mandatory or nonmandatory protocols in Appendix A. At least 0.057 mm$^2$ of filter must be examined on blank filters.

C. Interpretation of Results

1. The response action shall be considered complete if either:

a. Each sample collected inside the abatement area consists of at least 1,199 L of air for a 25 mm filter, or 2,799 L of air for a 37 mm filter, and the arithmetic mean of their asbestos structure concentrations per square millimeter of filter is less than or equal to 70 s/mm$^2$; or

b. The three blank samples have an arithmetic mean of the asbestos structure concentration on the blank filters that is less than or equal to 70 s/mm$^2$ and the average airborne asbestos concentration measured inside the abatement area is not statistically higher than the average airborne asbestos concentration measured outside the abatement area as determined by the Z-test. The Z-test is carried out by calculating

$$Z = \frac{\bar{Y}_I - \bar{Y}_O}{0.8\left(1/n_I + 1/n_O\right)^{1/2}}$$

where $Y_I$ is the average of the natural logarithms of the inside samples and $Y_O$ is the average of the natural logarithms of the outside samples, $n_I$ is the number of inside samples and $n_O$ is the number of outside samples. The response action is considered complete if Z is less than or equal to 1.65.

NOTE: When no fibers are counted, the calculated detection limit for that analysis is inserted for the concentration.

2. If the abatement site does not satisfy either (1) or (2) of this Section C, the site must be recleaned and a new set of samples collected.

D. Sequence for Analyzing Samples

It is possible to determine completion of the response action without analyzing all samples. Also, at any point in the process, a decision may be made to terminate the analysis of existing samples, reclean the abatement site, and collect a new set of samples. The following sequence is outlined to minimize the number of analyses needed to reach a decision.

1. Analyze the inside samples.

2. If at least 1,199 L of air for a 25 mm filter or 2,799 L of air for a 37 mm filter is collected for each inside sample and the arithmetic mean concentration of structures per square millimeter of filter is less than or equal to 70 s/mm², the response action is complete and no further analysis is needed.

3. If less than 1,199 L of air for a 25 mm filter or 2,799 L of air for a 37 mm filter is collected for any of the inside samples, or the arithmetic mean concentration of structures per square millimeter of filter is greater than 70 s/mm², analyze the three blanks.

4. If the arithmetic mean concentration of structures per square millimeter on the blank filters is greater than 70 s/mm², terminate the analysis, identify and correct the source of blank contamination, and collect a new set of samples.

5. If the arithmetic mean concentration of structures per square millimeter on the blank filters is less than or equal to 70 s/mm², analyze the outside samples and perform the Z-test.

6. If the Z-statistic is less than or equal to 1.65, the response action is complete. If the Z-statistic is greater than 1.65, reclean the abatement site and collect a new set of samples.

[52 FR 41857, Oct. 30, 1987]

## APPENDIX B TO SUBPART E—WORK PRACTICES AND ENGINEERING CONTROLS FOR SMALL-SCALE, SHORT-DURATION OPERATIONS MAINTENANCE AND REPAIR (O&M) ACTIVITIES INVOLVING ACM

This appendix is not mandatory, in that LEAs may choose to comply with all the requirements of 40 CFR 763.121. Section 763.91(b) extends the protection provided by EPA in its 40 CFR 763.121 for worker protection during asbestos abatement projects to employees of local education agencies who perform small-scale, short-duration operations, maintenance and repair (O&M) activities involving asbestos-containing materials and are not covered by the OSHA asbestos construction standard at 29 CFR 1926.58 or an asbestos worker protection standard adopted by a State as part of a State plan approved by OSHA under section 18 of the Occupational Safety and Health Act. Employers wishing to be exempt from the requirements of §763.121 (e)(6) and (f)(2)(i) may instead comply with the provisions of this appendix when performing small-scale, short-duration O&M activities.

### Definition of Small-Scale, Short-Duration Activities

For the purposes of this appendix, small-scale, short-duration maintenance activities are tasks such as, but not limited to:

1. Removal of asbestos-containing insulation on pipes.
2. Removal of small quantities of asbestos-containing insulation on beams or above ceilings.
3. Replacement of an asbestos-containing gasket on a valve.
4. Installation or removal of a small section of drywall.
5. Installation of electrical conduits through or proximate to asbestos-containing materials.

Small-scale, short-duration maintenance activities can be further defined, for the purposes of this subpart, by the following considerations:

1. Removal of small quantities of asbestos-containing materials (ACM) only if required in the performance of another maintenance activity not intended as asbestos abatement.
2. Removal of asbestos-containing thermal system insulation not to exceed amounts greater than those which can be contained in a single glove bag.
3. Minor repairs to damaged thermal system insulation which do not require removal.
4. Repairs to a piece of asbestos-containing wallboard.
5. Repairs, involving encapsulation, enclosure or removal, to small amounts of friable asbestos-containing material only if required in the performance of emergency or routine maintenance activity and not intended solely as asbestos abatement. Such work may not exceed amounts greater than those which can be contained in a single prefabricated minienclosure. Such an enclosure shall conform spatially and geometrically to the localized work area, in order to perform its intended containment function.

OSHA concluded that the use of certain engineering and work practice controls is capable of reducing employee exposures to asbestos to levels below the final standard's action level (0.1 f/cm³). (See 51 FR 22714, June 20, 1986.) Several controls and work practices, used either singly or in combination, can be employed effectively to reduce asbestos exposures during small maintenance and renovation operations. These include:

1. Wet methods.
2. Removal methods.
i. Use of glove bags.
ii. Removal of entire asbestos insulated pipes or structures.
iii. Use of minienclosures.
3. Enclosure of asbestos materials.
4. Maintenance programs.

This appendix describes these controls and work practices in detail.

### Preparation of the Area Before Renovation or Maintenance Activities

The first step in preparing to perform a small-scale, short-duration asbestos renovation or maintenance task, regardless of the

abatement method that will be used, is the removal from the work area of all objects that are movable to protect them from asbestos contamination. Objects that cannot be removed must be covered completely with 6-mil-thick polyethylene plastic sheeting before the task begins. If objects have already been contaminated, they should be thoroughly cleaned with a High Efficiency Particulate Air (HEPA) filtered vacuum or be wet-wiped before they are removed from the work area or completely encased in the plastic.

*Wet methods.* Whenever feasible, and regardless of the abatement method to be used (e.g., removal, enclosure, use of glove bags), wet methods must be used during small-scale, short-duration maintenance and renovation activities that involve disturbing asbestos-containing materials. Handling asbestos materials wet is one of the most reliable methods of ensuring that asbestos fibers do not become airborne, and this practice should therefore be used whenever feasible. Wet methods can be used in the great majority of workplace situations. Only in cases where asbestos work must be performed on live electrical equipment, on live steam lines, or in other areas where water will seriously damage materials or equipment may dry removal be performed. Amended water or another wetting agent should be applied by means of an airless sprayer to minimize the extent to which the asbestos-containing material is disturbed.

Asbestos-containing material should be wetted from the initiation of the maintenance or renovation operation and wetting agents should be used continually throughout the work period to ensure that any dry asbestos-containing material exposed in the course of the work is wet and remains wet until final disposal.

*Removal of small amount of asbestos-containing materials.* Several methods can be used to remove small amounts of asbestos-containing materials during small-scale, short-duration renovation or maintenance tasks. These include the use of glove bags, the removal of an entire asbestos-covered pipe or structure, and the construction of minienclosures. The procedures that employers must use for each of these operations if they wish to avail themselves of the rule's exemptions are described in the following sections.

*Glove bags.* OSHA found that the use of glove bags to enclose the work area during small-scale, short-duration maintenance or renovation activities will result in employee exposure to asbestos that are below the rule's action level of 0.1 f/cm$^3$. This appendix provides requirements for glove-bag procedures to be followed by employers wishing to avail themselves of the rule's exemption for each activity. OSHA has determined that the use of these procedures will reduce the 8-hour time weighted average (TWA) exposure of employees involved in these work operations to levels below the action level and will thus provide a degree of employee protection equivalent to that provided by compliance with all provisions of the rule.

*Glove bag installation.* Glove bags are approximately 40-inch-wide times 64-inch-long bags fitted with arms through which the work can be performed. When properly installed and used, they permit workers to remain completely isolated from the asbestos material removed or replaced inside the bag. Glove bags can thus provide a flexible, easily installed, and quickly dismantled temporary small work area enclosure that is ideal for small-scale asbestos renovation or maintenance jobs. These bags are single-use control devices that are disposed of at the end of each job. The bags are made of transparent 6-mil-thick polyethylene plastic with areas of Tyvek[1] material (the same material used to make the disposal protective suits used in major asbestos removal, renovation, and demolition operations and in protective gloves). Glove bags are readily available from safety supply stores or specialty asbestos removal supply houses. Glove bags come pre-labelled with the asbestos warning label prescribed by OSHA and EPA for bags used to dispose of asbestos waste.

*Glove bag equipment and supplies.* Supplies and materials that are necessary to use glove bags effectively include:

1. Tape to seal glove bag to the area from which asbestos is to be removed.
2. Amended water or other wetting agents.
3. An airless sprayer for the application of the wetting agent.
4. Bridging encapsulant (a paste-like substance for coating asbestos) to seal the rough edges of any asbestos-containing materials that remain within the glove bag at the points of attachment after the rest of the asbestos has been removed.
5. Tools such as razor knives, nips, and wire brushes (or other tools suitable for cutting wires, etc.).
6. A HEPA filter-equipped vacuum for evacuating the glove bag (to minimize the release of asbestos fibers) during removal of the bag from the work area and for cleaning any material that may have escaped during the installation of the glove bag.
7. HEPA-equipped dual-cartridge or more protective respirators for use by the employees involved in the removal of asbestos with the glove bag.

*Glove bag work practices.* The proper use of glove bags requires the following steps:

1. Glove bags must be installed so that they completely cover the pipe or other structure where asbestos work is to be done.

[1] Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

Glove bags are installed by cutting the sides of the glove bag to fit the size of the pipe from which asbestos is to be removed. The glove bag is attached to the pipe by folding the open edges together and securely sealing them with tape. All openings in the glove bag must be sealed with duct tape or equivalent material. The bottom seam of the glove bag must also be sealed with duct tape or equivalent to prevent any leakage from the bag that may result from a defect in the bottom seam.

2. The employee who is performing the asbestos removal with the glove bag must don at least a half mask dual-cartridge HEPA-equipped respirator; respirators should be worn by employees who are in close contact with the glove bag and who may thus be exposed as a result of small gaps in the seams of the bag or holes punched through the bag by a razor knife or a piece of wire mesh.

3. The removed asbestos material from the pipe or other surface that has fallen into the enclosed bag must be thoroughly wetted with a wetting agent (applied with an airless sprayer through the precut port provided in most gloves bags or applied through a small hole in the bag).

4. Once the asbestos material has been thoroughly wetted, it can be removed from the pipe, beam, or other surface. The choice of tool to use to remove the asbestos-containing material depends on the type of material to be removed. Asbestos-containing materials are generally covered with painted canvas and/or wire mesh. Painted canvas can be cut with a razor knife and peeled away from the asbestos-containing material underneath. Once the canvas has been peeled away, the asbestos-containing material underneath may be dry, in which case it should be resprayed with a wetting agent to ensure that it generates as little dust as possible when removed. If the asbestos-containing material is covered with wire mesh, the mesh should be cut with nips, tin snips, or other appropriate tool and removed.

A wetting agent must then be used to spray any layer of dry material that is exposed beneath the mesh, the surface of the stripped underlying structure, and the inside of the glove bag.

5. After removal of the layer of asbestos-containing material, the pipe or surface from which asbestos has been removed must be thoroughly cleaned with a wire brush and wet-wiped with a wetting agent until no traces of the asbestos-containing material can be seen.

6. Any asbestos-containing insulation edges that have been exposed as a result of the removal or maintenance activity must be encapsulated with bridging encapsulant to ensure that the edges do not release asbestos fibers to the atmosphere after the glove bag has been removed.

7. When the asbestos removal and encapsulation have been completed, a vacuum hose from a HEPA filtered vacuum must be inserted into the glove bag through the port to remove any air in the bag that may contain asbestos fibers. When the air has been removed from the bag, the bag should be squeezed tightly (as close to the top as possible), twisted, and sealed with tape, to keep the asbestos materials safely in the bottom of the bag. The HEPA vacuum can then be removed from the bag and the glove bag itself can be removed from the work area to be disposed of properly.

*Minienclosures.* In some instances, such as removal of asbestos from a small ventilation system or from a short length of duct, a glove bag may not be either large enough or of the proper shape to enclose the work area. In such cases, a minienclosure can be built around the area where small-scale, short-duration asbestos maintenance or renovation work is to be performed. Such enclosures should be constructed of 6-mil-thick polyethylene plastic sheeting and can be small enough to restrict entry to the asbestos work area to one worker.

For example, a minienclosure can be built in a small utility closet when asbestos-containing duct covering is to be removed. The enclosure is constructed by:

1. Affixing plastic sheeting to the walls with spray adhesive and tape.

2. Covering the floor with plastic and sealing the plastic covering the floor to the plastic on the walls.

3. Sealing any penetrations such as pipes or electrical conducts with tape.

4. Constructing a small change room (approximately 3 feet square) made of 6-mil-thick polyethylene plastic supported by 2-inch by 4-inch lumber (the plastic should be attached to the lumber supports with staples or spray adhesive and tape).

The change room should be contiguous to the minienclosure, and is necessary to allow the worker to vacuum off his protective coveralls and remove them before leaving the work area. While inside minienclosure, the worker should wear Tyvek[1] disposable coveralls and use the appropriate HEPA-filtered dual-cartridge or more protective respiratory protection.

The advantages of minienclosures are that they limit the spread of asbestos contamination, reduce the potential exposure of bystanders and other workers who may be working in adjacent areas, and are quick and easy to install. The disadvantage of minienclosures is that they may be too small to contain the equipment necessary to create a negative pressure within the enclosure; however the double layer of plastic sheeting will serve to restrict the release of asbestos fibers to the area outside the enclosure.

*Removal of entire structures.* When pipes are insulated with asbestos-containing materials, removal of the entire pipe may be more protective, easier, and more cost-effective than stripping the asbestos insulation from the pipe. Before such a pipe is cut, the asbestos-containing insulation must be wrapped with 6-mil polyethylene plastic and securely sealed with duct tape or equivalent. This plastic covering will prevent asbestos fibers from becoming airborne as a result of the vibration created by the power saws used to cut the pipe. If possible, the pipes should be cut at locations that are not insulated to avoid disturbing the asbestos. If a pipe is completely insulated with asbestos-containing materials, small sections should be stripped using the glove-bag method described above before the pipe is cut at the stripped sections.

*Enclosure.* The decision to enclose rather than remove asbestos-containing material from an area depends on the building owner's preference, i.e., for removal or containment. Owners consider such factors as cost effectiveness, the physical configuration of the work area, and the amount of traffic in the area when determining which abatement method to use.

If the owner chooses to enclose the structure rather than to remove the asbestos-containing material insulating it, a solid structure (airtight walls and ceilings) must be built around the asbestos covered pipe or structure to prevent the release of asbestos-containing materials into the area beyond the enclosure and to prevent disturbing these materials by casual contact during future maintenance operations.

Such a permanent (i.e., for the life of the building) enclosure should be built of new construction materials and should be impact resistant and airtight. Enclosure walls should be made of tongue-and-groove boards, boards with spine joints, or gypsum boards having taped seams. The underlying structure must be able to support the weight of the enclosure. (Suspended ceilings with laid-in panels do not provide airtight enclosures and should not be used to enclose structures covered with asbestos-containing materials.) All joints between the walls and ceiling of the enclosure should be caulked to prevent the escape of asbestos fibers. During the installation of enclosures, tools that are used (such as drills or rivet tools) should be equipped with HEPA-filtered vacuums. Before constructing the enclosure, all electrical conduits, telephone lines, recessed lights, and pipes in the area to be enclosed should be moved to ensure that the enclosure will not have to be re-opened later for routine or emergency maintenance. If such lights or other equipment cannot be moved to a new location for logistic reasons, or if moving them will disturb the asbestos-containing materials, removal rather than enclosure of the asbestos-containing materials is the appropriate control method to use.

*Maintenance program.* An asbestos maintenance program must be initiated in all facilities that have friable asbestos-containing materials. Such a program should include:

1. Development of an inventory of all asbestos-containing materials in the facility.
2. Periodic examination of all asbestos-containing materials to detect deterioration.
3. Written procedures for handling asbestos materials during the performance of small-scale, short-duration maintenance and renovation activities.
4. Written procedures for asbestos disposal.
5. Written procedures for dealing with asbestos-related emergencies.

Members of the building's maintenance engineering staff (electricians, heating/air conditioning engineers, plumbers, etc.) who may be required to handle asbestos-containing materials should be trained in safe procedures. Such training should include at a minimum:

1. Information regarding types of ACM and its various uses and forms.
2. Information on the health effects associated with asbestos exposure.
3. Descriptions of the proper methods of handling asbestos-containing materials.
4. Information on the use of HEPA-equipped dual-cartridge respirators and other personal protection during maintenance activities.

*Prohibited activities.* The training program for the maintenance engineering staff should describe methods of handling asbestos-containing materials as well as routine maintenance activities that are prohibited when asbestos-containing materials are involved. For example, maintenance staff employees should be instructed:

1. *Not* to drill holes in asbestos-containing materials.
2. *Not* to hang plants or pictures on structures covered with asbestos-containing materials.
3. *Not* to sand asbestos-containing floor tile.
4. *Not* to damage asbestos-containing materials while moving furniture or other objects.
5. *Not* to install curtains, drapes, or dividers in such a way that they damage asbestos-containing materials.
6. *Not* to dust floors, ceilings, moldings or other surfaces in asbestos-contaminated environments with a dry brush or sweep with a dry broom.
7. *Not* to use an ordinary vacuum to clean up asbestos-containing debris.
8. *Not* to remove ceiling tiles below asbestos-containing materials without wearing the proper respiratory protection, clearing the area of other people, and observing asbestos removal waste disposal procedures.

9. *Not* to remove ventilation system filters dry.

10. *Not* to shake ventilation system filters.

[52 FR 41894, Oct. 30, 1987]

## APPENDIX C TO SUBPART E—ASBESTOS MODEL ACCREDITATION PLAN

### *I. Asbestos Model Accreditation Plan for States*

The Asbestos Model Accreditation Plan (MAP) for States has eight components:

(A) Definitions
(B) Initial Training
(C) Examinations
(D) Continuing Education
(E) Qualifications
(F) Recordkeeping Requirements for Training Providers
(G) Deaccreditation
(H) Reciprocity

A. Definitions

For purposes of Appendix C:

1. ''Friable asbestos-containing material (ACM)'' means any material containing more than one percent asbestos which has been applied on ceilings, walls, structural members, piping, duct work, or any other part of a building, which when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. The term includes non-friable asbestos-containing material after such previously non-friable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

2. ''Friable asbestos-containing building material (ACBM)'' means any friable ACM that is in or on interior structural members or other parts of a school or public and commercial building.

3. ''Inspection'' means an activity undertaken in a school building, or a public and commercial building, to determine the presence or location, or to assess the condition of, friable or non-friable asbestos-containing building material (ACBM) or suspected ACBM, whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of friable and non-friable known or assumed ACBM which has been previously identified. The term does not include the following:

a. Periodic surveillance of the type described in 40 CFR 763.92(b) solely for the purpose of recording or reporting a change in the condition of known or assumed ACBM;

b. Inspections performed by employees or agents of Federal, State, or local government solely for the purpose of determining compliance with applicable statutes or regulations; or

c. visual inspections of the type described in 40 CFR 763.90(i) solely for the purpose of determining completion of response actions.

4. ''Major fiber release episode'' means any uncontrolled or unintentional disturbance of ACBM, resulting in a visible emission, which involves the falling or dislodging of more than 3 square or linear feet of friable ACBM.

5. ''Minor fiber release episode'' means any uncontrolled or unintentional disturbance of ACBM, resulting in a visible emission, which involves the falling or dislodging of 3 square or linear feet or less of friable ACBM.

6. ''Public and commercial building'' means the interior space of any building which is not a school building, except that the term does not include any residential apartment building of fewer than 10 units or detached single-family homes. The term includes, but is not limited to: industrial and office buildings, residential apartment buildings and condominiums of 10 or more dwelling units, government-owned buildings, colleges, museums, airports, hospitals, churches, preschools, stores, warehouses and factories. Interior space includes exterior hallways connecting buildings, porticos, and mechanical systems used to condition interior space.

7. ''Response action'' means a method, including removal, encapsulation, enclosure, repair, and operation and maintenance, that protects human health and the environment from friable ACBM.

8. ''Small-scale, short-duration activities (SSSD)'' are tasks such as, but not limited to:

a. Removal of asbestos-containing insulation on pipes.

b. Removal of small quantities of asbestos-containing insulation on beams or above ceilings.

c. Replacement of an asbestos-containing gasket on a valve.

d. Installation or removal of a small section of drywall.

e. Installation of electrical conduits through or proximate to asbestos-containing materials.

SSSD can be further defined by the following considerations:

f. Removal of small quantities of ACM only if required in the performance of another maintenance activity not intended as asbestos abatement.

g. Removal of asbestos-containing thermal system insulation not to exceed amounts greater than those which can be contained in a single glove bag.

h. Minor repairs to damaged thermal system insulation which do not require removal.

i. Repairs to a piece of asbestos-containing wallboard.

j. Repairs, involving encapsulation, enclosure, or removal, to small amounts of friable ACM only if required in the performance of emergency or routine maintenance activity and not intended solely as asbestos abatement. Such work may not exceed amounts

greater than those which can be contained in a single prefabricated mini-enclosure. Such an enclosure shall conform spatially and geometrically to the localized work area, in order to perform its intended containment function.

B. Initial Training

Training requirements for purposes of accreditation are specified both in terms of required subjects of instruction and in terms of length of training. Each initial training course has a prescribed curriculum and number of days of training. One day of training equals 8 hours, including breaks and lunch. Course instruction must be provided by EPA or State-approved instructors. EPA or State instructor approval shall be based upon a review of the instructor's academic credentials and/or field experience in asbestos abatement.

Beyond the initial training requirements, individual States may wish to consider requiring additional days of training for purposes of supplementing hands-on activities or for reviewing relevant state regulations. States also may wish to consider the relative merits of a worker apprenticeship program. Further, they might consider more stringent minimum qualification standards for the approval of training instructors. EPA recommends that the enrollment in any given course be limited to 25 students so that adequate opportunities exist for individual hands-on experience.

States have the option to provide initial training directly or approve other entities to offer training. The following requirements are for the initial training of persons required to have accreditation under TSCA Title II.

Training requirements for each of the five accredited disciplines are outlined below. Persons in each discipline perform a different job function and distinct role. Inspectors identify and assess the condition of ACBM, or suspect ACBM. Management planners use data gathered by inspectors to assess the degree of hazard posed by ACBM in schools to determine the scope and timing of appropriate response actions needed for schools. Project designers determine how asbestos abatement work should be conducted. Lastly, workers and contractor/supervisors carry out and oversee abatement work. In addition, a recommended training curriculum is also presented for a sixth discipline, which is not federally-accredited, that of ''Project Monitor.'' Each accredited discipline and training curriculum is separate and distinct from the others. A person seeking accreditation in any of the five accredited MAP disciplines cannot attend two or more courses concurrently, but may attend such courses sequentially.

In several instances, initial training courses for a specific discipline (e.g., workers, inspectors) require hands-on training. For asbestos abatement contractor/supervisors and workers, hands-on training should include working with asbestos-substitute materials, fitting and using respirators, use of glovebags, donning protective clothing, and constructing a decontamination unit as well as other abatement work activities.

1. WORKERS

A person must be accredited as a worker to carry out any of the following activities with respect to friable ACBM in a school or public and commercial building: (1) A response action other than a SSSD activity, (2) a maintenance activity that disturbs friable ACBM other than a SSSD activity, or (3) a response action for a major fiber release episode. All persons seeking accreditation as asbestos abatement workers shall complete at least a 4–day training course as outlined below. The 4–day worker training course shall include lectures, demonstrations, at least 14 hours of hands-on training, individual respirator fit testing, course review, and an examination. Hands-on training must permit workers to have actual experience performing tasks associated with asbestos abatement. A person who is otherwise accredited as a contractor/supervisor may perform in the role of a worker without possessing separate accreditation as a worker.

Because of cultural diversity associated with the asbestos workforce, EPA recommends that States adopt specific standards for the approval of foreign language courses for abatement workers. EPA further recommends the use of audio-visual materials to complement lectures, where appropriate.

The training course shall adequately address the following topics:

(a) *Physical characteristics of asbestos*. Identification of asbestos, aerodynamic characteristics, typical uses, and physical appearance, and a summary of abatement control options.

(b) *Potential health effects related to asbestos exposure*. The nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; the synergistic effect between cigarette smoking and asbestos exposure; the latency periods for asbestos-related diseases; a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers of other organs.

(c) *Employee personal protective equipment*. Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection; donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit testing procedures; variability

between field and laboratory protection factors that alter respiratory fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; use, storage, and handling of non-disposable clothing; and regulations covering personal protective equipment.

(d) *State-of-the-art work practices.* Proper work practices for asbestos abatement activities, including descriptions of proper construction; maintenance of barriers and decontamination enclosure systems; positioning of warning signs; lock-out of electrical and ventilation systems; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure exhaust ventilation equipment; use of high-efficiency particulate air (HEPA) vacuums; proper clean-up and disposal procedures; work practices for removal, encapsulation, enclosure, and repair of ACM; emergency procedures for sudden releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices.

(e) *Personal hygiene.* Entry and exit procedures for the work area; use of showers; avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area; and potential exposures, such as family exposure.

(f) *Additional safety hazards.* Hazards encountered during abatement activities and how to deal with them, including electrical hazards, heat stress, air contaminants other than asbestos, fire and explosion hazards, scaffold and ladder hazards, slips, trips, and falls, and confined spaces.

(g) *Medical monitoring.* OSHA and EPA Worker Protection Rule requirements for physical examinations, including a pulmonary function test, chest X-rays, and a medical history for each employee.

(h) *Air monitoring.* Procedures to determine airborne concentrations of asbestos fibers, focusing on how personal air sampling is performed and the reasons for it.

(i) *Relevant Federal, State, and local regulatory requirements, procedures, and standards.* With particular attention directed at relevant EPA, OSHA, and State regulations concerning asbestos abatement workers.

(j) *Establishment of respiratory protection programs.*

(k) *Course review.* A review of key aspects of the training course.

2. CONTRACTOR/SUPERVISORS

A person must be accredited as a contractor/supervisor to supervise any of the following activities with respect to friable ACBM in a school or public and commercial building: (1) A response action other than a SSSD activity, (2) a maintenance activity that disturbs friable ACBM other than a SSSD activity, or (3) a response action for a major fiber release episode. All persons seeking accreditation as asbestos abatement contractor/supervisors shall complete at least a 5–day training course as outlined below. The training course must include lectures, demonstrations, at least 14 hours of hands-on training, individual respirator fit testing, course review, and a written examination. Hands-on training must permit supervisors to have actual experience performing tasks associated with asbestos abatement.

EPA recommends the use of audiovisual materials to complement lectures, where appropriate.

Asbestos abatement supervisors include those persons who provide supervision and direction to workers performing response actions. Supervisors may include those individuals with the position title of foreman, working foreman, or leadman pursuant to collective bargaining agreements. At least one supervisor is required to be at the worksite at all times while response actions are being conducted. Asbestos workers must have access to accredited supervisors throughout the duration of the project.

The contractor/supervisor training course shall adequately address the following topics:

(a) *The physical characteristics of asbestos and asbestos-containing materials.* Identification of asbestos, aerodynamic characteristics, typical uses, physical appearance, a review of hazard assessment considerations, and a summary of abatement control options.

(b) *Potential health effects related to asbestos exposure.* The nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; synergism between cigarette smoking and asbestos exposure; and latency period for diseases.

(c) *Employee personal protective equipment.* Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection, donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors that alter respiratory fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; and use, storage, and handling of non-disposable clothing; and regulations covering personal protective equipment.

(d) *State-of-the-art work practices.* Proper work practices for asbestos abatement activities, including descriptions of proper construction and maintenance of barriers and

decontamination enclosure systems; positioning of warning signs; lock-out of electrical and ventilation systems; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure exhaust ventilation equipment; use of HEPA vacuums; and proper clean-up and disposal procedures. Work practices for removal, encapsulation, enclosure, and repair of ACM; emergency procedures for unplanned releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices. New abatement-related techniques and methodologies may be discussed.

(e) *Personal hygiene.* Entry and exit procedures for the work area; use of showers; and avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area. Potential exposures, such as family exposure, shall also be included.

(f) *Additional safety hazards.* Hazards encountered during abatement activities and how to deal with them, including electrical hazards, heat stress, air contaminants other than asbestos, fire and explosion hazards, scaffold and ladder hazards, slips, trips, and falls, and confined spaces.

(g) *Medical monitoring.* OSHA and EPA Worker Protection Rule requirements for physical examinations, including a pulmonary function test, chest X-rays and a medical history for each employee.

(h) *Air monitoring.* Procedures to determine airborne concentrations of asbestos fibers, including descriptions of aggressive air sampling, sampling equipment and methods, reasons for air monitoring, types of samples and interpretation of results.

EPA recommends that transmission electron microscopy (TEM) be used for analysis of final air clearance samples, and that sample analyses be performed by laboratories accredited by the National Institute of Standards and Technology's (NIST) National Voluntary Laboratory Accreditation Program (NVLAP).

(i) *Relevant Federal, State, and local regulatory requirements, procedures, and standards, including*:

(i) Requirements of TSCA Title II.

(ii) National Emission Standards for Hazardous Air Pollutants (40 CFR part 61), Subparts A (General Provisions) and M (National Emission Standard for Asbestos).

(iii) OSHA standards for permissible exposure to airborne concentrations of asbestos fibers and respiratory protection (29 CFR 1910.134).

(iv) OSHA Asbestos Construction Standard (29 CFR 1926.58). (v)EPA Worker Protection Rule, (40 CFR part 763, Subpart G).

(j) *Respiratory Protection Programs and Medical Monitoring Programs.*

(k) *Insurance and liability issues.* Contractor issues; worker's compensation coverage and exclusions; third-party liabilities and defenses; insurance coverage and exclusions.

(l) *Recordkeeping for asbestos abatement projects.* Records required by Federal, State, and local regulations; records recommended for legal and insurance purposes.

(m) *Supervisory techniques for asbestos abatement activities.* Supervisory practices to enforce and reinforce the required work practices and discourage unsafe work practices.

(n) *Contract specifications.* Discussions of key elements that are included in contract specifications.

(o) *Course review.* A review of key aspects of the training course.

3. INSPECTOR

All persons who inspect for ACBM in schools or public and commercial buildings must be accredited. All persons seeking accreditation as an inspector shall complete at least a 3–day training course as outlined below. The course shall include lectures, demonstrations, 4 hours of hands-on training, individual respirator fit-testing, course review, and a written examination.

EPA recommends the use of audiovisual materials to complement lectures, where appropriate. Hands-on training should include conducting a simulated building walk-through inspection and respirator fit testing. The inspector training course shall adequately address the following topics:

(a) *Background information on asbestos.* Identification of asbestos, and examples and discussion of the uses and locations of asbestos in buildings; physical appearance of asbestos.

(b) *Potential health effects related to asbestos exposure.* The nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; the synergistic effect between cigarette smoking and asbestos exposure; the latency periods for asbestos-related diseases; a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers of other organs.

(c) *Functions/qualifications and role of inspectors.* Discussions of prior experience and qualifications for inspectors and management planners; discussions of the functions of an accredited inspector as compared to those of an accredited management planner; discussion of inspection process including inventory of ACM and physical assessment.

(d) *Legal liabilities and defenses.* Responsibilities of the inspector and management planner; a discussion of comprehensive general liability policies, claims-made, and occurrence policies, environmental and pollution liability policy clauses; state liability insurance requirements; bonding and the relationship of insurance availability to bond availability.

(e) *Understanding building systems.* The interrelationship between building systems,

including: an overview of common building physical plan layout; heat, ventilation, and air conditioning (HVAC) system types, physical organization, and where asbestos is found on HVAC components; building mechanical systems, their types and organization, and where to look for asbestos on such systems; inspecting electrical systems, including appropriate safety precautions; reading blueprints and as-built drawings.

(f) *Public/employee/building occupant relations.* Notifying employee organizations about the inspection; signs to warn building occupants; tact in dealing with occupants and the press; scheduling of inspections to minimize disruptions; and education of building occupants about actions being taken.

(g) *Pre-inspection planning and review of previous inspection records.* Scheduling the inspection and obtaining access; building record review; identification of probable homogeneous areas from blueprints or as-built drawings; consultation with maintenance or building personnel; review of previous inspection, sampling, and abatement records of a building; the role of the inspector in exclusions for previously performed inspections.

(h) *Inspecting for friable and non-friable ACM and assessing the condition of friable ACM.* Procedures to follow in conducting visual inspections for friable and non-friable ACM; types of building materials that may contain asbestos; touching materials to determine friability; open return air plenums and their importance in HVAC systems; assessing damage, significant damage, potential damage, and potential significant damage; amount of suspected ACM, both in total quantity and as a percentage of the total area; type of damage; accessibility; material's potential for disturbance; known or suspected causes of damage or significant damage; and deterioration as assessment factors.

(i) *Bulk sampling/documentation of asbestos.* Detailed discussion of the ''Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a October 1985)''; techniques to ensure sampling in a randomly distributed manner for other than friable surfacing materials; sampling of non-friable materials; techniques for bulk sampling; inspector's sampling and repair equipment; patching or repair of damage from sampling; discussion of polarized light microscopy; choosing an accredited laboratory to analyze bulk samples; quality control and quality assurance procedures. EPA's recommendation that all bulk samples collected from school or public and commercial buildings be analyzed by a laboratory accredited under the NVLAP administered by NIST.

(j) *Inspector respiratory protection and personal protective equipment.* Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection; donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors that alter respiratory fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; use, storage, and handling of non-disposable clothing.

(k) *Recordkeeping and writing the inspection report.* Labeling of samples and keying sample identification to sampling location; recommendations on sample labeling; detailing of ACM inventory; photographs of selected sampling areas and examples of ACM condition; information required for inclusion in the management plan required for school buildings under TSCA Title II, section 203 (i)(1). EPA recommends that States develop and require the use of standardized forms for recording the results of inspections in schools or public or commercial buildings, and that the use of these forms be incorporated into the curriculum of training conducted for accreditation.

(l) *Regulatory review.* The following topics should be covered: National Emission Standards for Hazardous Air Pollutants (NESHAP; 40 CFR part 61, Subparts A and M); EPA Worker Protection Rule (40 CFR part 763, Subpart G); OSHA Asbestos Construction Standard (29 CFR 1926.58); OSHA respirator requirements (29 CFR 1910.134); the Asbestos-Containing Materials in School Rule (40 CFR part 763, Subpart E; applicable State and local regulations, and differences between Federal and State requirements where they apply, and the effects, if any, on public and nonpublic schools or commercial or public buildings.

(m) *Field trip.* This includes a field exercise, including a walk-through inspection; on-site discussion about information gathering and the determination of sampling locations; on-site practice in physical assessment; classroom discussion of field exercise.

(n) *Course review.* A review of key aspects of the training course.

### 4. Management Planner

All persons who prepare management plans for schools must be accredited. All persons seeking accreditation as management planners shall complete a 3–day inspector training course as outlined above and a 2–day management planner training course. Possession of current and valid inspector accreditation shall be a prerequisite for admission to the management planner training course. The management planner course shall include lectures, demonstrations, course review, and a written examination.

EPA recommends the use of audiovisual materials to complement lectures, where appropriate.

TSCA Title II does not require accreditation for persons performing the management planner role in public and commercial buildings. Nevertheless, such persons may find this training and accreditation helpful in preparing them to design or administer asbestos operations and maintenance programs for public and commercial buildings.

The management planner training course shall adequately address the following topics:

(a) *Course overview*. The role and responsibilities of the management planner; operations and maintenance programs; setting work priorities; protection of building occupants.

(b) *Evaluation/interpretation of survey results*. Review of TSCA Title II requirements for inspection and management plans for school buildings as given in section 203(i)(1) of TSCA Title II; interpretation of field data and laboratory results; comparison of field inspector's data sheet with laboratory results and site survey.

(c) *Hazard assessment*. Amplification of the difference between physical assessment and hazard assessment; the role of the management planner in hazard assessment; explanation of significant damage, damage, potential damage, and potential significant damage; use of a description (or decision tree) code for assessment of ACM; assessment of friable ACM; relationship of accessibility, vibration sources, use of adjoining space, and air plenums and other factors to hazard assessment.

(d) *Legal implications*. Liability; insurance issues specific to planners; liabilities associated with interim control measures, in-house maintenance, repair, and removal; use of results from previously performed inspections.

(e) *Evaluation and selection of control options*. Overview of encapsulation, enclosure, interim operations and maintenance, and removal; advantages and disadvantages of each method; response actions described via a decision tree or other appropriate method; work practices for each response action; staging and prioritizing of work in both vacant and occupied buildings; the need for containment barriers and decontamination in response actions.

(f) *Role of other professionals*. Use of industrial hygienists, engineers, and architects in developing technical specifications for response actions; any requirements that may exist for architect sign-off of plans; team approach to design of high-quality job specifications.

(g) *Developing an operations and maintenance (O&M) plan*. Purpose of the plan; discussion of applicable EPA guidance documents; what actions should be taken by custodial staff; proper cleaning procedures; steam cleaning and HEPA vacuuming; reducing disturbance of ACM; scheduling O&M for off-hours; rescheduling or canceling renovation in areas with ACM; boiler room maintenance; disposal of ACM; in-house procedures for ACM—bridging and penetrating encapsulants; pipe fittings; metal sleeves; polyvinyl chloride (PVC), canvas, and wet wraps; muslin with straps, fiber mesh cloth; mineral wool, and insulating cement; discussion of employee protection programs and staff training; case study in developing an O&M plan (development, implementation process, and problems that have been experienced).

(h) *Regulatory review*. Focusing on the OSHA Asbestos Construction Standard found at 29 CFR 1926.58; the National Emission Standard for Hazardous Air Pollutants (NESHAP) found at 40 CFR part 61, Subparts A (General Provisions) and M (National Emission Standard for Asbestos); EPA Worker Protection Rule found at 40 CFR part 763, Subpart G; TSCA Title II; applicable State regulations.

(i) *Recordkeeping for the management planner*. Use of field inspector's data sheet along with laboratory results; on-going recordkeeping as a means to track asbestos disturbance; procedures for recordkeeping. EPA recommends that States require the use of standardized forms for purposes of management plans and incorporate the use of such forms into the initial training course for management planners.

(j) *Assembling and submitting the management plan*. Plan requirements for schools in TSCA Title II section 203(i)(1); the management plan as a planning tool.

(k) *Financing abatement actions*. Economic analysis and cost estimates; development of cost estimates; present costs of abatement versus future operation and maintenance costs; Asbestos School Hazard Abatement Act grants and loans.

(l) *Course review*. A review of key aspects of the training course.

### 5. Project Designer

A person must be accredited as a project designer to design any of the following activities with respect to friable ACBM in a school or public and commercial building: (1) A response action other than a SSSD maintenance activity, (2) a maintenance activity that disturbs friable ACBM other than a SSSD maintenance activity, or (3) a response action for a major fiber release episode. All persons seeking accreditation as a project designer shall complete at least a minimum 3–day training course as outlined below. The project designer course shall include lectures, demonstrations, a field trip, course review and a written examination.

EPA recommends the use of audiovisual materials to complement lectures, where appropriate.

The abatement project designer training course shall adequately address the following topics:

(a) *Background information on asbestos.* Identification of asbestos; examples and discussion of the uses and locations of asbestos in buildings; physical appearance of asbestos.

(b) *Potential health effects related to asbestos exposure.* Nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; the synergistic effect between cigarette smoking and asbestos exposure; the latency period of asbestos-related diseases; a discussion of the relationship between asbestos exposure and asbestosis, lung cancer, mesothelioma, and cancers of other organs.

(c) *Overview of abatement construction projects.* Abatement as a portion of a renovation project; OSHA requirements for notification of other contractors on a multi-employer site (29 CFR 1926.58).

(d) *Safety system design specifications.* Design, construction, and maintenance of containment barriers and decontamination enclosure systems; positioning of warning signs; electrical and ventilation system lockout; proper working techniques for minimizing fiber release; entry and exit procedures for the work area; use of wet methods; proper techniques for initial cleaning; use of negative-pressure exhaust ventilation equipment; use of HEPA vacuums; proper clean-up and disposal of asbestos; work practices as they apply to encapsulation, enclosure, and repair; use of glove bags and a demonstration of glove bag use.

(e) *Field trip.* A visit to an abatement site or other suitable building site, including on-site discussions of abatement design and building walk-through inspection. Include discussion of rationale for the concept of functional spaces during the walk-through.

(f) *Employee personal protective equipment.* Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection; donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors that alter respiratory fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; use, storage, and handling of non-disposable clothing.

(g) *Additional safety hazards.* Hazards encountered during abatement activities and how to deal with them, including electrical hazards, heat stress, air contaminants other than asbestos, fire, and explosion hazards.

(h) *Fiber aerodynamics and control.* Aerodynamic characteristics of asbestos fibers; importance of proper containment barriers; settling time for asbestos fibers; wet methods in abatement; aggressive air monitoring following abatement; aggressive air movement and negative-pressure exhaust ventilation as a clean-up method.

(i) *Designing abatement solutions.* Discussions of removal, enclosure, and encapsulation methods; asbestos waste disposal.

(j) *Final clearance process.* Discussion of the need for a written sampling rationale for aggressive final air clearance; requirements of a complete visual inspection; and the relationship of the visual inspection to final air clearance.

EPA recommends the use of TEM for analysis of final air clearance samples. These samples should be analyzed by laboratories accredited under the NIST NVLAP.

(k) *Budgeting/cost estimating.* Development of cost estimates; present costs of abatement versus future operation and maintenance costs; setting priorities for abatement jobs to reduce costs.

(l) *Writing abatement specifications.* Preparation of and need for a written project design; means and methods specifications versus performance specifications; design of abatement in occupied buildings; modification of guide specifications for a particular building; worker and building occupant health/medical considerations; replacement of ACM with non-asbestos substitutes.

(m) *Preparing abatement drawings.* Significance and need for drawings, use of as-built drawings as base drawings; use of inspection photographs and on-site reports; methods of preparing abatement drawings; diagramming containment barriers; relationship of drawings to design specifications; particular problems related to abatement drawings.

(n) *Contract preparation and administration.*

(o) *Legal/liabilities/defenses.* Insurance considerations; bonding; hold-harmless clauses; use of abatement contractor's liability insurance; claims made versus occurrence policies.

(p) *Replacement.* Replacement of asbestos with asbestos-free substitutes.

(q) *Role of other consultants.* Development of technical specification sections by industrial hygienists or engineers; the multi-disciplinary team approach to abatement design.

(r) *Occupied buildings.* Special design procedures required in occupied buildings; education of occupants; extra monitoring recommendations; staging of work to minimize occupant exposure; scheduling of renovation to minimize exposure.

(s) *Relevant Federal, State, and local regulatory requirements, procedures and standards, including, but not limited to*:

(i) Requirements of TSCA Title II.

(ii) National Emission Standards for Hazardous Air Pollutants, (40 CFR part 61) subparts A (General Provisions) and M (National Emission Standard for Asbestos).

(iii) OSHA Respirator Standard found at 29 CFR 1910.134.

(iv) EPA Worker Protection Rule found at 40 CFR part 763, subpart G.

(v) OSHA Asbestos Construction Standard found at 29 CFR 1926.58.

(vi) OSHA Hazard Communication Standard found at 29 CFR 1926.59.

(t) *Course review*. A review of key aspects of the training course.

6. PROJECT MONITOR

EPA recommends that States adopt training and accreditation requirements for persons seeking to perform work as project monitors. Project monitors observe abatement activities performed by contractors and generally serve as a building owner's representative to ensure that abatement work is completed according to specification and in compliance with all relevant statutes and regulations. They may also perform the vital role of air monitoring for purposes of determining final clearance. EPA recommends that a State seeking to accredit individuals as project monitors consider adopting a minimum 5–day training course covering the topics outlined below. The course outlined below consists of lectures and demonstrations, at least 6 hours of hands-on training, course review, and a written examination. The hands-on training component might be satisfied by having the student simulate participation in or performance of any of the relevant job functions or activities (or by incorporation of the workshop component described in item ''n'' below of this unit).

EPA recommends that the project monitor training course adequately address the following topics:

(a) *Roles and responsibilities of the project monitor*. Definition and responsibilities of the project monitor, including regulatory/specification compliance monitoring, air monitoring, conducting visual inspections, and final clearance monitoring.

(b) *Characteristics of asbestos and asbestos-containing materials*. Typical uses of asbestos; physical appearance of asbestos; review of asbestos abatement and control techniques; presentation of the health effects of asbestos exposure, including routes of exposure, dose-response relationships, and latency periods for asbestos-related diseases.

(c) *Federal asbestos regulations*. Overview of pertinent EPA regulations, including: NESHAP, 40 CFR part 61, subparts A and M; AHERA, 40 CFR part 763, subpart E; and the EPA Worker Protection Rule, 40 CFR part 763, subpart G. Overview of pertinent OSHA regulations, including: Construction Industry Standard for Asbestos, 29 CFR 1926.58; Respirator Standard, 29 CFR 1910.134; and the Hazard Communication Standard, 29 CFR 1926.59. Applicable State and local asbestos regulations; regulatory interrelationships.

(d) *Understanding building construction and building systems*. Building construction basics, building physical plan layout; understanding building systems (HVAC, electrical, etc.); layout and organization, where asbestos is likely to be found on building systems; renovations and the effect of asbestos abatement on building systems.

(e) *Asbestos abatement contracts, specifications, and drawings*. Basic provisions of the contract; relationships between principle parties, establishing chain of command; types of specifications, including means and methods, performance, and proprietary and nonproprietary; reading and interpreting records and abatement drawings; discussion of change orders; common enforcement responsibilities and authority of project monitor.

(f) *Response actions and abatement practices*. Pre-work inspections; pre-work considerations, precleaning of the work area, removal of furniture, fixtures, and equipment; shutdown/modification of building systems; construction and maintenance of containment barriers, proper demarcation of work areas; work area entry/exit, hygiene practices; determining the effectiveness of air filtration equipment; techniques for minimizing fiber release, wet methods, continuous cleaning; abatement methods other than removal; abatement area clean-up procedures; waste transport and disposal procedures; contingency planning for emergency response.

(g) *Asbestos abatement equipment*. Typical equipment found on an abatement project; air filtration devices, vacuum systems, negative pressure differential monitoring; HEPA filtration units, theory of filtration, design/construction of HEPA filtration units, qualitative and quantitative performance of HEPA filtration units, sizing the ventilation requirements, location of HEPA filtration units, qualitative and quantitative tests of containment barrier integrity; best available technology.

(h) *Personal protective equipment*. Proper selection of respiratory protection; classes and characteristics of respirator types, limitations of respirators; proper use of other safety equipment, protective clothing selection, use, and proper handling, hard/bump hats, safety shoes; breathing air systems, high pressure v. low pressure, testing for Grade D air, determining proper backup air volumes.

(i) *Air monitoring strategies*. Sampling equipment, sampling pumps (low v. high volume), flow regulating devices (critical and limiting orifices), use of fibrous aerosol monitors on abatement projects; sampling media, types of filters, types of cassettes, filter orientation, storage and shipment of filters; calibration techniques, primary calibration standards, secondary calibration standards, temperature/pressure effects, frequency of calibration, recordkeeping and

field work documentation, calculations; air sample analysis, techniques available and limitations of AHERA on their use, transmission electron microscopy (background to sample preparation and analysis, air sample conditions which prohibit analysis, EPA's recommended technique for analysis of final air clearance samples), phase contrast microscopy (background to sample preparation, and AHERA's limits on the use of phase contrast microscopy), what each technique measures; analytical methodologies, AHERA TEM protocol, NIOSH 7400, OSHA reference method (non clearance), EPA recommendation for clearance (TEM); sampling strategies for clearance monitoring, types of air samples (personal breathing zone v. fixed-station area) sampling location and objectives (pre-abatement, during abatement, and clearance monitoring), number of samples to be collected, minimum and maximum air volumes, clearance monitoring (post-visual-inspection) (number of samples required, selection of sampling locations, period of sampling, aggressive sampling, interpretations of sampling results, calculations), quality assurance; special sampling problems, crawl spaces, acceptable samples for laboratory analysis, sampling in occupied buildings (barrier monitoring).

(j) *Safety and health issues other than asbestos.* Confined-space entry, electrical hazards, fire and explosion concerns, ladders and scaffolding, heat stress, air contaminants other than asbestos, fall hazards, hazardous materials on abatement projects.

(k) *Conducting visual inspections.* Inspections during abatement, visual inspections using the ASTM E1368 document; conducting inspections for completeness of removal; discussion of ''how clean is clean?''

(l) *Legal responsibilities and liabilities of project monitors.* Specification enforcement capabilities; regulatory enforcement; licensing; powers delegated to project monitors through contract documents.

(m) *Recordkeeping and report writing.* Developing project logs/daily logs (what should be included, who sees them); final report preparation; recordkeeping under Federal regulations.

(n) *Workshops (6 hours spread over 3 days).* Contracts, specifications, and drawings: This workshop could consist of each participant being issued a set of contracts, specifications, and drawings and then being asked to answer questions and make recommendations to a project architect, engineer or to the building owner based on given conditions and these documents.

Air monitoring strategies/asbestos abatement equipment: This workshop could consist of simulated abatement sites for which sampling strategies would have to be developed (i.e., occupied buildings, industrial situations). Through demonstrations and exhibition, the project monitor may also be able to gain a better understanding of the function of various pieces of equipment used on abatement projects (air filtration units, water filtration units, negative pressure monitoring devices, sampling pump calibration devices, etc.).

Conducting visual inspections: This workshop could consist, ideally, of an interactive video in which a participant is ''taken through'' a work area and asked to make notes of what is seen. A series of questions will be asked which are designed to stimulate a person's recall of the area. This workshop could consist of a series of two or three videos with different site conditions and different degrees of cleanliness.

C. Examinations

1. Each State shall administer a closed book examination or designate other entities such as State-approved providers of training courses to administer the closed-book examination to persons seeking accreditation who have completed an initial training course. Demonstration testing may also be included as part of the examination. A person seeking initial accreditation in a specific discipline must pass the examination for that discipline in order to receive accreditation. For example, a person seeking accreditation as an abatement project designer must pass the State's examination for abatement project designer.

States may develop their own examinations, have providers of training courses develop examinations, or use standardized examinations developed for purposes of accreditation under TSCA Title II. In addition, States may supplement standardized examinations with questions about State regulations. States may obtain commercially developed standardized examinations, develop standardized examinations independently, or do so in cooperation with other States, or with commercial or non-profit providers on a regional or national basis. EPA recommends the use of standardized, scientifically-validated testing instruments, which may be beneficial in terms of both promoting competency and in fostering accreditation reciprocity between States.

Each examination shall adequately cover the topics included in the training course for that discipline. Each person who completes a training course, passes the required examination, and fulfills whatever other requirements the State imposes must receive an accreditation certificate in a specific discipline. Whether a State directly issues accreditation certificates, or authorizes training providers to issue accreditation certificates, each certificate issued to an accredited person must contain the following minimum information:

a. A unique certificate number

b. Name of accredited person

c. Discipline of the training course completed.

d. Dates of the training course.

e. Date of the examination.

f. An expiration date of 1 year after the date upon which the person successfully completed the course and examination.

g. The name, address, and telephone number of the training provider that issued the certificate.

h. A statement that the person receiving the certificate has completed the requisite training for asbestos accreditation under TSCA Title II.

States or training providers who reaccredit persons based upon completion of required refresher training must also provide accreditation certificates with all of the above information, except the examination date may be omitted if a State does not require a refresher examination for reaccreditation.

Where a State licenses accredited persons but has authorized training providers to issue accreditation certificates, the State may issue licenses in the form of photo-identification cards. Where this applies, EPA recommends that the State licenses should include all of the same information required for the accreditation certificates. A State may also choose to issue photo-identification cards in addition to the required accreditation certificates.

Accredited persons must have their initial and current accreditation certificates at the location where they are conducting work.

2. The following are the requirements for examination in each discipline:

a. Worker:

i. 50 multiple-choice questions

ii. Passing score: 70 percent correct

b. Contractor/Supervisor:

i. 100 multiple-choice questions

ii. Passing score: 70 percent correct

c. Inspector:

i. 50 Multiple-choice questions

ii. Passing score: 70 percent correct

d. Management Planner:

i. 50 Multiple-choice questions

ii. Passing score: 70 percent correct

e. Project Designer:

i. 100 multiple-choice questions

ii. Passing score: 70 percent correct

D. Continuing Education

For all disciplines, a State's accreditation program shall include annual refresher training as a requirement for reaccreditation as indicated below:

1. Workers: One full day of refresher training.

2. Contractor/Supervisors: One full day of refresher training.

3. Inspectors: One half-day of refresher training.

4. Management Planners: One half-day of inspector refresher training and one half-day of refresher training for management planners.

5. Project Designers: One full day of refresher training.

The refresher courses shall be specific to each discipline. Refresher courses shall be conducted as separate and distinct courses and not combined with any other training during the period of the refresher course. For each discipline, the refresher course shall review and discuss changes in Federal, State, and local regulations, developments in state-of-the-art procedures, and a review of key aspects of the initial training course as determined by the State. After completing the annual refresher course, persons shall have their accreditation extended for an additional year from the date of the refresher course. A State may consider requiring persons to pass reaccreditation examinations at specific intervals (for example, every 3 years).

EPA recommends that States formally establish a 12-month grace period to enable formerly accredited persons with expired certificates to complete refresher training and have their accreditation status reinstated without having to re-take the initial training course.

E. Qualifications

In addition to requiring training and an examination, a State may require candidates for accreditation to meet other qualification and/or experience standards that the State considers appropriate for some or all disciplines. States may choose to consider requiring qualifications similar to the examples outlined below for inspectors, management planners and project designers. States may modify these examples as appropriate. In addition, States may want to include some requirements based on experience in performing a task directly as a part of a job or in an apprenticeship role. They may also wish to consider additional criteria for the approval of training course instructors beyond those prescribed by EPA.

1. Inspectors: Qualifications - possess a high school diploma. States may want to require an Associate's Degree in specific fields (e.g., environmental or physical sciences).

2. Management Planners: Qualifications - Registered architect, engineer, or certified industrial hygienist or related scientific field.

3. Project Designers: Qualifications - registered architect, engineer, or certified industrial hygienist.

4. Asbestos Training Course Instructor: Qualifications - academic credentials and/or field experience in asbestos abatement.

EPA recommends that States prescribe minimum qualification standards for training instructors employed by training providers.

F. Recordkeeping Requirements for Training Providers

All approved providers of accredited asbestos training courses must comply with the following minimum recordkeeping requirements.

1. Training course materials. A training provider must retain copies of all instructional materials used in the delivery of the classroom training such as student manuals, instructor notebooks and handouts.

2. Instructor qualifications. A training provider must retain copies of all instructors' resumes, and the documents approving each instructor issued by either EPA or a State. Instructors must be approved by either EPA or a State before teaching courses for accreditation purposes. A training provider must notify EPA or the State, as appropriate, in advance whenever it changes course instructors. Records must accurately identify the instructors that taught each particular course for each date that a course is offered.

3. Examinations. A training provider must document that each person who receives an accreditation certificate for an initial training course has achieved a passing score on the examination. These records must clearly indicate the date upon which the exam was administered, the training course and discipline for which the exam was given, the name of the person who proctored the exam, a copy of the exam, and the name and test score of each person taking the exam. The topic and dates of the training course must correspond to those listed on that person's accreditation certificate. States may choose to apply these same requirements to examinations for refresher training courses.

4. Accreditation certificates. The training providers or States, whichever issues the accreditation certificate, shall maintain records that document the names of all persons who have been awarded certificates, their certificate numbers, the disciplines for which accreditation was conferred, training and expiration dates, and the training location. The training provider or State shall maintain the records in a manner that allows verification by telephone of the required information.

5. Verification of certificate information. EPA recommends that training providers of refresher training courses confirm that their students possess valid accreditation before granting course admission. EPA further recommends that training providers offering the initial management planner training course verify that students have met the prerequisite of possessing valid inspector accreditation at the time of course admission.

6. Records retention and access. (a) The training provider shall maintain all required records for a minimum of 3 years. The training provider, however, may find it advantageous to retain these records for a longer period of time.

(b) The training provider must allow reasonable access to all of the records required by the MAP, and to any other records which may be required by States for the approval of asbestos training providers or the accreditation of asbestos training courses, to both EPA and to State Agencies, on request. EPA encourages training providers to make this information equally accessible to the general public.

(c) If a training provider ceases to conduct training, the training provider shall notify the approving government body (EPA or the State) and give it the opportunity to take possession of that providers asbestos training records.

G. Deaccreditation

1. States must establish criteria and procedures for deaccrediting persons accredited as workers, contractor/supervisors, inspectors, management planners, and project designers. States must follow their own administrative procedures in pursuing deaccreditation actions. At a minimum, the criteria shall include:

(a) Performing work requiring accreditation at a job site without being in physical possession of initial and current accreditation certificates;

(b) Permitting the duplication or use of one's own accreditation certificate by another;

(c) Performing work for which accreditation has not been received; or

(d) Obtaining accreditation from a training provider that does not have approval to offer training for the particular discipline from either EPA or from a State that has a contractor accreditation plan at least as stringent as the EPA MAP.

EPA may directly pursue deaccreditation actions without reliance on State deaccreditation or enforcement authority or actions. In addition to the above-listed situations, the Administrator may suspend or revoke the accreditation of persons who have been subject to a final order imposing a civil penalty or convicted under section 16 of TSCA, 15 U.S.C. 2615 or 2647, for violations of 40 CFR part 763, or section 113 of the Clean Air Act, 42 U.S.C. 7413, for violations of 40 CFR part 61, subpart M.

2. Any person who performs asbestos work requiring accreditation under section 206(a) of TSCA, 15 U.S.C. 2646(a), without such accreditation is in violation of TSCA. The following persons are not accredited for purposes of section 206(a) of TSCA:

(a) Any person who obtains accreditation through fraudulent representation of training or examination documents;

(b) Any person who obtains training documentation through fraudulent means;

(c) Any person who gains admission to and completes refresher training through fraudulent representation of initial or previous refresher training documentation; or

(d) Any person who obtains accreditation through fraudulent representation of accreditation requirements such as education, training, professional registration, or experience.

H. Reciprocity

EPA recommends that each State establish reciprocal arrangements with other States that have established accreditation programs that meet or exceed the requirements of the MAP. Such arrangements might address cooperation in licensing determinations, the review and approval of training programs and/or instructors, candidate testing and exam administration, curriculum development, policy formulation, compliance monitoring, and the exchange of information and data. The benefits to be derived from these arrangements include a potential cost-savings from the reduction of duplicative activity and the attainment of a more professional accredited workforce as States are able to refine and improve the effectiveness of their programs based upon the experience and methods of other States.

*II. EPA Approval Process for State Accreditation Programs*

A. States may seek approval for a single discipline or all disciplines as specified in the MAP. For example, a State that currently only requires worker accreditation may receive EPA approval for that discipline alone. EPA encourages States that currently do not have accreditation requirements for all disciplines required under section 206(b)(2) of TSCA, 15 U.S.C. 2646(b)(2), to seek EPA approval for those disciplines the State does accredit. As States establish accreditation requirements for the remaining disciplines, the requested information outlined below should be submitted to EPA as soon as possible. Any State that had an accreditation program approved by EPA under an earlier version of the MAP may follow the same procedures to obtain EPA approval of their accreditation program under this MAP.

B. Partial approval of a State Program for the accreditation of one or more disciplines does not mean that the State is in full compliance with TSCA where the deadline for that State to have adopted a State Plan no less stringent than the MAP has already passed. State Programs which are at least as stringent as the MAP for one or more of the accredited disciplines may, however, accredit persons in those disciplines only.

C. States seeking EPA approval or reapproval of accreditation programs shall submit the following information to the Regional Asbestos Coordinator at their EPA Regional office:

1. A copy of the legislation establishing or upgrading the State's accreditation program (if applicable).

2. A copy of the State's accreditation regulations or revised regulations.

3. A letter to the Regional Asbestos Coordinator that clearly indicates how the State meets the program requirements of this MAP. Addresses for each of the Regional Asbestos Coordinators are shown below:

EPA, Region I, (ATC-111) Asbestos Coordinator, JFK Federal Bldg., Boston, MA 02203-2211, (617) 565-3836.

EPA, Region II, (MS-500), Asbestos Coordinator, 2890 Woodbridge Ave., Edison, NJ 08837-3679, (908) 321-6671.

EPA, Region III, (3AT-33), Asbestos Coordinator, 841 Chestnut Bldg., Philadelphia, PA 19107, (215) 597-3160.

EPA, Region IV, Asbestos Coordinator, 345 Courtland St., N.E., Atlanta, GA 30365, (404) 347-5014.

EPA, Region V, (SP-14J), Asbestos Coordinator, 77 W. Jackson Blvd., Chicago, IL 60604-3590, (312) 886-6003.

EPA, Region VI, (6T-PT), Asbestos Coordinator, 1445 Ross Ave. Dallas, TX 75202-2744, (214) 655-7244.

EPA, Region VII, (ARTX/ASBS), Asbestos Coordinator, 726 Minnesota Ave., Kansas City, KS 66101, (913) 551-7020.

EPA, Region VIII, (8AT-TS), Asbestos Coordinator, 1 Denver Place, Suite 500 999 - 18th St., Denver, CO 80202-2405, (303) 293-1442.

EPA, Region IX, (A-4-4), Asbestos Coordinator, 75 Hawthorne St., San Francisco, CA 94105, (415) 744-1128.

EPA, Region X, (AT-083), Asbestos Coordinator, 1200 Sixth Ave., Seattle, WA 98101, (206) 553-4762.

EPA maintains a listing of all those States that have applied for and received EPA approval for having accreditation requirements that are at least as stringent as the MAP for one or more disciplines. Any training courses approved by an EPA-approved State Program are considered to be EPA-approved for purposes of accreditation.

*III. Approval of Training Courses*

Individuals or groups wishing to sponsor training courses for disciplines required to be accredited under section 206(b)(1)(A) of TSCA, 15 U.S.C. 2646(b)(1)(A), may apply for approval from States that have accreditation program requirements that are at least as stringent as this MAP. For a course to receive approval, it must meet the requirements for the course as outlined in this MAP, and any other requirements imposed by the State from which approval is being sought. Courses that have been approved by a State with an accreditation program at least as stringent as this MAP are approved under section 206(a) of TSCA, 15 U.S.C.

2646(a), for that particular State, and also for any other State that does not have an accreditation program as stringent as this MAP.

A. Initial Training Course Approval

A training provider must submit the following minimum information to a State as part of its application for the approval of each training course:

1. The course provider's name, address, and telephone number.

2. A list of any other States that currently approve the training course.

3. The course curriculum.

4. A letter from the provider of the training course that clearly indicates how the course meets the MAP requirements for:

a. Length of training in days.

b. Amount and type of hands-on training.

c. Examination (length, format, and passing score).

d. Topics covered in the course.

5. A copy of all course materials (student manuals, instructor notebooks, handouts, etc.).

6. A detailed statement about the development of the examination used in the course.

7. Names and qualifications of all course instructors. Instructors must have academic and/or field experience in asbestos abatement.

8. A description of and an example of the numbered certificates issued to students who attend the course and pass the examination.

B. Refresher Training Course Approval

The following minimum information is required for approval of refresher training courses by States:

1. The length of training in half-days or days.

2. The topics covered in the course.

3. A copy of all course materials (student manuals, instructor notebooks, handouts, etc.).

4. The names and qualifications of all course instructors. Instructors must have academic and/or field experience in asbestos abatement.

5. A description of and an example of the numbered certificates issued to students who complete the refresher course and pass the examination, if required.

C. Withdrawal of Training Course Approval

States must establish criteria and procedures for suspending or withdrawing approval from accredited training programs. States should follow their own administrative procedures in pursuing actions for suspension or withdrawal of approval of training programs. At a minimum, the criteria shall include:

(1) Misrepresentation of the extent of a training course's approval by a State or EPA;

(2) Failure to submit required information or notifications in a timely manner;

(3) Failure to maintain requisite records;

(4) Falsification of accreditation records, instructor qualifications, or other accreditation information; or

(5) Failure to adhere to the training standards and requirements of the EPA MAP or State Accreditation Program, as appropriate.

In addition to the criteria listed above, EPA may also suspend or withdraw a training course's approval where an approved training course instructor, or other person with supervisory authority over the delivery of training has been found in violation of other asbestos regulations administered by EPA. An administrative or judicial finding of violation, or execution of a consent agreement and order under 40 CFR 22.18, constitutes evidence of a failure to comply with relevant statutes or regulations. States may wish to adopt this criterion modified to include their own asbestos statutes or regulations. EPA may also suspend or withdraw approval of training programs where a training provider has submitted false information as a part of the self-certification required under Unit V.B. of the revised MAP.

Training course providers shall permit representatives of EPA or the State which approved their training courses to attend, evaluate, and monitor any training course without charge. EPA or State compliance inspection staff are not required to give advance notice of their inspections. EPA may suspend or withdraw State or EPA approval of a training course based upon the criteria specified in this Unit III.C.

*IV. EPA Procedures for Suspension or Revocation of Accreditation or Training Course Approval.*

A. If the Administrator decides to suspend or revoke the accreditation of any person or suspend or withdraw the approval of a training course, the Administrator will notify the affected entity of the following:

1. The grounds upon which the suspension, revocation, or withdrawal is based.

2. The time period during which the suspension, revocation, or withdrawal is effective, whether permanent or otherwise.

3. The conditions, if any, under which the affected entity may receive accreditation or approval in the future.

4. Any additional conditions which the Administrator may impose.

5. The opportunity to request a hearing prior to final Agency action to suspend or revoke accreditation or suspend or withdraw approval.

B. If a hearing is requested by the accredited person or training course provider pursuant to the preceding paragraph, the Administrator will:

1. Notify the affected entity of those assertions of law and fact upon which the action to suspend, revoke, or withdraw is based.

2. Provide the affected entity an opportunity to offer written statements of facts, explanations, comments, and arguments relevant to the proposed action.

3. Provide the affected entity such other procedural opportunities as the Administrator may deem appropriate to ensure a fair and impartial hearing.

4. Appoint an EPA attorney as Presiding Officer to conduct the hearing. No person shall serve as Presiding Officer if he or she has had any prior connection with the specific case.

C. The Presiding Officer appointed pursuant to the preceding paragraph shall:

1. Conduct a fair, orderly, and impartial hearing, without unnecessary delay.

2. Consider all relevant evidence, explanation, comment, and argument submitted pursuant to the preceding paragraph.

3. Promptly notify the affected entity of his or her decision and order. Such an order is a final Agency action.

D. If the Administrator determines that the public health, interest, or welfare warrants immediate action to suspend the accreditation of any person or the approval of any training course provider, the Administrator will:

1. Notify the affected entity of the grounds upon which the emergency suspension is based;

2. Notify the affected entity of the time period during which the emergency suspension is effective.

3. Notify the affected entity of the Administrator's intent to suspend or revoke accreditation or suspend or withdraw training course approval, as appropriate, in accordance with Unit IV.A. above. If such suspension, revocation, or withdrawal notice has not previously been issued, it will be issued at the same time the emergency suspension notice is issued.

E. Any notice, decision, or order issued by the Administrator under this section, and any documents filed by an accredited person or approved training course provider in a hearing under this section, shall be available to the public except as otherwise provided by section 14 of TSCA or by 40 CFR part 2. Any such hearing at which oral testimony is presented shall be open to the public, except that the Presiding Officer may exclude the public to the extent necessary to allow presentation of information which may be entitled to confidential treatment under section 14 of TSCA or 40 CFR part 2.

*V. Implementation Schedule*

The various requirements of this MAP become effective in accordance with the following schedules:

A. Requirements applicable to State Programs

1. Each State shall adopt an accreditation plan that is at least as stringent as this MAP within 180 days after the commencement of the first regular session of the legislature of the State that is convened on or after April 4, 1994.

2. If a State has adopted an accreditation plan at least as stringent as this MAP as of April 4, 1994, the State may continue to:

a. Conduct TSCA training pursuant to this MAP.

b. Approve training course providers to conduct training and to issue accreditation that satisfies the requirements for TSCA accreditation under this MAP.

c. Issue accreditation that satisfies the requirements for TSCA accreditation under this MAP.

3. A State that had complied with an earlier version of the MAP, but has not adopted an accreditation plan at least as stringent as this MAP by April 4, 1994, may:

a. Conduct TSCA training which remains in compliance with the requirements of Unit V.B. of this MAP. After such training has been self-certified in accordance with Unit V.B. of this MAP, the State may issue accreditation that satisfies the requirement for TSCA accreditation under this MAP.

b. Sustain its approval for any training course providers to conduct training and issue TSCA accreditation that the State had approved before April 4, 1994, and that remain in compliance with Unit V.B. of this MAP.

c. Issue accreditation pursuant to an earlier version of the MAP that provisionally satisfies the requirement for TSCA accreditation until October 4, 1994.

Such a State may not approve new TSCA training course providers to conduct training or to issue TSCA accreditation that satisfies the requirements of this MAP until the State adopts an accreditation plan that is at least as stringent as this MAP.

4. A State that had complied with an earlier version of the MAP, but fails to adopt a plan as stringent as this MAP by the deadline established in Unit V.A.1., is subject to the following after that deadline date:

a. The State loses any status it may have held as an EPA-approved State for accreditation purposes under section 206 of TSCA, 15 U.S.C. 2646.

b. All training course providers approved by the State lose State approval to conduct training and issue accreditation that satisfies the requirements for TSCA accreditation under this MAP.

c. The State may not:

i. Conduct training for accreditation purposes under section 206 of TSCA, 15 U.S.C. 2646.

ii. Approve training course providers to conduct training or issue accreditation that satisfies the requirements for TSCA accreditation; or

iii. Issue accreditation that satisfies the requirement for TSCA accreditation.

EPA will extend EPA-approval to any training course provider that loses State approval because the State does not comply with the deadline, so long as the provider is in compliance with Unit V.B. of this MAP, and the provider is approved by a State that had complied with an earlier version of the MAP as of the day before the State loses its EPA approval.

5. A State that does not have an accreditation program that satisfies the requirements for TSCA accreditation under either an earlier version of the MAP or this MAP, may not:

a. Conduct training for accreditation purposes under section 206 of TSCA, 15 U.S.C. 2646;

b. Approve training course providers to conduct training or issue accreditation that satisfies the requirements for TSCA accreditation; or

c. Issue accreditation that satisfies the requirement for TSCA accreditation.

B. Requirements applicable to Training Courses and Providers

As of October 4, 1994, an approved training provider must certify to EPA and to any State that has approved the provider for TSCA accreditation, that each of the provider's training courses complies with the requirements of this MAP. The written submission must document in specific detail the changes made to each training course in order to comply with the requirements of this MAP and clearly state that the provider is also in compliance with all other requirements of this MAP, including the new recordkeeping and certificate provisions. Each submission must include the following statement signed by an authorized representative of the training provider: ''Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the training described in this submission complies with all applicable requirements of Title II of TSCA, 40 CFR part 763, Appendix C to Subpart E, as revised, and any other applicable Federal, state, or local requirements.'' A consolidated self-certification submission from each training provider that addresses all of its approved training courses is permissible and encouraged.

The self-certification must be sent via registered mail, to EPA Headquarters at the following address: Attn. Self-Certification Program, Field Programs Branch, Chemical Management Division (7404), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. A duplicate copy of the complete submission must also be sent to any States from which approval had been obtained.

The timely receipt of a complete self-certification by EPA and all approving States shall have the effect of extending approval under this MAP to the training courses offered by the submitting provider. If a self-certification is not received by the approving government bodies on or before the due date, the affected training course is not approved under this MAP. Such training providers must then reapply for approval of these training courses pursuant to the procedures outlined in Unit III.

C. Requirements applicable to Accredited Persons.

Persons accredited by a State with an accreditation program no less stringent than an earlier version of the MAP or by an EPA-approved training provider as of April 3, 1994, are accredited in accordance with the requirements of this MAP, and are not required to retake initial training. They must continue to comply with the requirements for annual refresher training in Unit I.D. of the revised MAP.

D. Requirements applicable to Non-Accredited Persons.

In order to perform work requiring accreditation under TSCA Title II, persons who are not accredited by a State with an accreditation program no less stringent than an earlier version of the MAP or by an EPA-approved training provider as of April 3, 1994, must comply with the upgraded training requirements of this MAP by no later than October 4, 1994. Non-accredited persons may obtain initial accreditation on a provisional basis by successfully completing any of the training programs approved under an earlier version of the MAP, and thereby perform work during the first 6 months after this MAP takes effect. However, by October 4, 1994, these persons must have successfully completed an upgraded training program that fully complies with the requirements of this MAP in order to continue to perform work requiring accreditation under section 206 of TSCA, 15 U.S.C. 2646.

[59 FR 5251, Feb. 3, 1994, as amended at 60 FR 31922, June 19, 1995]

## APPENDIX D TO SUBPART E—TRANSPORT AND DISPOSAL OF ASBESTOS WASTE

For the purposes of this appendix, transport is defined as all activities from receipt

of the containerized asbestos waste at the generation site until it has been unloaded at the disposal site. Current EPA regulations state that there must be no visible emissions to the outside air during waste transport. However, recognizing the potential hazards and subsequent liabilities associated with exposure, the following additional precautions are recommended.

*Recordkeeping.* Before accepting wastes, a transporter should determine if the waste is properly wetted and containerized. The transporter should then require a chain-of-custody form signed by the generator. A chain-of-custody form may include the name and address of the generator, the name and address of the pickup site, the estimated quantity of asbestos waste, types of containers used, and the destination of the waste. The chain-of-custody form should then be signed over to a disposal site operator to transfer responsibility for the asbestos waste. A copy of the form signed by the disposal site operator should be maintained by the transporter as evidence of receipt at the disposal site.

*Waste handling.* A transporter should ensure that the asbestos waste is properly contained in leak-tight containers with appropriate labels, and that the outside surfaces of the containers are not contaminated with asbestos debris adhering to the containers. If there is reason to believe that the condition of the asbestos waste may allow significant fiber release, the transporter should not accept the waste. Improper containerization of wastes is a violation of the NESHAPs regulation and should be reported to the appropriate EPA Regional Asbestos NESHAPs contact below:

*Region I*

Asbestos NESHAPs Contact, Air Management Division, USEPA, Region I, JFK Federal Building, Boston, MA 02203, (617) 223–3266.

*Region II*

Asbestos NESHAPs Contact, Air & Waste Management Division, USEPA, Region II, 26 Federal Plaza, New York, NY 10007, (212) 264–6770.

*Region III*

Asbestos NESHAPs Contact, Air Management Division, USEPA, Region III, 841 Chestnut Street, Philadelphia, PA 19107, (215) 597–9325.

*Region IV*

Asbestos NESHAPs Contact, Air, Pesticide & Toxic Management, USEPA, Region IV, 345 Courtland Street, NE., Atlanta, GA 30365, (404) 347–4298.

*Region V*

Asbestos NESHAPs Contact, Air Management Division, USEPA, Region V, 230 S. Dearborn Street, Chicago, IL 60604, (312) 353–6793.

*Region VI*

Asbestos NESHAPs Contact, Air & Waste Management Division, USEPA, Region VI, 1445 Ross Avenue, Dallas, TX 75202, (214) 655–7229.

*Region VII*

Asbestos NESHAPs Contact, Air & Waste Management Division, USEPA, Region VII, 726 Minnesota Avenue, Kansas City, KS 66101, (913) 236–2896.

*Region VIII*

Asbestos NESHAPs Contact, Air & Waste Management Division, USEPA, Region VIII, 999 18th Street, Suite 500, Denver, CO 80202, (303) 293–1814.

*Region IX*

Asbestos NESHAPs Contact, Air Management Division, USEPA, Region IX, 215 Fremont Street, San Francisco, CA 94105, (415) 974–7633.

*Region X*

Asbestos NESHAPs Contact, Air & Toxics Management Division, USEPA, Region X, 1200 Sixth Avenue, Seattle, WA 98101, (206) 442–2724.

Once the transporter is satisfied with the condition of the asbestos waste and agrees to handle it, the containers should be loaded into the transport vehicle in a careful manner to prevent breaking of the containers. Similarly, at the disposal site, the asbestos waste containers should be transferred carefully to avoid fiber release.

*Waste transport.* Although there are no regulatory specifications regarding the transport vehicle, it is recommended that vehicles used for transport of containerized asbestos waste have an enclosed carrying compartment or utilize a canvas covering sufficient to contain the transported waste, prevent damage to containers, and prevent fiber release. Transport of large quantities of asbestos waste is commonly conducted in a 20-cubic-yard ''roll off'' box, which should also be covered. Vehicles that use compactors to reduce waste volume should not be used because these will cause the waste containers to rupture. Vacuum trucks used to transport waste slurry must be inspected to ensure that water is not leaking from the truck.

Disposal involves the isolation of asbestos waste material in order to prevent fiber release to air or water. Landfilling is recommended as an environmentally sound isolation method because asbestos fibers are

virtually immobile in soil. Other disposal techniques such as incineration or chemical treatment are not feasible due to the unique properties of asbestos. EPA has established asbestos disposal requirements for active and inactive disposal sites under NESHAPs (40 CFR Part 61, subpart M) and specifies general requirements for solid waste disposal under RCRA (40 CFR Part 257). Advance EPA notification of the intended disposal site is required by NESHAPs.

*Selecting a disposal facility.* An acceptable disposal facility for asbestos wastes must adhere to EPA's requirements of no visible emissions to the air during disposal, or minimizing emissions by covering the waste within 24 hours. The minimum required cover is 6 inches of nonasbestos material, normally soil, or a dust-suppressing chemical. In addition to these Federal requirements, many state or local government agencies require more stringent handling procedures. These agencies usually supply a list of ''approved'' or licensed asbestos disposal sites upon request. Solid waste control agencies are listed in local telephone directories under state, county, or city headings. A list of state solid waste agencies may be obtained by calling the RCRA hotline: 1–800–424–9346 (382–3000 in Washington, DC). Some landfill owners or operators place special requirements on asbestos waste, such as placing all bagged waste into 55-gallon metal drums. Therefore, asbestos removal contractors should contact the intended landfill before arriving with the waste.

*Receiving asbestos waste.* A landfill approved for receipt of asbestos waste should require notification by the waste hauler that the load contains asbestos. The landfill operator should inspect the loads to verify that asbestos waste is properly contained in leak-tight containers and labeled appropriately. The appropriate EPA Regional Asbestos NESHAPs Contact should be notified if the landfill operator believes that the asbestos waste is in a condition that may cause significant fiber release during disposal. In situations when the wastes are not properly containerized, the landfill operator should thoroughly soak the asbestos with a water spray prior to unloading, rinse out the truck, and immediately cover the wastes with nonasbestos material prior to compacting the waste in the landfill.

*Waste deposition and covering.* Recognizing the health dangers associated with asbestos exposure, the following procedures are recommended to augment current federal requirements:

- Designate a separate area for asbestos waste disposal. Provide a record for future landowners that asbestos waste has been buried there and that it would be hazardous to attempt to excavate that area. (Future regulations may require property deeds to identify the location of any asbestos wastes and warn against excavation.)
- Prepare a separate trench to receive asbestos wastes. The size of the trench will depend upon the quantity and frequency of asbestos waste delivered to the disposal site. The trenching technique allows application of soil cover without disturbing the asbestos waste containers. The trench should be ramped to allow the transport vehicle to back into it, and the trench should be as narrow as possible to reduce the amount of cover required. If possible, the trench should be aligned perpendicular to prevailing winds.
- Place the asbestos waste containers into the trench carefully to avoid breaking them. Be particularly careful with plastic bags because when they break under pressure asbestos particles can be emitted.
- Completely cover the containerized waste within 24 hours with a minimum of 6 inches of nonasbestos material. Improperly containerized waste is a violation of the NESHAPs and EPA should be notified.

However, if improperly containerized waste is received at the disposal site, it should be covered immediately after unloading. Only after the wastes, including properly containerized wastes, are completely covered, can the wastes be compacted or other heavy equipment run over it. During compacting, avoid exposing wastes to the air or tracking asbestos material away from the trench.

- For final closure of an area containing asbestos waste, cover with at least an additional 30 inches of compacted nonasbestos material to provide a 36-inch final cover. To control erosion of the final cover, it should be properly graded and vegetated. In areas of the United States where excessive soil erosion may occur or the frost line exceeds 3 feet, additional final cover is recommended. In desert areas where vegetation would be difficult to maintain, 3–6 inches of well graded crushed rock is recommended for placement on top of the final cover.

*Controlling public access.* Under the current NESHAPs regulation, EPA does not require that a landfill used for asbestos disposal use warning signs or fencing if it meets the requirement to cover asbestos wastes. However, under RCRA, EPA requires that access be controlled to prevent exposure of the public to potential health and safety hazards at the disposal site. Therefore, for liability protection of operators of landfills that handle asbestos, fencing and warning signs are recommended to control public access when natural barriers do not exist. Access to a landfill should be limited to one or two entrances with gates that can be locked when left unattended. Fencing should be installed around the perimeter of the disposal site in a manner adequate to deter access by the general public. Chain-link fencing, 6-ft high and topped with a barbed wire guard, should

be used. More specific fencing requirements may be specified by local regulations. Warning signs should be displayed at all entrances and at intervals of 330 feet or less along the property line of the landfill or perimeter of the sections where asbestos waste is deposited. The sign should read as follows:

ASBESTOS WASTE DISPOSAL SITE

BREATHING ASBESTOS DUST MAY CAUSE LUNG DISEASE AND CANCER

*Recordkeeping.* For protection from liability, and considering possible future requirements for notification on disposal site deeds, a landfill owner should maintain documentation of the specific location and quantity of the buried asbestos wastes. In addition, the estimated depth of the waste below the surface should be recorded whenever a landfill section is closed. As mentioned previously, such information should be recorded in the land deed or other record along with a notice warning against excavation of the area.

[52 FR 41897, Oct. 30, 1987]

## APPENDIX E TO SUBPART E—INTERIM METHOD OF THE DETERMINATION OF ASBESTOS IN BULK INSULATION SAMPLES

### SECTION 1, POLARIZED LIGHT MICROSCOPY

#### 1.1 Principle and Applicability

Bulk samples of building materials taken for asbestos identification are first examined for homogeneity and preliminary fiber identification at low magnification. Positive identification of suspect fibers is made by analysis of subsamples with the polarized light microscope.

The principles of optical mineralogy are well established.[1,2] A light microscope equipped with two polarizing filters is used to observe specific optical characteristics of a sample. The use of plane polarized light allows the determination of refractive indices along specific crystallographic axes. Morphology and color are also observed. A retardation plate is placed in the polarized light path for determination of the sign of elongation using orthoscopic illumination. Orientation of the two filters such that their vibration planes are perpendicular (crossed polars) allows observation of the birefringence and extinction characteristics of anisotropic particles.

Quantitative analysis involves the use of point counting. Point counting is a standard technique in petrography for determining the relative areas occupied by separate minerals in thin sections of rock. Background information on the use of point counting[2] and the interpretation of point count data[3] is available.

This method is applicable to all bulk samples of friable insulation materials submitted for identification and quantitation of asbestos components.

#### 1.2 Range

The point counting method may be used for analysis of samples containing from 0 to 100 percent asbestos. The upper detection limit is 100 percent. The lower detection limit is less than 1 percent.

#### 1.3 Interferences

Fibrous organic and inorganic constituents of bulk samples may interfere with the identification and quantitation of the asbestos mineral content. Spray-on binder materials may coat fibers and affect color or obscure optical characteristics to the extent of masking fiber identity. Fine particles of other materials may also adhere to fibers to an extent sufficient to cause confusion in identification. Procedures that may be used for the removal of interferences are presented in Section 1.7.2.2.

#### 1.4 Precision and Accuracy

Adequate data for measuring the accuracy and precision of the method for samples with various matrices are not currently available. Data obtained for samples containing a single asbestos type in a simple matrix are available in the EPA report *Bulk Sample Analysis for Asbestos Content: Evaluation of the Tentative Method.*[4]

#### 1.5 Apparatus

##### 1.5.1 *Sample Analysis*

A low-power binocular microscope, preferably stereoscopic, is used to examine the bulk insulation sample as received.

- *Microscope:* binocular, 10–45X (approximate).
- *Light Source:* incandescent or fluorescent.
- *Forceps, Dissecting Needles, and Probes*
- *Glassine Paper or Clean Glass Plate*

Compound microscope requirements: A polarized light microscope complete with polarizer, analyzer, port for wave retardation plate, 360° graduated rotating stage, substage condenser, lamp, and lamp iris.

- *Polarized Light Microscope:* described above.
- *Objective Lenses:* 10X, 20X, and 40X or near equivalent.
- *Dispersion Staining Objective Lens* (optional)
- *Ocular Lens:* 10X minimum.
- *Eyepiece Reticle:* cross hair or 25 point Chalkley Point Array.
- *Compensator Plate:* 550 millimicron retardation.

##### 1.5.2 *Sample Preparation*

Sample preparation apparatus requirements will depend upon the type of insulation sample under consideration. Various

physical and/or chemical means may be employed for an adequate sample assessment.

- *Ventilated Hood* or negative pressure glove box.
- *Microscope Slides*
- *Coverslips*
- *Mortar and Pestle:* agate or porcelain. (optional)
- *Wylie Mill* (optional)
- *Beakers and Assorted Glassware* (optional)
- *Certrifuge* (optional)
- *Filtration apparatus* (optional)
- *Low temperature asher* (optional)

1.6 Reagents

1.6.1 *Sample Preparation*

- *Distilled Water (optional)*
- *Dilute $CH_3COOH$:* ACS reagent grade (optional)
- *Dilute HCl:* ACS reagent grade (optional)
- *Sodium metaphosphate* $(NaPO_3)_6$ (optional)

1.6.2 *Analytical Reagents*

*Refractive Index Liquids:* 1.490–1.570, 1.590–1.720 in increments of 0.002 or 0.004.

- *Refractive Index Liquids for Dispersion Staining:* high-dispersion series, 1.550, 1.605, 1.630 (optional).
- *UICC Asbestos Reference Sample Set:* Available from: UICC MRC Pneumoconiosis Unit, Llandough Hospital, Penarth, Glamorgan CF6 1XW, UK, and commercial distributors.
- *Tremolite-asbestos* (source to be determined)
- *Actinolite-asbestos* (source to be determined)

1.7 Procedures

NOTE: Exposure to airborne asbestos fibers is a health hazard. Bulk samples submitted for analysis are usually friable and may release fibers during handling or matrix reduction steps. All sample and slide preparations should be carried out in a ventilated hood or glove box with continuous airflow (negative pressure). Handling of samples without these precautions may result in exposure of the analyst and contamination of samples by airborne fibers.

1.7.1 *Sampling*

Samples for analysis of asbestos content shall be taken in the manner prescribed in Reference 5 and information on design of sampling and analysis programs may be found in Reference 6. If there are any questions about the representative nature of the sample, another sample should be requested before proceeding with the analysis.

1.7.2 *Analysis*

1.7.2.1 *Gross Examination*

Bulk samples of building materials taken for the identification and quantitation of asbestos are first examined for homogeneity at low magnification with the aid of a stereomicroscope. The core sample may be examined in its container or carefully removed from the container onto a glassine transfer paper or clean glass plate. If possible, note is made of the top and bottom orientation. When discrete strata are identified, each is treated as a separate material so that fibers are first identified and quantified in that layer only, and then the results for each layer are combined to yield an estimate of asbestos content for the whole sample.

1.7.2.2 *Sample Preparation*

Bulk materials submitted for asbestos analysis involve a wide variety of matrix materials. Representative subsamples may not be readily obtainable by simple means in heterogeneous materials, and various steps may be required to alleviate the difficulties encountered. In most cases, however, the best preparation is made by using forceps to sample at several places from the bulk material. Forcep samples are immersed in a refractive index liquid on a microscope slide, teased apart, covered with a cover glass, and observed with the polarized light microscope.

Alternatively, attempts may be made to homogenize the sample or eliminate interferences before further characterization. The selection of appropriate procedures is dependent upon the samples encountered and personal preference. The following are presented as possible sample preparation steps.

A mortar and pestle can sometimes be used in the size reduction of soft or loosely bound materials though this may cause matting of some samples. Such samples may be reduced in a Wylie mill. Apparatus should be clean and extreme care exercised to avoid cross-contamination of samples. Periodic checks of the particle sizes should be made during the grinding operation so as to preserve any fiber bundles present in an identifiable form. These procedures are not recommended for samples that contain amphibole minerals or vermiculite. Grinding of amphiboles may result in the separation of fiber bundles or the production of cleavage fragments with aspect ratios greater than 3:1. Grinding of vermiculite may also produce fragments with aspect ratios greater than 3:1.

Acid treatment may occasionally be required to eliminate interferences. Calcium carbonate, gypsum, and bassanite (plaster) are frequently present in sprayed or trowelled insulations. These materials may be removed by treatment with warm dilute acetic acid. Warm dilute hydrochloric acid may also be used to remove the above materials. If acid treatment is required, wash the sample at least twice with distilled water, being careful not to lose the particulates during decanting steps. Centrifugation or filtration of the suspension will prevent significant fiber loss. The pore size of the filter

should be 0.45 micron or less. Caution: prolonged acid contact with the sample may alter the optical characteristics of chrysotile fibers and should be avoided.

Coatings and binding materials adhering to fiber surfaces may also be removed by treatment with sodium metaphosphate.[7] Add 10 mL of 10g/L sodium metaphosphate solution to a small (0.1 to 0.5 mL) sample of bulk material in a 15-mL glass centrifuge tube. For approximately 15 seconds each, stir the mixture on a vortex mixer, place in an ultrasonic bath and then shake by hand. Repeat the series. Collect the dispersed solids by centrifugation at 1000 rpm for 5 minutes. Wash the sample three times by suspending in 10 mL distilled water and recentrifuging. After washing, resuspend the pellet in 5 mL distilled water, place a drop of the suspension on a microscope slide, and dry the slide at 110° C.

In samples with a large portion of cellulosic or other organic fibers, it may be useful to ash part of the sample and view the residue. Ashing should be performed in a low temperature asher. Ashing may also be performed in a muffle furnace at temperatures of 500° C or lower. Temperatures of 550° C or higher will cause dehydroxylation of the asbestos minerals, resulting in changes of the refractive index and other key parameters. If a muffle furnace is to be used, the furnace thermostat should be checked and calibrated to ensure that samples will not be heated at temperatures greater than 550° C.

Ashing and acid treatment of samples should not be used as standard procedures. In order to monitor possible changes in fiber characteristics, the material should be viewed microscopically before and after any sample preparation procedure. Use of these procedures on samples to be used for quantitation requires a correction for percent weight loss.

1.7.2.3 *Fiber Identification*

Positive identification of asbestos requires the determination of the following optical properties.

- Morphology
- Color and pleochroism
- Refractive indices
- Birefringence
- Extinction characteristics
- Sign of elongation

Table 1–1 lists the above properties for commercial asbestos fibers. Figure 1–1 presents a flow diagram of the examination procedure. Natural variations in the conditions under which deposits of asbestiform minerals are formed will occasionally produce exceptions to the published values and differences from the UICC standards. The sign of elongation is determined by use of the compensator plate and crossed polars. Refractive indices may be determined by the Becke line test. Alternatively, dispersion staining may be used. Inexperienced operators may find that the dispersion staining technique is more easily learned, and should consult Reference 9 for guidance. Central stop dispersion staining colors are presented in Table 1–2. Available high-dispersion (HD) liquids should be used.

TABLE 1–1—OPTICAL PROPERTIES OF ASBESTOC FIBERS

| Mineral | Morphology, color [a] | Refrac- tive indices [b] | | Birefring- ence | Extinction | Sign of elonation |
|---|---|---|---|---|---|---|
| | | α | γ | | | |
| Chrysotile (asbestiform serpentine). | Wavy fibers. Fiber bundles have splayed ends and ''kinks''. Aspect ratio typically >10:1. Colorless [3], nonpleochroic. | 1.493–1.560 | 1.517–1.562 [f] (normally 1.556). | .008 | ∥to fiber length. | + (length slow) |
| Amosite (asbestiform grunerite). | Straight, rigid fibers. Aspect ratio typically >10:1. Colorless to brown, nonpleochroic or weakly so. Opaque inclusions may be present. | 1.635–1.696 | 1.655–1.729 [f] (normally 1.696–1.710. | .020–.033 | ∥to fiber length. | + (length slow) |
| Crocidolite (asbestiform Riebeckite). | Straight, rigid fibers. Thick fibers and bundles common, blue to purple-blue in color. Pleochroic. Birefringence is generally masked by blue color. | 1.654–1.701 | 1.668–1.717 [3 e] (normally close to 1.700). | .014–.016 | ∥to fiber length. | – (length fast) |
| Anthophyllite-asbestos. | Straight fibers and acicular cleavage fragments. [d] Some composite fibers. Aspect ratio <10:1. Colorless to light brown. | 1.596–1.652 | 1.615–1.676 [f]. | .019–.024 | ∥to fiber length. | + (length slow) |

TABLE 1–1—OPTICAL PROPERTIES OF ASBESTOC FIBERS—Continued

| Mineral | Morphology, color [a] | Refrac- tive indices [b] | | Birefring- ence | Extinction | Sign of elonation |
|---|---|---|---|---|---|---|
| | | α | γ | | | |
| Tremolite-actin- olite-asbestos. | Normally present as acicular or prismatic cleavage fragments.[d] Single crystals predominate, aspect ratio <10:1. Colorless to pale green. | 1.599–1.668 | 1.622–1.688 [f]. | .023–.020 | Oblique extinction, 10–20° for fragments. Composite fibers show ⊥ extinction. | + (length slow) |

[a] From reference 5; colors cited are seen by observation with plane polarized light.
[b] From references 5 and 8.
[c] Fibers subjected to heating may be brownish.
[d] Fibers defined as having aspect ratio >3:1.
[e] ⊥ to fiber length.
[f] ∥To fiber length.

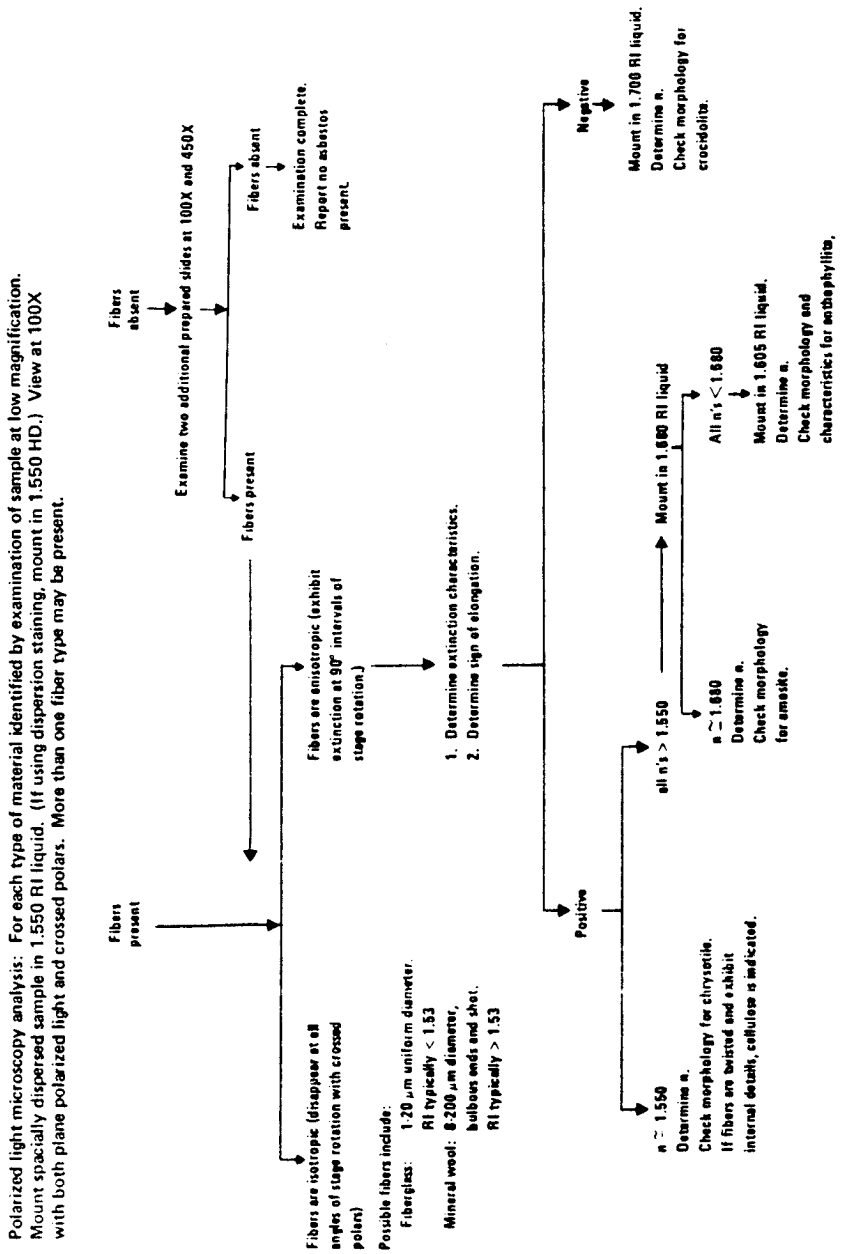


Figure 1-1. Flow chart for analysis of bulk samples by polarized light microscopy.

TABLE 1–2—CENTRAL STOP DISPERSION STAINING COLORS [a]

| Mineral | RI Liquid | η⊥ | η∥ |
|---|---|---|---|
| Chrysotile ..... | 1.550 HD | Blue ..... | Blue-magenta |
| Amosite ..... | 1.680 | Blue-magenta to pale blue. | Golden-yellow |
| | 1.550 HD | Yellow to white. | Yellow to white |
| Crocidolite [b] | 1.700 | Red magenta | Blue-magenta |
| | 1.550 HD | Yellow to white. | Yellow to white |
| Anthophyllite | 1.605 HD | Blue ..... | Gold to gold-magenta |
| Tremolite ..... | 1.605 HD [c] | Pale blue ..... | Gold |
| Actinolite ..... | 1.605 HD | Gold-magenta to blue. | Gold |
| | 1.630 HD [c] | Magenta ..... | Golden-yellow |

[a] From reference 9.
[b] Blue absorption color.
[c] Oblique extinction view.

1.7.2.4 *Quantitation of Asbestos Content*

Asbestos quantitation is performed by a point-counting procedure or an equivalent estimation method. An ocular reticle (cross-hair or point array) is used to visually superimpose a point or points on the microscope field of view. Record the number of points positioned directly above each kind of particle or fiber of interest. Score only points directly over asbestos fibers or nonasbestos matrix material. Do not score empty points for the closest particle. If an asbestos fiber and a matrix particle overlap so that a point is superimposed on their visual intersection, a point is scored for both categories. Point counting provides a determination of the area percent asbestos. Reliable conversion of area percent to percent of dry weight is not currently feasible unless the specific gravities and relative volumes of the materials are known.

For the purpose of this method, ''asbestos fibers'' are defined as having an aspect ratio greater than 3:1 and being positively identified as one of the minerals in Table 1–1.

A total of 400 points superimposed on either asbestos fibers or nonasbestos matrix material must be counted over at least eight different preparations of representative subsamples. Take eight forcep samples and mount each separately with the appropriate refractive index liquid. The preparation should not be heavily loaded. The sample should be uniformly dispersed to avoid overlapping particles and allow 25–50 percent empty area within the fields of view. Count 50 nonempty points on each preparation, using either

- A cross-hair reticle and mechanical stage; or
- A reticle with 25 points (Chalkley Point Array) and counting at least 2 randomly selected fields.

For samples with mixtures of isotropic and anisotropic materials present, viewing the sample with slightly uncrossed polars or the addition of the compensator plate to the polarized light path will allow simultaneous discrimination of both particle types. Quantitation should be performed at 100X or at the lowest magnification of the polarized light microscope that can effectively distinguish the sample components. Confirmation of the quantitation result by a second analyst on some percentage of analyzed samples should be used as standard quality control procedure.

The percent asbestos is calculated as follows:

% asbestos=(a/n) 100%

where

a=number of asbestos counts,
n=number of nonempty points counted (400).

If a=0, report ''No asbestos detected.'' If $0<a\leq3$, report ''<1% asbestos''.

The value reported should be rounded to the nearest percent.

1.8 References

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4. E. P. Brantly, Jr., K. W. Gold, L. E. Myers, and D. E. Lentzen, *Bulk Sample Analysis for Asbestos Content: Evaluation of the Tentative Method,* U.S. Environmental Protection Agency, October 1981.

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8. W. J. Campbell, R. L. Blake, L. L. Brown, E. E. Cather, and J. J. Sjoberg. *Selected Silicate Minerals and Their Asbestiform Varieties: Mineralogical Definitions and Identification-Characterization,* U.S. Bureau of Mines Information Circular 8751, 1977.

9. Walter C. McCrone, *Asbestos Particle Atlas,* Ann Arbor: Ann Arbor Science Publishers, June 1980.

SECTION 2, X-RAY POWDER DIFFRACTION

2.1 Principle and Applicability

The principle of X-ray powder diffraction (XRD) analysis is well established.[1,2] Any solid, crystalline material will diffract an impingent beam of parallel, monochromatic X-rays whenever Bragg's Law,

$\lambda = 2d \sin \theta$,

is satisfied for a particular set of planes in the crystal lattice, where

$\lambda$ = the X-ray wavelength, Å;
d = the interplanar spacing of the set of reflecting lattice planes, Å; and
$\theta$ = the angle of incidence between the X-ray beam and the reflecting lattice planes.

By appropriate orientation of a sample relative to the incident X-ray beam, a diffraction pattern can be generated that, in most cases, will be uniquely characteristic of both the chemical composition and structure of the crystalline phases present.

Unlike optical methods of analysis, however, XRD cannot determine crystal morphology. Therefore, in asbestos analysis, XRD does not distinguish between fibrous and nonfibrous forms of the serpentine and amphibole minerals (Table 2–1). However, when used in conjunction with optical methods such as polarized light microscopy (PLM), XRD techniques can provide a reliable analytical method for the identification and characterization of asbestiform minerals in bulk materials.

For *qualitative analysis* by XRD methods, samples are initially scanned over limited diagnostic peak regions for the serpentine (~7.4 Å) and amphibole (8.2–8.5 Å) minerals (Table 2–2). Standard slow-scanning methods for bulk sample analysis may be used for materials shown by PLM to contain significant amounts of asbestos (>5–10 percent). Detection of minor or trace amounts of asbestos may require special sample preparation and step-scanning analysis. All samples that exhibit diffraction peaks in the diagnostic regions for asbestiform minerals are submitted to a full (5°–60° 2θ; 1° 2θ/min) qualitative XRD scan, and their diffraction patterns are compared with standard reference powder diffraction patterns[3] to verify initial peak assignments and to identify possible matrix interferences when subsequent quantitative analysis will be performed.

TABLE 2–1—THE ASBESTOS MINERALS AND THEIR NONASBESTIFORM ANALOGS

| Asbestiform | Nonasbestiform |
|---|---|
| SERPENTINE | |
| Chrysotile | Antigorite, lizardite |
| AMPHIBOLE | |
| Anthophyllite asbestos | Anthophyllite |
| Cummingtonite-grunerite asbestos ("Amosite") | Cummingtonite-grunerite |
| Crocidolite | Riebeckite |
| Tremolite asbestos | Tremolite |
| Actinolite asbestos | Actinolite |

TABLE 2–2—PRINCIPAL LATTICE SPACINGS OF ASBESTIFORM MINERALS[a]

| Minerals | Principal d-spacings (Å) and relative intensities | | | JCPDS Powder diffraction file[3] number |
|---|---|---|---|---|
| Chrysotile | $7.37_{100}$ | $3.65_{70}$ | $4.57_{50}$ | 21–543[b] |
| | $7.36_{100}$ | $3.66_{80}$ | $2.45_{65}$ | 25–645 |
| | $7.10_{100}$ | $2.33_{80}$ | $3.55_{70}$ | 22–1162 (theoretical) |
| "Amosite" | $8.33_{100}$ | $3.06_{70}$ | $2.756_{70}$ | 17–745 (nonfibrous) |
| | $8.22_{100}$ | $3.060_{85}$ | $3.25_{70}$ | 27–1170 (UICC) |
| Anthophyllite | $3.05_{100}$ | $3.24_{60}$ | $8.26_{55}$ | 9–455 |
| | $3.06_{100}$ | $8.33_{70}$ | $3.23_{50}$ | 16–401 (synthetic) |
| Anthophyllite | $2.72_{100}$ | $2.54_{100}$ | $3.480_{80}$ | 25–157 |
| Crocidolite | $8.35_{100}$ | $3.10_{55}$ | $2.720_{35}$ | 27–1415 (UICC) |
| Tremolite | $8.38_{100}$ | $3.12_{100}$ | $2.705_{90}$ | 13–437[b] |
| | $2.706_{100}$ | $3.14_{95}$ | $8.43_{40}$ | 20–1310[b] (synthetic) |
| | $3.13_{100}$ | $2.706_{60}$ | $8.44_{40}$ | 23–666 (synthetic mixture with richterite) |

[a]This information is intended as a guide, only. Complete powder diffraction data, including mineral type and source, should be referred to, to ensure comparability of sample and reference materials where possible. Additional precision XRD data on amosite, crocidolite, tremolite, and chrysotile are available from the U.S. Bureaus of Mines.[4]
[b]Fibrosity questionable.

Accurate *quantitative analysis* of asbestos in bulk samples by XRD is critically dependent on particle size distribution, crystallite size, preferred orientation and matrix absorption effects, and comparability of standard reference and sample materials. The most intense diffraction peak that has been shown to be free from interference by prior qualitative XRD analysis is selected for quantitation of each asbestiform mineral. A "thin-layer" method of analysis[5,6] is recommended in which, subsequent to comminution of the bulk material to ~10 µm by suitable cryogenic milling techniques, an accurately known amount of the sample is deposited on a silver membrane filter. The mass of

asbestiform material is determined by measuring the integrated area of the selected diffraction peak using a step-scanning mode, correcting for matrix absorption effects, and comparing with suitable calibration standards. Alternative ''thick-layer'' or bulk methods,[7 8] may be used for *semiquantitative analysis.*

This XRD method is applicable as a confirmatory method for identification and quantitation of asbestos in bulk material samples that have undergone prior analysis by PLM or other optical methods.

### 2.2 Range and Sensitivity

The range of the method has not been determined.

The sensitivity of the method has not been determined. It will be variable and dependent upon many factors, including matrix effects (absoprtion and interferences), diagnostic reflections selected, and their relative intensities.

### 2.3 Limitations

#### 2.3.1 *Interferences*

Since the fibrous and nonfibrous forms of the serpentine and amphibole minerals (Table 2–1) are indistinguishable by XRD techniques unless special sample preparation techniques and instrumentation are used,[9] the presence of nonasbestiform serpentines and amphiboles in a sample will pose severe interference problems in the identification and quantitative analysis of their asbestiform analogs.

The use of XRD for identification and quantitation of asbestiform minerals in bulk samples may also be limited by the presence of other interfering materials in the sample. For naturally occurring materials the commonly associated asbestos-related mineral interferences can usually be anticipated. However, for fabricated materials the nature of the interferences may vary greatly (Table 2–3) and present more serious problems in identification and quantitation.[10] Potential interferences are summarized in Table 2–4 and include the following:

- *Chlorite* has major peaks at 7.19 Å and 3.58 Å That interfere with both the primary (7.36 Å) and secondary (3.66 Å) peaks for chrysotile. Resolution of the primary peak to give good quantitative results may be possible when a step-scanning mode of operation is employed.
- *Halloysite* has a peak at 3.63 Å that interferes with the secondary (3.66 Å) peak for chrysotile.
- *Kaolinite* has a major peak at 7.15 Å that may interfere with the primary peak of chrysotile at 7.36 Å when present at concentrations of >10 percent. However, the secondary chrysotile peak at 3.66 Å may be used for quantitation.
- *Gypsum* has a major peak at 7.5 Å that overlaps the 7.36 Å peak of chrysotile when present as a major sample constituent. This may be removed by careful washing with distilled water, or be heating to 300° C to convert gypsum to plaster of paris.
- *Cellulose* has a broad peak that partially overlaps the secondary (3.66 Å) chrysotile peak.[8]
- Overlap of major diagnostic peaks of the amphibole asbestos minerals, amosite, anthophyllite, crocidolite, and tremolite, at approximately 8.3 Å and 3.1 Å causes mutual interference when these minerals occur in the presence of one another. In some instances, adquate resolution may be attained by using step-scanning methods and/or by decreasing the collimator slit width at the X-ray port.

TABLE 2–3—COMMON CONSTITUENTS IN INSULATION AND WALL MATERIALS

A. Insulation materials

Chrysotile
''Amosite''
Crocidolite
*Rock wool
*Slag wool
*Fiber glass
Gypsum ($CaSO_4 \bullet 2H_2O$)
Vermiculite (micas)
*Perlite
Clays (kaolin)
*Wood pulp
*Paper fibers (talc, clay, carbonate fillers)
Calcium silicates (synthetic)
Opaques (chromite, magnetite inclusions in serpentine)
Hematite (inclusions in ''amosite'')
Magnesite
*Diatomaceous earth

B. Spray finishes or paints

Bassanite
Carbonate minerals (calcite, dolomite, vaterite)
Talc
Tremolite
Anthophyllite
Serpentine (including chrysotile)
Amosite
Crocidolite
*Mineral wool
*Rock wool
*Slag wool
*Fiber glass
Clays (kaolin)
Micas
Chlorite
Gypsum ($CaSO_4 \bullet 2H_2O$)
Quartz
*Organic binders and thickeners
Hyrdomagnesite
Wollastonite
Opaques (chromite, magnetite inclusions in serpentine)
Hematite (inclusions in ''amosite'')

*Amorphous materials——contribute only to overall scattered radiation and increased background radiation.

TABLE 2–4—INTERFERENCES IN XRD ANALYSIS ASBESTIFORM MINERALS

| Asbestiform mineral | Primary diagnostic peaks (approximate d-spacings, in A) | Interference |
|---|---|---|
| Serpentine | | |
| Chrysotile | 7.4 | Nonasbestiform serpentines (antigorite, lizardite) |
| | | Chlorite |
| | | Kaolinite |
| | | Gypsum |
| | 3.7 | Chlorite |
| | | Halloysite |
| | | Cellulose |
| Amphibole | | |
| "Amosite" Anthophyllite Crocidolite Tremolite | 3.1 | Nonasbestiform amphiboles (cummingtonite-grunerite, anthophyllite, riebeckite, tremolite) |
| | | Mutual interferences |
| | | Carbonates |
| | | Talc |
| | 8.3 | Mutual interferences |

- *Carbonates* may also interfere with quantitative analysis of the amphibole asbestos minerals, amosite, anthophyllite, crocidolite, and tremolite. Calcium carbonate ($CaCO_3$) has a peak at 3.035 Å that overlaps major amphibole peaks at approximately 3.1 Å when present in concentrations of >5 percent. Removal of carbonates with a dilute acid wash is possible; however, if present, chrysotile may be partially dissolved by this treatment.[11]
- A major *talc* peak at 3.12 Å interferes with the primary tremolite peak at this same position and with secondary peaks of crocidolite (3.10 Å), amosite (3.06 Å), and anthophyllite (3.05 Å). In the presence of talc, the major diagnostic peak at approximately 8.3 Å should be used for quantitation of these asbestiform minerals.

The problem of intraspecies and matrix interferences is further aggravated by the variability of the silicate mineral powder diffraction patterns themselves, which often makes definitive identification of the asbestos minerals by comparison with standard reference diffraction patterns difficult. This variability results from alterations in the crystal lattice associated with differences in isomorphous substitution and degree of crystallinity. This is especially true for the amphiboles. These minerals exhibit a wide variety of very similar chemical compositions, with the result being that their diffraction patterns are chracterized by having major (110) reflections of the monoclinic amphiboles and (210) reflections of the orthorhombic anthophyllite separated by less than 0.2 Å.[12]

### 2.3.2 *Matrix Effects*

If a copper X-ray source is used, the presence of iron at high concentrations in a sample will result in significant X-ray fluorescence, leading to loss of peak intensity along with increased background intensity and an overall decrease in sensitivity. This situation may be corrected by choosing an X-ray source other than copper; however, this is often accompanied both by loss of intensity and by decreased resolution of closely spaced reflections. Alternatively, use of a diffracted beam monochromator will reduce background fluorescent raditation, enabling weaker diffraction peaks to be detected.

X-ray absorption by the sample matrix will result in overall attenuation of the diffracted beam and may seriously interfere with quantitative analysis. Absorption effects may be minimized by using sufficiently "thin" samples for analysis.[5 13 14] However, unless absorption effects are known to be the same for both samples and standards, appropriate corrections should be made by referencing diagnostic peak areas to an internal standard[7 8] or filter substrate (Ag) peak.[5 6]

### 2.3.3 *Particle Size Dependence*

Because the intensity of diffracted X-radiation is particle-size dependent, it is essential for accurate quantitative analysis that both sample and standard reference materials have similar particle size distributions. The optimum particle size range for quantitative analysis of asbestos by XRD has been reported to be 1 to 10 µm.[15] Comparability of sample and standard reference material particle size distributions should be verified by optical microscopy (or another suitable method) prior to analysis.

### 2.3.4 *Preferred Orientation Effects*

Preferred orientation of asbestiform minerals during sample preparation often poses a serious problem in quantitative analysis by XRD. A number of techniques have been developed for reducing preferred orientation effects in "thick layer" samples.[7 8 15] However, for "thin" samples on membrane filters, the preferred orientation effects seem to be both reproducible and favorable to enhancement of the principal diagnostic reflections of asbestos minerals, actually increasing the overall sensitivity of the method.[12 14] (Further investigation into preferred orientation effects in both thin layer and bulk samples is required.)

### 2.3.5 *Lack of Suitably Characterized Standard Materials*

The problem of obtaining and characterizing suitable reference materials for asbestos

analysis is clearly recognized. NIOSH has recently directed a major research effort toward the preparation and characterization of analytical reference materials, including asbestos standards;[16 17] however, these are not available in large quantities for routine analysis.

In addition, the problem of ensuring the comparability of standard reference and sample materials, particularly regarding crystallite size, particle size distribution, and degree of crystallinity, has yet to be adequately addressed. For example, Langer et al.[18] have observed that in insulating matrices, chrysotile tends to break open into bundles more frequently than amphiboles. This results in a line-broadening effect with a resultant decrease in sensitivity. Unless this effect is the same for both standard and sample materials, the amount of chrysotile in the sample will be underestimated by XRD analysis. To minimize this problem, it is recommended that standardized matrix reduction procedures be used for both sample and standard materials.

### 2.4 Precision and Accuracy

Precision of the method has not been determined.

Accuracy of the method has not been determined.

### 2.5 Apparatus

#### 2.5.1 *Sample Preparation*

Sample preparation apparatus requirements will depend upon the sample type under consideration and the kind of XRD analysis to be performed.

- *Mortar and Pestle:* Agate or porcelain.
- *Razor Blades*
- *Sample Mill:* SPEX, Inc., freezer mill or equivalent.
- *Bulk Sample Holders*
- *Silver Membrane Filters:* 25-mm diameter, 0.45-µm pore size. Selas Corp. of America, Flotronics Div., 1957 Pioneer Road, Huntington Valley, PA 19006.
- *Microscope Slides*
- *Vacuum Filtration Apparatus:* Gelman No. 1107 or equivalent, and side-arm vacuum flask.
- *Microbalance*
- *Ultrasonic Bath or Probe:* Model W140, Ultrasonics, Inc., operated at a power density of approximately 0.1 W/mL, or equivalent.
- *Volumetric Flasks:* 1–L volume.
- *Assorted Pipettes*
- *Pipette Bulb*
- *Nonserrated Forceps*
- *Polyethylene Wash Bottle*
- *Pyrex Beakers:* 50-mL volume.
- *Desiccator*
- *Filter Storage Cassettes*
- *Magnetic Stirring Plate and Bars*
- *Porcelain Crucibles*
- *Muffle Furnace or Low Temperature Asher*

#### 2.5.2 *Sample Analysis*

Sample analysis requirements include an X-ray diffraction unit, equipped with:

- *Constant Potential Generator; Voltage and mA Stabilizers*
- *Automated Diffractometer with Step-Scanning Mode*
- *Copper Target X-Ray Tube:* High intensity, fine focus, preferably.
- *X-Ray Pulse Height Selector*
- *X-Ray Detector* (with high voltage power supply): Scintillation or proportional counter.
- *Focusing Graphite Crystal Monochromator;* or *Nickel Filter* (if copper source is used, and iron fluorescence is not a serious problem).
- *Data Output Accessories:*
  - *Strip Chart Recorder*
  - *Decade Scaler/Timer*
  - *Digital Printer*
- *Sample Spinner* (optional).
- *Instrument Calibration Reference Specimen:* α-quartz reference crystal (Arkansas quartz standard, #180–147–00, Philips Electronics Instruments, Inc., 85 McKee Drive, Mahwah, NJ 07430) or equivalent.

### 2.6 Reagents

#### 2.6.1 *Standard Reference Materials*

The reference materials listed below are intended to serve as a guide. Every attempt should be made to acquire pure reference materials that are comparable to sample materials being analyzed.

- *Chrysotile:* UICC Canadian, or NIEHS Plastibest. (UICC reference materials available from: UICC, MRC Pneumoconiosis Unit, Llandough Hospital, Penarth, Glamorgan, CF61XW, UK).
- *Crocidolite:* UICC
- *Amosite:* UICC
- *Anthophyllite:* UICC
- *Tremolite Asbestos:* Wards Natural Science Establishment, Rochester, N.Y.; Cyprus Research Standard, Cyprus Research, 2435 Military Ave., Los Angeles, CA 90064 (washed with dilute HCl to remove small amount of calcite impurity); India tremolite, Rajasthan State, India.
- *Actinolite Asbestos*

#### 2.6.2 *Adhesive*

Tape, petroleum jelly, etc. (for attaching silver membrane filters to sample holders).

#### 2.6.3 *Surfactant*

1 percent aerosol OT aqueous solution or equivalent.

#### 2.6.4 *Isopropanol*

ACS Reagent Grade.

2.7 Procedure

2.7.1 *Sampling*

Samples for analysis of asbestos content shall be collected as specified in EPA Guidance Document #C0090, *Asbestos-Containing Materials in School Buildings.*[10]

2.7.2 *Analysis*

All samples must be analyzed initially for asbestos content by PLM. XRD should be used as an auxiliary method when a second, independent analysis is requested.

NOTE: Asbestos is a toxic substance. All handling of dry materials should be performed in an operating fume hood.

2.7.2.1 *Sample Preparation*

The method of sample preparation required for XRD analysis will depend on: (1) The condition of the sample received (sample size, homogeneity, particle size distribution, and overall composition as determined by PLM); and (2) the type of XRD analysis to be performed (qualitative, quantitative, thin layer or bulk).

Bulk materials are usually received as inhomogeneous mixtures of complex composition with very wide particle size distributions. Preparation of a homogeneous, representative sample from asbestos-containing materials is particularly difficult because the fibrous nature of the asbestos minerals inhibits mechanical mixing and stirring, and because milling procedures may cause adverse lattice alterations.

A discussion of specific matrix reduction procedures is given below. Complete methods of sample preparation are detailed in Sections 2.7.2.2 and 2.7.2.3.

NOTE: All samples should be examined microscopically before and after each matrix reduction step to monitor changes in sample particle size, composition, and crystallinity, and to ensure sample representativeness and homogeneity for analysis.

2.7.2.1.1 *Milling*—Mechanical milling of asbestos materials has been shown to decrease fiber crystallinity, with a resultant decrease in diffraction intensity of the specimen; the degree of lattice alteration is related to the duration and type of milling process.[19, 22] Therefore, all milling times should be kept to a minimum.

For *qualitative analysis*, particle size is not usually of critical importance and initial characterization of the material with a minimum of matrix reduction is often desirable to document the composition of the sample as received. Bulk samples of very large particle size (>2–3 mm) should be comminuted to ~100 µm. A mortar and pestle can sometimes be used in size reduction of soft or loosely bound materials though this may cause matting of some samples. Such samples may be reduced by cutting with a razor blade in a mortar, or by grinding in a suitable mill (e.g., a microhammer mill or equivalent). When using a mortar for grinding or cutting, the sample should be moistened with ethanol, or some other suitable wetting agent, to minimize exposures.

For accurate, reproducible *quantitative analysis*, the particle size of both sample and standard materials should be reduced to ~10 µm (see Section 2.3.3). Dry ball milling at liquid nitrogen temperatures (e.g., Spex Freezer Mill, or equivalent) for a maximum time of 10 min. is recommended to obtain satisfactory particle size distributions while protecting the integrity of the crystal lattice.[5] Bulk samples of very large particle size may require grinding in two stages for full matrix reduction to <10 µm.[8, 16]

Final particle size distributions should always be verified by optical microscopy or another suitable method.

2.7.2.1.2 *Low temperature ashing*—For materials shown by PLM to contain large amounts of gypsum, cellulosic, or other organic materials, it may be desirable to ash the samples prior to analysis to reduce background radiation or matrix interference. Since chrysotile undergoes dehydroxylation at temperatures between 550° C and and 650° C, with subsequent transformation to forsterite,[23, 24] ashing temperatures should be kept below 500° C. Use of a low temperature asher is recommended. In all cases, calibration of the oven is essential to ensure that a maximum ashing temperature of 500° C is not exceeded.

2.7.2.1.3 *Acid leaching*—Because of the interference caused by gypsum and some carbonates in the detection of asbestiform minerals by XRD (see Section 2.3.1), it may be necessary to remove these interferents by a simple acid leaching procedure prior to analysis (see Section 1.7.2.2).

2.7.2.2 *Qualitative Analysis*

2.7.2.2.1 *Initial screening of bulk material*—Qualitative analysis should be performed on a representative, homogeneous portion of the sample with a minimum of sample treatment.

1. Grind and mix the sample with a mortar and pestle (or equivalent method, see Section 2.7.2.1.1.) to a final particle size sufficiently small (~100 µm) to allow adequate packing into the sample holder.

2. Pack the sample into a standard bulk sample holder. Care should be taken to ensure that a representative portion of the milled sample is selected for analysis. Particular care should be taken to avoid possible size segregation of the sample. (Note: Use of a back-packing method[25] of bulk sample preparation may reduce preferred orientation effects.)

3. Mount the sample on the diffractometer and scan over the diagnostic peak regions for

the serpentine (~67.4 Å) and amphibole (8.2–8.5 Å) minerals (see Table 2–2). The X-ray diffraction equipment should be optimized for intensity. A slow scanning speed of 1° 2θ/min is recommended for adequate resolution. Use of a sample spinner is recommended.

4. Submit all samples that exhibit diffraction peaks in the diagnostic regions for asbestiform minerals to a full qualitative XRD scan (5°–60° 2θ; 1°2θ/min) to verify initial peak assignments and to identify potential matrix interferences when subsequent quantitative analysis is to be performed.

5. Compare the sample XRD pattern with standard reference powder diffraction patterns (i.e., JCPDS powder diffraction data[3] or those of other well-characterized reference materials). Principal lattice spacings of asbestiform minerals are given in Table 2–2; common constituents of bulk insulation and wall materials are listed in Table 2–3.

2.7.2.2.2 *Detection of minor or trace constituents*—Routine screening of bulk materials by XRD may fail to detect small concentrations (<5 percent) of asbestos. The limits of detection will, in general, be improved if matrix absorption effects are minimized, and if the sample particle size is reduced to the optimal 1 to 10 µm range, provided that the crystal lattice is not degraded in the milling process. Therefore, in those instances where confirmation of the presence of an asbestiform mineral at very low levels is required, or where a negative result from initial screening of the bulk material by XRD (see Section 2.7.2.2.1) is in conflict with previous PLM results, it may be desirable to prepare the sample as described for quantitative analysis (see Section 2.7.2.3) and step-scan over appropriate 2θ ranges of selected diagnostic peaks (Table 2–2). Accurate transfer of the sample to the silver membrane filter is not necessary unless subsequent quantitative analysis is to be performed.

### 2.7.2.3 *Quantitative Analysis*

The proposed method for quantitation of asbestos in bulk samples is a modification of the NIOSH-recommended thin-layer method for chrysotile in air.[5] A thick-layer or bulk method involving pelletizing the sample may be used for semiquantitative analysis;[7,8] however, this method requires the addition of an internal standard, use of a specially fabricated sample press, and relatively large amounts of standard reference materials. Additional research is required to evaluate the comparability of thin- and thick-layer methods for quantitative asbestos analysis.

For quantitative analysis by thin-layer methods, the following procedure is recommended:

1. Mill and size all or a substantial representative portion of the sample as outlined in Section 2.7.2.1.1.

2. Dry at 100° C for 2 hr; cool in a desiccator.

3. Weigh accurately to the nearest 0.01 mg.

4. Samples shown by PLM to contain large amounts of cellulosic or other organic materials, gypsum, or carbonates, should be submitted to appropriate matrix reduction procedures described in Sections 2.7.2.1.2 and 2.7.2.1.3. After ashing and/or acid treatment, repeat the drying and weighing procedures described above, and determine the percent weight loss; L.

5. Quantitatively transfer an accurately weighed amount (50–100 mg) of the sample to a 1–L volumetric flask with approximately 200 mL isopropanol to which 3 to 4 drops of surfactant have been added.

6. Ultrasonicate for 10 min at a power density of approximately 0.1 W/mL, to disperse the sample material.

7. Dilute to volume with isopropanol.

8. Place flask on a magnetic stirring plate. Stir.

9. Place a silver membrane filter on the filtration apparatus, apply a vacuum, and attach the reservoir. Release the vacuum and add several milliliters of isopropanol to the reservoir. Vigorously hand shake the asbestos suspension and immediately withdraw an aliquot from the center of the suspension so that total sample weight, $W_T$, on the filter will be approximately 1 mg. Do not adjust the volume in the pipet by expelling part of the suspension; if more than the desired aliquot is withdrawn, discard the aliquot and resume the procedure with a clean pipet. Transfer the aliquot to the reservoir. Filter rapidly under vacuum. Do not wash the reservoir walls. Leave the filter apparatus under vacuum until dry. Remove the reservoir, release the vacuum, and remove the filter with forceps. (Note: Water-soluble matrix interferences such as gypsum may be removed at this time by careful washing of the filtrate with distilled water. Extreme care should be taken not to disturb the sample.)

10. Attach the filter to a flat holder with a suitable adhesive and place on the diffractometer. Use of a sample spinner is recommended.

11. For each asbestos mineral to be quantitated select a reflection (or reflections) that has been shown to be free from interferences by prior PLM or qualitative XRD analysis and that can be used unambiguously as an index of the amount of material present in the sample (see Table 2–2).

12. Analyze the selected diagnostic reflection(s) by step scanning in increments of 0.02° 2θ for an appropriate fixed time and integrating the counts. (A fixed count scan may be used alternatively; however, the method chosen should be used consistently for all samples and standards.) An appropriate scanning interval should be selected for each peak, and background corrections made. For a fixed time scan, measure the

background on each side of the peak for one-half the peak-scanning time. The net intensity, $I_a$, is the difference between the peak integrated count and the total background count.

13. Determine the net count, $I_{Ag}$, of the filter 2.36 Å silver peak following the procedure in step 12. Remove the filter from the holder, reverse it, and reattach it to the holder. Determine the net count for the unattenuated silver peak, $I^{\circ}_{Ag}$. Scan times may be *less* for measurement of silver peaks than for sample peaks; however, they should be *constant* throughout the analysis.

14. Normalize all raw, net intensities (to correct for instrument instabilities) by referencing them to an external standard (e.g., the 3.34 Å peak of an α-quartz reference crystal). After each unknown is scanned, determine the net count, $I^{\circ}_{r}$, of the reference specimen following the procedure in step 12. Determine the normalized intensities by dividing the peak intensities by $I^{\circ}_{r}$:

$$\hat{I}_a = \frac{I_a}{I^{\circ}_r}, \quad \hat{I}_{Ag} = \frac{I_{Ag}}{I^{\circ}_r}, \quad \text{and} \quad \hat{I}^{\circ}_{Ag} = \frac{I^{\circ}_{Ag}}{I^{\circ}_r}$$

2.8 Calibration

2.8.1 *Preparation of Calibration Standards*

1. Mill and size standard asbestos materials according to the procedure outlined in Section 2.7.2.1.1. *Equivalent, standardized matrix reduction and sizing techniques should be used for both standard and sample materials.*

2. Dry at 100° C for 2 hr; cool in a desiccator.

3. Prepare two suspensions of each standard in isopropanol by weighing approximately 10 and 50 mg of the dry material to the nearest 0.01 mg. Quantitatively transfer each to a 1–L volumetric flask with approximately 200 mL isopropanol to which a few drops of surfactant have been added.

4. Ultrasonicate for 10 min at a power density of approximately 0.1 W/mL, to disperse the asbestos material.

5. Dilute to volume with isopropanol.

6. Place the flask on a magnetic stirring plate. Stir.

7. Prepare, in triplicate, a series of at least five standard filters to cover the desired analytical range, using appropriate aliquots of the 10 and 50 mg/L suspensions and the following procedure.

Mount a silver membrane filter on the filtration apparatus. Place a few milliliters of isopropanol in the reservoir. Vigorously hand shake the asbestos suspension and immediately withdraw an aliquot from the center of the suspension. Do not adjust the volume in the pipet by expelling part of the suspension; if more than the desired aliquot is withdrawn, discard the aliquot and resume the procedure with a clean pipet. Transfer the aliquot to the reservoir. Keep the tip of the pipet near the surface of the isopropanol. Filter rapidly under vacuum. Do not wash the sides of the reservoir. Leave the vacuum on for a time sufficient to dry the filter. Release the vacuum and remove the filter with forceps.

2.8.2 *Analysis of Calibration Standards*

1. Mount each filter on a flat holder. Perform step scans on selected diagnostic reflections of the standards and reference specimen using the procedure outlined in Section 2.7.2.3, step 12, and the same conditions as those used for the samples.

2. Determine the normalized intensity for each peak measured, $\hat{I}_{std}$, as outlined in Section 2.7.2.3, step 14.

2.9 Calculations

For each asbestos reference material, calculate the exact weight deposited on each standard filter from the concentrations of the standard suspensions and aliquot volumes. Record the weight, w, of each standard. Prepare a calibration curve by regressing $\hat{I}2_{std}$ on w. Poor reproducibility (±15 percent RSD) at any given level indicates problems in the sample preparation technique, and a need for new standards. The data should fit a straight line equation.

Determine the slope, m, of the calibration curve in counts/microgram. The intercept, b, of the line with the $\hat{I}_{std}$ axis should be approximately zero. A large negative intercept indicates an error in determining the background. This may arise from incorrectly measuring the baseline or from interference by another phase at the angle of background measurement. A large positive intercept indicates an error in determining the baseline or that an impurity is included in the measured peak.

Using the normalized intensity, $\hat{I}_{Ag}$, for the attenuated silver peak of a sample, and the corresponding normalized intensity from the unattenuated silver peak, $\hat{I}^{\circ}_{Ag}$, of the sample filter, calculate the transmittance, T, for each sample as follows:[26 27]

$$T = \frac{\hat{I}_{Ag}}{\hat{I}^{\circ}_{Ag}}$$

Determine the correction factor, f(T), for each sample according to the formula:

$$f(T) = \frac{-R\,(\ln T)}{1-T^R}$$

where

$$R = \frac{\sin \Theta_{Ag}}{\sin \Theta_a}$$

$\theta_{Ag}$=angular position of the measured silver peak (from Bragg's Law), and

$\theta_a$=angular position of the diagnostic asbestos peak.

Calculate the weight, $W_a$, in micrograms, of the asbestos material analyzed for in each sample, using the appropriate calibration data and absorption corrections:

$$W_a = \frac{\hat{I}_a f(t) - b}{m}$$

Calculate the percent composition, $P_a$, of each asbestos mineral analyzed for in the parent material, from the total sample weight, $W_T$, on the filter:

$$P_a = \frac{W_a\,(1-.01L)}{W_T} \times 100$$

where

$P_a$=percent asbestos mineral in parent material;

$W_a$=mass of asbestos mineral on filter, in µg;

$W_T$=total sample weight on filter, in µg;

L=percent weight loss of parent material on ashing and/or acid treatment (see Section 2.7.2.3).

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## Subpart F—[Reserved]

## Subpart G—Asbestos Abatement Projects

SOURCE: 52 FR 5623, Feb. 25, 1987, unless otherwise noted.

### § 763.120 Scope

(a) This part establishes requirements which must be followed during asbestos abatement projects by employers of State and local government employees not covered by the Asbestos Standard of the Occupational Safety and Health Administration (OSHA), 29 CFR 1926.58, an Asbestos Standard adopted by a State as part of a State plan approved by OSHA under section 18 of the Occupational Safety and Health Act, or a State asbestos regulation which EPA has determined to be comparable to or more stringent than this part. The rule covers those employees who take part in asbestos abatement work.

(b) [Reserved]

### § 763.121 Regulatory requirements.

(a) [Reserved]

(b) *Definitions. Action level* means an airborne concentration of asbestos of 0.1 fiber per cubic centimeter (f/cc) of air calculated as an 8-hour time-weighted average.

*Administrator* means the Administrator, U.S. Environmental Protection Agency, or designee.

*Asbestos* means the asbestiform varieties of chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite—grunerite); tremolite; anthophyllite, and actinolite.

*Asbestos abatement project* means any activity involving the removal, enclosure, or encapsulation of friable asbestos material.

*Authorized person* means any person authorized by the employer and required by work duties to be present in regulated areas.

*Clean room* means an uncontaminated room having facilities for the storage of employees' street clothing and uncontaminated materials and equipment.

*Competent person* means one who is capable of identifying existing asbestos hazards in the workplace and who has the authority to take prompt corrective measures to eliminate them. The duties of the competent person include at least the following: Establishing the negative-pressure enclosure, ensuring its integrity, and controlling entry to and exit from the enclosure; supervising any employee exposure monitoring required by this subpart, ensuring that all employees working within such an enclosure wear the appropriate personal protective equipment, are trained in the use of appropriate methods of exposure control, and use the hygiene facilities and decontamination procedures specified in this subpart; and ensuring that engineering controls in use are in proper operating condition and are functioning properly.

*Decontamination area* means an enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and

clean room, which is used for the decontamination of workers, materials, and equipment contaminated with asbestos.

*Demolition* means the wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of asbestos products.

*Emergency project* means a project involving the removal, enclosure, or encapsulation of friable asbestos-containing material that was not planned but results from a sudden unexpected event.

*Employee exposure* means that exposure to airborne asbestos would occur if the employee were not using respiratory protective equipment.

*Employer* means the public department, agency, or entity which hires an employee. The term includes, but is not limited to, any State, County, City, or other local governmental entity which operates or administers schools, a department of health or human services, a library, a police department, a fire department, or similar public service agencies or offices.

*Equipment room (change room)* means a contaminated room located within the decontamination area that is supplied with impermeable bags or containers for the disposal of contaminated protective clothing and equipment.

*Fiber* means a particulate form of asbestos, 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1.

*Friable asbestos material* means any material containing more than 1 percent asbestos by weight which, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

*High-efficiency particulate air (HEPA) filter* means a filter capable of trapping and retaining at least 99.97 percent of all monodispersed particles of 0.3 micrometer in diameter or larger.

*Regulated area* means an area established by the employer to demarcate areas where airborne concentrations of asbestos exceed or can reasonably be expected to exceed the permissible exposure limit. The regulated area may take the form of: (1) A temporary enclosure, as required by paragraph (e)(6) of this section, or (2) an area demarcated in any manner that minimizes the number of employees exposed to asbestos.

*Removal* means the taking out or stripping of asbestos or materials containing asbestos.

*Renovation* means the modifying of any existing structure, or portion thereof, where exposure to airborne asbestos may result.

*Repair* means overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates where asbestos is present.

(c) *Permissible exposure limit (PEL).* The employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.2 fiber per cubic centimeter of air as an 8-hour time-weighted average (TWA), as determined by the method prescribed in Appendix A of this section, or by an equivalent method.

(d) *Communication among employers.* On multi-employer worksites, an employer performing asbestos work requiring the establishment of a regulated area shall inform other employers (as defined by this subpart and by 29 U.S.C. section 652(5)) on the site of the nature of the employer's work with asbestos and of the existence of and requirements pertaining to regulated areas.

(e) *Regulated areas*—(1) *General.* The employer shall establish a regulated area in work areas where airborne concentrations of asbestos exceed or can reasonably be expected to exceed the permissible exposure limit prescribed in paragraph (c) of this section.

(2) *Demarcation.* The regulated area shall be demarcated in any manner that minimizes the number of persons within the area and protects persons outside the area from exposure to airborne concentrations of asbestos in excess of the permissible exposure limit.

(3) *Access.* Access to regulated areas shall be limited to authorized persons.

(4) *Respirators.* All persons entering a regulated area shall be supplied with a respirator, selected in accordance with paragraph (h)(2) of this section.

(5) *Prohibited activities.* The employer shall ensure that employees do not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the regulated area.

(6) *Requirements for asbestos removal, demolition, and renovation operations.* (i) Wherever feasible, the employer shall establish negative-pressure enclosures before commencing removal, demolition, and renovation operations.

(ii) The employer shall designate a competent person to perform or supervise the following duties:

(A) Set up the enclosure.

(B) Ensure the integrity of the enclosure.

(C) Control entry to and exit from the enclosure.

(D) Supervise all employee exposure monitoring required by this section.

(E) Ensure that employees working within the enclosure wear respirators and protective clothing as required by paragraphs (h) and (i) of this section.

(F) Ensure that employees are trained in the use of engineering controls, work practices, and personal protective equipment.

(G) Ensure that employees use the hygiene facilities and observe the decontamination procedures specified in paragraph (j) of this section.

(H) Ensure that engineering controls are functioning properly.

(iii)(A) In addition to the qualifications specified in paragraph (b) of this section, the competent person shall be trained in all aspects of asbestos abatement, the contents of this subpart, the identification of asbestos and its removal procedures, and other practices for reducing the hazard. Such training shall be obtained in a comprehensive course, such as a course conducted by an EPA Asbestos Training Center, or an equivalent course.

(B) For small-scale, short-duration operations, such as pipe repair, valve replacement, installing electrical conduits, installing or removing drywall, roofing, and other general building maintenance or renovation, the employer is not required to comply with the requirements of paragraph (e)(6) of this section.

(f) *Exposure monitoring*—(1) *General.* (i) Each employer who has a workplace or work operation covered by this subpart shall perform monitoring to determine accurately the airborne concentrations of asbestos to which employees may be exposed.

(ii) Determinations of employee exposure shall be made from breathing zone air samples that are representative of the 8-hour TWA of each employee.

(iii) Representative 8-hour TWA employee exposure shall be determined on the basis of one or more samples representing fullshift exposure for employees in each work area.

(2) *Initial monitoring.* (i) Each employer who has a workplace or work operation covered by this subpart, except as provided for in paragraphs (f)(2)(ii) and (iii) of this section, shall perform initial monitoring at the initiation of each asbestos job to determine accurately the airborne concentrations of asbestos to which employees may be exposed.

(ii) The employer may demonstrate that employee exposures are below the action level by means of objective data demonstrating that the product or material containing asbestos cannot release airborne fibers in concentrations exceeding the action level under those work conditions having the greatest potential for releasing asbestos.

(iii) Where the employer has monitored each asbestos job, and the data were obtained during work operations conducted under workplace conditions closely resembling the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the employer may rely on such earlier monitoring results to satisfy the requirements of paragraph (f)(2)(i) of this section.

(3) *Periodic monitoring within regulated areas.* (i) The employer shall conduct daily monitoring that is representative of the exposure of each employee who is assigned to work within a regulated area.

(ii) When all employees within a regulated area are equipped with supplied-air respirators operated in the positive-pressure mode, the employer may dispense with the daily monitoring required by this paragraph.

(4) *Termination of monitoring.* If the periodic monitoring required by paragraph (f)(3)(i) of this section reveals that employee exposures, as indicated by statistically reliable measurements,

are below the action level, the employer may discontinue monitoring for those employees whose exposures are represented by such monitoring.

(5) *Method of monitoring.* (i) All samples taken to satisfy the monitoring requirements of paragraph (f) of this section shall be personal samples collected following the procedures specified in Appendix A of this section.

(ii) All samples taken to satisfy the monitoring requirements of paragraph (f) of this section shall be evaluated using the EPA/OSHA Reference Method (ORM) specified in Appendix A, or an equivalent counting method.

(iii) If an equivalent method to the ORM is used, the employer shall ensure that the method meets the following criteria:

(A) Replicate exposure data used to establish equivalency are collected in side-by-side field and laboratory comparisons.

(B) The comparison indicates that 90 percent of the samples collected in the range 0.5 to 2.0 times the permissible limit have an accuracy range of plus or minus 25 percent of the ORM results with a 95 percent confidence level as demonstrated by a statistically valid protocol.

(C) The equivalent method is documented and the results of the comparison testing are maintained.

(iv) To satisfy the monitoring requirements of paragraph (f) of this section, employers shall rely on the results of monitoring analysis performed by laboratories that have instituted quality assurance programs that include the elements prescribed in Appendix A of this section.

(6) *Employee notification of monitoring results.* (i) The employer shall notify affected employees of the monitoring results that represent the employees' exposure as soon as possible following receipt of monitoring results.

(ii) The employer shall notify affected employees of the results of monitoring representing the employees' exposure in writing either individually or by posting at a centrally located place that is accessible to affected employees.

(7) *Observation of monitoring.* (i) The employer shall provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to asbestos conducted in accordance with this section

(ii) When observation of the monitoring of employee exposure to asbestos requires entry into an area where the use of protective clothing or equipment is required, the observer shall be provided with and be required to use such clothing and equipment and shall comply with all other applicable safety and health procedures.

(g) *Methods of compliance*—(1) *Engineering controls and work practices.* (i) The employer shall use one or any combination of the following control methods to achieve compliance with the permissible exposure limit prescribed by paragraph (c) of this section:

(A) Local exhaust ventilation equipped with HEPA filter dust collection systems.

(B) General ventilation systems.

(C) Vacuum cleaners equipped with HEPA filters.

(D) Enclosure or isolation of processes producing asbestos dust.

(E) Use of wet methods, wetting agents, or removal encapsulants to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup.

(F) Prompt disposal of wastes contaminated with asbestos in leak-tight containers.

(G) Use of work practices or other engineering controls that the Administrator can show to be feasible.

(ii) Wherever the feasible engineering and work practice controls described in this paragraph are not sufficient to reduce employee exposure to or below the limit prescribed in paragraph (c) of this section, the employer shall use them to reduce employee exposure to the lowest levels attainable by these controls and shall supplement them by the use of respiratory protection that complies with the requirements of paragraph (h) of this section.

(2) *Prohibitions.* (i) High-speed abrasive disc saws that are not equipped with appropriate engineering controls shall not be used for work related to asbestos.

(ii) Compressed air shall not be used to remove asbestos materials containing asbestos unless the compressed air

is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.

(iii) Materials containing asbestos shall not be applied by spray methods.

(3) *Employee rotation.* The employer shall not use employee rotation as a means of compliance with the exposure limit prescribed in paragraph (c) of this section.

(h) *Respiratory protection*—(1) *General.* The employer shall provide respirators, and ensure that they are used, where required by this section. Respirators shall be used in the following circumstances:

(i) During the interval necessary to install or implement feasible engineering and work practice controls.

(ii) In work operations such as maintenance and repair activities, or other activities for which engineering and work practice controls are not feasible.

(iii) In work situations where feasible engineering and work practice controls are not yet sufficient to reduce exposure to or below the exposure limit.

(iv) In emergencies.

(2) *Respirator selection.* (i) Where respirators are used, the employer shall select and provide, at no cost to the employee, the appropriate respirator as specified in Table 1 in paragraph (h)(2)(iv) of this section, and shall ensure that the employee uses the respirator provided.

(ii) The employer shall select respirators from among those jointly approved as being acceptable for protection by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 30 CFR Part 11.

(iii) The employer shall provide a powered, air-purifying respirator in lieu of any negative-pressure respirator specified in Table 1 whenever:

(A) An employee chooses to use this type of respirator; and

(B) This respirator will provide adequate protection to the employee.

(iv) Table 1—Respiratory Protection for Asbestos Fibers.

TABLE 1—RESPIRATORY PROTECTION FOR ASBESTOS FIBERS

| Airborne concentration of asbestos | Required respirator |
|---|---|
| Not in excess of 2 f/cc (10×PEL). | 1. Half-mask air-purifying respirator other than a disposable respirator equipped with high-efficiency filters. |
| Not in excess of 10 f/cc (50×PEL). | 1. Full facepiece air-purifying respirator equipped with high-efficiency filters. |
| Not in excess of 20 f/cc (100×PEL). | 1. Any powered air-purifying respirator equipped with high-efficiency filters.<br>2. Any supplied-air respirator operated in continuous flow mode. |
| Not in excess of 200 f/cc (1,000×PEL). | 1. Full facepiece supplied-air respirator operated in pressure demand mode. |
| Greater than 200 f/cc (>1,000×PEL) or unknown concentration. | 1. Full facepiece supplied air respirator operated in pressure demand mode equipped with an auxilliary positive pressure selfcontained breathing apparatus. |

NOTE: a. Respirators assigned for higher environmental concentrations may be used at lower concentrations.

b. A high-efficiency filter means a filter that is at least 99.97 percent efficient against mono-dispersed particles of 0.3 micrometers in diameter or larger.

(3) *Respirator program.* (i) Where respiratory protection is used, the employee shall institute a respirator program. This should include all information and guidance necessary for their proper selection, use, and care. Possible emergency uses of respirators should be anticipated and planned for.

(ii) The employer shall permit each employee who uses a filter respirator to change the filter elements whenever an increase in breathing resistance is detected and shall maintain an adequate supply of filter elements for this purpose.

(iii) Employees who wear respirators shall be permitted to leave work areas to wash their faces and respirator facepieces whenever necessary to prevent skin irritation associated with respirator use.

(iv) No employee shall be assigned to tasks requiring the use of respirators if, based on his or her most recent examination, an examining physician determines that the employee will be unable to function normally wearing a respirator, or that the safety or health of the employee or of other employees

will be impaired by the use of a respirator. Such employee shall be assigned to another job or given the opportunity to transfer to a different position, the duties of which he or she is able to perform, with the same employer, in the same geographical area, and with the same seniority, status, and rate of pay he or she had just prior to such transfer, if such a different position is available.

(4) *Respirator fit testing.* (i) The employer shall ensure that the respirator issued to the employee exhibits the least possible facepiece leakage and that the respirator is fitted properly.

(ii) Employers shall perform either quantitative or qualitative face fit tests at the time of initial fitting and at least every 6 months thereafter for each employee wearing a negative-pressure respirator. The qualitative fit tests may be used only for testing the fit of half-mask respirators where they are permitted to be worn, and shall be conducted in accordance with Appendix C of this section. The tests shall be used to select facepieces that provide the required protection as prescribed in Table 1.

(i) *Protective clothing*—(1) *General.* The employer shall provide and require the use of protective clothing, such as coveralls or similar whole-body clothing, head coverings, gloves, and foot coverings for any employee exposed to airborne concentrations of asbestos that exceed the permissible exposure limit prescribed in paragraph (c) of this section.

(2) *Laundering.* (i) The employer shall ensure that laundering of contaminated clothing is done so as to prevent the release of airborne asbestos in excess of the exposure limit prescribed in paragraph (c) of this section.

(ii) Any employer who gives contaminated clothing to another person for laundering shall inform such person of the requirement in paragraph (i)(2)(i) of this section effectively to prevent the release of airborne asbestos in excess of the exposure limit prescribed in paragraph (c) of this section.

(3) *Contaminated clothing.* Contaminated clothing shall be transported in sealed impermeable bags, or other closed, impermeable containers, and be labeled in accordance with paragraph (k) of this section.

(4) *Protective clothing for removal, demolition, and renovation operations.* (i) The competent person shall periodically examine worksuits worn by employees for rips or tears that may occur during performance of work.

(ii) When rips or tears are detected while an employee is working within a negative-pressure enclosure, rips and tears shall be immediately mended, or the worksuit shall be immediately replaced.

(j) *Hygiene facilities and practices*—(1) *General.* (i)(A) The employer shall provide clean change areas for employees required to work in regulated areas or required by paragraph (i)(1) of this section to wear protective clothing.

(B) In lieu of the change area requirement specified in paragraph (j)(1)(i), the employer may permit employees engaged in small-scale, short-duration operations, as described in paragraph (e)(6) of this section, to clean their protective clothing with a portable HEPA-equipped vacuum before such employees leave the area where maintenance was performed.

(ii) The employer shall ensure that change areas are equipped with separate storage facilities for protective clothing and street clothing.

(iii) Whenever food or beverages are consumed at the worksite and employees are exposed to airborne concentrations of asbestos in excess of the permissible exposure limit, the employer shall provide lunch areas in which the airborne concentrations of asbestos are below the action level.

(2) *Requirements for removal, demolition, and renovation operations*—(i) *Decontamination area.* Except for small-scale, short-duration operations, as described in paragraph (e)(6) of this section, the employer shall establish a decontamination area that is adjacent and connected to the regulated area for the decontamination of employees contaminated with asbestos. The decontamination area shall consist of an equipment room, shower area, and clean room in series. The employer shall ensure that employees enter and exit the regulated area through the decontamination area.

(ii) *Clean room.* The clean room shall be equipped with a locker or appropriate storage container for each employee's use.

(iii) *Shower area.* Where feasible, shower facilities shall be provided. The showers shall be contiguous both to the equipment room and the clean change room, unless the employer can demonstrate that this location is not feasible. Where the employer can demonstrate that it is not feasible to locate the shower between the equipment room and the clean change room, the employer shall ensure that employees:

(A) Remove asbestos contamination from their worksuits using a HEPA vacuum before proceeding to a shower that is not contiguous to the work area; or

(B) Remove their contaminated worksuits, don clean worksuits, and proceed to a shower that is not contiguous to the work area.

(iv) *Equipment room.* The equipment room shall be supplied with impermeable, labeled bags and containers for the containment and disposal of contaminated protective clothing and equipment.

(v) *Decontamination area entry procedures.* (A) The employer shall ensure that employees:

(*1*) Enter the decontamination area through the clean room.

(*2*) Remove and deposit street clothing within a locker provided for their use.

(*3*) Put on protective clothing and respiratory protection before leaving the clean room.

(B) The employer shall ensure that employees pass through the equipment room before entering the enclosure.

(vi) *Decontamination area exit procedures.* (A) The employer shall ensure that employees remove all gross contamination and debris from their protective clothing before leaving the regulated area.

(B) The employer shall ensure that employees remove their protective clothing in the equipment room and deposit the clothing in labeled impermeable bags or containers.

(C) The employer shall ensure that employees do not remove their respirators in the equipment room.

(D) The employer shall ensure that employees shower prior to entering the clean room.

(E) The employer shall ensure that, after showering, employees enter the clean room before changing into street clothes.

(k) *Communication of hazards to employees*—(1) *Signs.* (i) Warning signs that demarcate the regulated area shall be provided and displayed at each location where airborne concentrations of asbestos may be in excess of the exposure limit prescribed in paragraph (c) of this section. Signs shall be posted at such a distance from such a location that an employee may read the signs and take necessary protective steps before entering the area marked by the signs.

(ii) The warning signs required by paragraph (k)(1)(i) of this section shall bear the following information:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

(2) *Labels.* (i) Labels shall be affixed to all products containing asbestos and to all containers containing such products, including waste containers. Where feasible, installed asbestos products shall contain a visible label.

(ii) Labels shall be printed in large, bold letters on a contrasting background.

(iii) Labels shall be used and shall contain the following information:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

(iv) [Reserved]

(v) Labels shall contain a warning statement against breathing airborne asbestos fibers.

(vi) The provisions for labels required by paragraph (k)(2)(i) of this section do not apply where:

(A) Asbestos fibers have been modified by a bonding agent, coating, binder, or other material, provided that the manufacturer can demonstrate that, during any reasonably foreseeable use, handling, storage, disposal, processing,

or transportation, no airborne concentrations of asbestos fibers in excess of the action level will be released or

(B) Asbestos is present in a product in concentrations less than 0.1 percent by weight.

(3) *Employee information and training.* (i) The employer shall institute a training program for all employees exposed to airborne concentrations of asbestos at or above the action level and shall ensure their participation in the program.

(ii) Training shall be provided prior to or at the time of initial assignment, [unless the employee has received equivalent training within the previous 12 months] and at least annually thereafter.

(iii) The training program shall be conducted in a manner that the employee is able to understand. The employer shall ensure that each employee is informed of the following:

(A) Methods of recognizing asbestos.

(B) The health effects associated with asbestos exposure.

(C) The relationship between smoking and asbestos in producing lung cancer.

(D) The nature of operations that could result in exposure to asbestos, the importance of necessary protective controls to minimize exposure including, as applicable, engineering controls, work practices, respirators, housekeeping procedures, hygiene facilities, protective clothing, decontamination procedures, emergency procedures, and waste disposal procedures, and any necessary instruction in the use of these controls and procedures.

(E) The purpose, proper use, fitting instructions, and limitations of respirators.

(F) The appropriate work practices for performing the asbestos job; and

(G) Medical surveillance program requirements; and

(H) The content of this subpart, including appendices.

(4) *Access to training materials.* (i) The employer shall make readily available to all affected employees without cost all written materials relating to the employee training program, including a copy of this regulation.

(ii) The employer shall provide to the Administrator upon request, all information and training materials relating to the employee information and training program.

(l) *Housekeeping*—(1) *Vacuuming.* Where vacuuming methods are selected, HEPA filtered vacuuming equipment must be used. The equipment shall be used and emptied in a manner that minimizes the reentry of asbestos into the workplace.

(2) *Waste disposal.* Asbestos waste, scrap, debris, bags, containers, equipment, and contaminated clothing consigned for disposal shall be collected and disposed of in sealed, labeled, impermeable bags or other closed, labeled, impermeable containers.

(m) *Medical surveillance*—(1) *General*—(i)—*Employees covered.* The employer shall institute a medical surveillance program for all employees engaged in work involving levels of asbestos at or above the action level for 30 or more days per year, or who are required by this section to wear negative-pressure respirators.

(ii) *Examination by a physician.* (A) The employer shall ensure that all medical examinations and procedures are performed by or under the supervision of a licensed physician, and are provided at no cost to the employee and at a reasonable time and place.

(B) Persons other than such licensed physicians who administer the pulmonary function testing required by this section shall complete a training course in spirometry sponsored by an appropriate academic or professional institution.

(2) *Medical examinations and consultation*—(i) *Frequency.* The employer shall make available medical examinations and consultations to each employee covered under paragraph (m)(1)(i) of this section on the following schedules:

(A) Prior to assignment of the employee to an area where negative-pressure respirators are worn.

(B)(*1*) When the employee is assigned to an area where exposure to asbestos may be at or above the action level for 30 or more days per year, a medical examination must be given within 10 working days following the thirtieth day of exposure.

(*2*) No medical examination is required of any employee if adequate records show that the employee has

been examined in accordance with this paragraph within the past 1-year period.

(C) At least annually thereafter.

(D) If the examining physician determines that any of the examinations should be provided more frequently than specified, the employer shall provide such examinations to affected employees at the frequencies specified by the physician.

(ii) *Content.* Medical examinations made available pursuant to paragraphs (m)(2)(i) (A), (B), and (C) of this section shall include:

(A) A medical and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems.

(B) On initial examination, the standardized questionnaire contained in Appendix D, Part 1 of this section and, on annual examination, the abbreviated standardized questionnaire contained in Appendix D, Part 2 of this section.

(C) A physical examination directed to the pulmonary and gastrointestinal systems, including a chest roentgenogram to be administered at the discretion of the physician, and pulmonary function tests of forced vital capacity (FVC) and forced expiratory volume at one second ($FEV_1$). Interpretation and classification of chest roentgenograms shall be conducted in accordance with Appendix E of this section.

(D) Any other examinations or tests deemed necessary by the examining physician.

(3) *Information provided to the physician.* The employer shall provide the following information to the examining physician:

(i) A copy of this rule and Appendices D and E of this section.

(ii) A description of the affected employee's duties as they relate to the employee's exposure.

(iii) The employee's representative exposure level or anticipated exposure level.

(iv) A description of any personal protective and respiratory equipment used or to be used.

(v) Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

(4) *Physician's written opinion.* (i) The employer shall obtain a written opinion from the examining physician. This written opinion shall contain the results of the medical examination and shall include:

(A) The physician's opinion as to whether the employee has any detected medical conditions that would place the employee at an increased risk of material health impairment from exposure to asbestos.

(B) Any recommended limitations on the employee or on the use of personal protective equipment such as respirators.

(C) A statement that the employee has been informed by the physician of the results of the medical examinations and of any medical conditions that may result from asbestos exposure.

(ii) The employer shall instruct the physician not to reveal in the written opinion given to the employer specific findings or diagnoses unrelated to occupational exposure to asbestos.

(iii) The employer shall provide a copy of the physician's written opinion to the affected employee within 30 days from its receipt.

(n) *Recordkeeping*—(1) *Objective data for exempted operations.* (i) Where the employer has relied on objective data that demonstrate that products made from or containing asbestos are not capable of releasing fibers of asbestos in concentrations at or above the action level under the expected conditions of processing, use, or handling to exempt such operations from the initial monitoring requirements under paragraph (f)(2) of this section, the employer shall establish and maintain an accurate record of objective data reasonably relied upon in support of the exemption.

(ii) The record shall include at least the following information:

(A) The product qualifying for exemption.

(B) The source of the objective data.

(C) The testing protocol, results of testing, and/or analysis of the material for the release of asbestos.

(D) A description of the operation exempted and how the data support the exemption.

(E) Other data relevant to the operations, materials, processing, or employee exposures covered by the exemption.

(iii) The employer shall maintain this record for the duration of the employer's reliance upon such objective data.

(2) *Exposure measurements.* (i)(A) The employer shall keep an accurate record of all measurements taken to monitor employee exposure to asbestos as prescribed in paragraph (f) of this section.

(B) The employer may utilize the services of competent organizations such as employee associations to maintain the records required by this section.

(ii) This record shall include at least the following information:

(A) The date of measurement.

(B) The operation involving exposure to asbestos that is being monitored.

(C) Sampling and analytical methods used and evidence of their accuracy.

(D) Number, duration, and results of samples taken.

(E) Type of protective devices worn, if any.

(F) Name, social security number, and exposure of the employees whose exposures are represented.

(iii) The employer shall maintain this record for at least 30 years.

(3) *Medical surveillance.* (i) The employer shall establish and maintain an accurate record for each employee subject to medical surveillance by paragraph (m) of this section.

(ii) The record shall include at least the following information:

(A) The name and social security number of the employee.

(B) A copy of the employee's medical examination results, including the medical history, questionnaire responses, results of any tests, and physician's recommendations.

(C) Physician's written opinions.

(D) Any employee medical complaints related to exposure to asbestos.

(E) A copy of the information provided to the physician as required by paragraph (m) of this section.

(iii) The employer shall ensure that this record is maintained for the duration of employment plus 30 years.

(4) *Training records.* The employer shall maintain all employee training records for 1 year beyond the last date of employment by that employer.

(5) *Availability.* (i) The employer, upon request, shall make all records required to be maintained by this section available to the Administrator for examination and copying.

(ii) The employer, upon request, shall make any exposure records required by paragraphs (f) and (n) of this section available for examination and copying to affected employees, former employees, designated representatives, and the Administrator.

(iii) The employer, upon request, shall make employee medical records required by paragraphs (m) and (n) of this section available for examination and copying to the subject employee, anyone having the specific written consent of the subject employee, and the Administrator.

(6) *Transfer of records.* Whenever the employer ceases to operate and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify the Administrator at least 90 days prior to disposal and, upon request, transmit them to the Administrator.

(o) *Effective date.* This section shall become effective March 27, 1987.

(p) *Appendices.* (1) Appendices A, C, D, and E to this section are incorporated as part of this section and the contents of these appendices are mandatory.

(2) Appendix B to this section is informational and is not intended to create any additional obligations not otherwise imposed or to detract from any existing obligations.

### APPENDIX A TO § 763.121—EPA/OSHA REFERENCE METHOD—MANDATORY

This mandatory appendix specifies the procedure for analyzing air samples for asbestos and specifies quality control procedures that must be implemented by laboratories performing the analysis. The sampling and analytical methods described below represent the elements of the available monitoring methods essential to achieve adequate employee exposure monitoring while allowing employers to use methods that are already established within their organizations. All employers who are required to conduct air monitoring under § 763.121(f) are required to utilize analytical laboratories that use this procedure, or an equivalent method for collecting and analyzing samples.

*Sampling and Analytical Procedure*

1. The sampling medium for air samples shall be mixed cellulose ester filter membranes. These shall be designated by the manufacturer as suitable for asbestos counting. See below for rejection of blanks.

2. The preferred collection device shall be the 25-mm diameter cassette with an open-faced 50-mm electrically conductive extension cowl. The 37-mm cassette may be used if necessary, but only if written justification for the need to use the 37-mm filter cassette accompanies the sample results in the employee's exposure monitoring record.

3. An air flow rate between 0.5 liter/min and 2.5 liters/min shall be selected for the 25-mm cassette. If the 37-mm cassette is used, an air flow rate between 1 liter/min and 2.5 liters/min shall be selected.

4. Where possible, a sufficient air volume for each air sample shall be collected to yield between 100 and 1,300 fibers per square millimeter on the membrane filter. If a filter darkens in appearance or if loose dust is seen on the filter, a second sample shall be started.

5. Ship the samples in a rigid container with sufficient packing material to prevent dislodging the collected fibers. Packing material that has a high electrostatic charge on its surface (e.g., expanded polystyrene) cannot be used because such material can cause loss of fibers to the sides of the cassette.

6. Calibrate each personal sampling pump before and after use with a representative filter cassette installed between the pump and the calibration devices.

7. Personal samples shall be taken in the ''breathing zone'' of the employee (i.e., attached to or near the collar or lapel near the worker's face).

8. Fiber counts shall be made by positive phase contrast using a microscope with an 8 to 10 X eyepiece and a 40 to 45 X objective for a total magnification of approximately 400 X and a numerical aperture of 0.65 to 0.75. The microscope shall also be fitted with a green or blue filter.

9. The microscope shall be fitted with a Walton-Beckett eyepiece graticule calibrated for a field diameter of 100 micrometers (± 2 micrometers).

10. The phase-shift detection limit of the microscope shall be about 3 degrees measured using the HSE phase shift test slide as outlined below.

a. Place the test slide on the microscope stage and center it under the phase objective.

b. Bring the blocks of grooved lines into focus.

NOTE: The slide consists of seven sets of grooved lines (ca. 20 grooves to each block) in descending order of visibility from sets 1 to 7, seven being the least visible. The requirements for asbestos counting are that the microscope optics must resolve the grooved lines in set 3 completely, although they may appear somewhat faint, and that the grooved lines in sets 6 and 7 must be invisible. Sets 4 and 5 must be at least partially visible but may vary slightly in visibility between microscopes. A microscope that fails to meet these requirements has either too low or too high a resolution to be used for asbestos counting.

c. If the image deteriorates, clean and adjust the microscope optics. If the problem persists, consult the microscope manufacturer.

11. Each set of samples taken will include 10 percent blanks or a minimum of 2 blanks. The blank results shall be averaged and subtracted from the analytical results before reporting. Any samples represented by a blank having a fiber count in excess of 7 fibers/100 fields shall be rejected.

12. The samples shall be mounted by the acetone/triacetin method or a method with an equivalent index of refraction and similar clarity.

13. Observe the following counting rules.

a. Count only fiber equal to or longer than 5 micrometers. Measure the length of curved fibers along the curve.

b. In the absence of other information, count all particles as asbestos that have a length-to-width ratio (aspect ratio) of 3:1 or greater.

c. Fibers lying entirely within the boundary of the Walton-Beckett graticule field shall receive a count of 1. Fibers crossing the boundary once, having one end within the circle, shall receive the count of one-half (½). Do not count any fiber that crosses the graticule boundary more than once. Reject and do not count any other fibers even though they may be visible outside the graticule area.

d. Count bundles of fibers as one fiber unless individual fibers can be identified by observing both ends of an individual fiber.

e. Count enough graticule fields to yield 100 fibers. Count a minimum of 20 fields; stop counting at 100 fields regardless of fiber count.

14. Blind recounts shall be conducted at the rate of 10 percent.

*Quality Control Procedures*

1. *Intralaboratory program.* Each laboratory and/or each company with more than one microscopist counting slides shall establish a statistically designed quality assurance program involving blind recounts and comparisons between microscopists to monitor the variability of counting by each microscopist and between microscopists. In a company with more than one laboratory, the program shall include all laboratories and shall also evaluate the laboratory-to-laboratory variability.

2. *Interlaboratory program.* Each laboratory analyzing asbestos samples for compliance determination shall implement an interlaboratory quality assurance program that as a minimum includes participation of at least two other independent laboratories. Each laboratory shall participate in round robin testing at least once every 6 months with at least all the other laboratories in its interlaboratory quality assurance group. Each laboratory shall submit slides typical of its own work load for use in this program. The round robin shall be designed and results analyzed using appropriate statistical methodology.

3. All individuals performing asbestos analysis must have taken the NIOSH course for sampling and evaluating airborne asbestos dust or an equivalent course.

4. When the use of different microscopes contributes to differences between counters and laboratories, the effect of the different microscope shall be evaluated and the microscope shall be replaced, as necessary.

5. Current results of these quality assurance programs shall be posted in each laboratory to keep the microscopists informed.

## APPENDIX B TO § 763.121—DETAILED PROCEDURE FOR ASBESTOS SAMPLING AND ANALYSIS—NON-MANDATORY

This appendix contains a detailed procedure for sampling and analysis and includes those critical elements specified in Appendix A of this section. Employers are not required to use this procedure, but they are required to use Appendix A of this section. The purpose of Appendix B of this section is to provide a detailed step-by-step sampling and analysis procedure that conforms to the elements specified in Appendix A of this section. Since this procedure may also standardize the analysis and reduce variability, EPA encourages employers to use this appendix.

*Technique:* Microscopy, Phase Contrast.

*Analyte:* Fibers (manual count).

*Sample Preparation:* Acetone/triacetin method.

*Calibration:* Phase-shift detection limit about 3 degrees.

*Range:* 100 to 1,300 fibers/mm$^2$ filter area.

*Estimated Limit of Detection:* 7 fibers/mm$^2$ filter area.

*Sampler:* Filter (0.8–1.2 µm mixed cellulose ester membrane, 25-mm diameter).

*Flow Rate:* 0.5 L/min to 2.5 L/min (25-mm cassette); 1.0 L/min to 2.5 L/min (37-mm cassette).

*Sample Volume:* Adjust to obtain 100 to 1,300 fibers/mm$^2$.

*Shipment:* Routine.

*Sample Stability:* Indefinite.

*Blanks:* 10% of samples (minimum 2).

*Standard Analytical Error:* 0.25.

*Applicability:* The working range is 0.02 f/cc (1920–L air sample) to 1.25 f/cc (400–L sample). The method gives an index of airborne asbestos fibers but may be used for other materials such as fibrous glass by inserting suitable parameters into the counting rules. The method does not differentiate between asbestos and other fibers. Asbestos fibers less than ca. 0.25 µm diameter will not be detected by this method.

*Interferences:* Any other airborne fiber may interfere since all particles meeting the counting criteria are counted. Chain-like particles may appear fibrous. High levels of nonfibrous dust particles may obscure fibers in the field of view and raise the detection limit.

*Reagents:*

1. Acetone.

2. Triacetin (glycerol triacetate), reagent grade.

*Special Precautions:* Acetone is an extremely flammable liquid and precautions must be taken not to ignite it. Heating of acetone must be done in a ventilated laboratory fume hood using a flameless, spark-free heat source.

*Equipment:*

1. *Collection device:* 25-mm cassette with 50-mm electrically conductive extension cowl with cellulose ester filter, 0.8 to 1.2 mm pore size and backup pad.

NOTE: Analyze representative filters for fiber background before use and discard the filter lot if more than 5 fibers/100 fields are found.

2. Personal sampling pump, greater than or equal to 0.5 l/min, with flexible connecting tubing.

3. Microscope, phase contrast, with green or blue filter, 8 to 10X eyepiece, and 40 to 45X phase objective (total magnification ca. 400X); numerical aperture=0.65 to 0.75.

4. Slides, glass, single-frosted, pre-cleaned, 25 x 75 mm.

5. Cover slips, 25 x 25 mm, No. 1½ unless otherwise specified by microscope manufacturer.

6. Knife, #1 surgical steel, curved blade.

7. Tweezers.

8. Flask, Guth-type, insulated neck, 250 to 500 mL (with single-holed rubber stopper and elbow-jointed glass tubing, 16 to 22 cm long).

9. Hotplate, spark-free, stirring type; heating mantle; or infrared lamp and magnetic stirrer.

10. Syringe, hypodermic, with 22-gauge needle.

11. Graticule, Walton-Beckett type with 100 µm diameter circular field at the specimen plane (area=0.00785 mm$^2$), (Type G–22).

NOTE: The graticule is custom-made for each microscope.

12. HSE/NPL phase contrast test slide, Mark II.

13. Telescope, ocular phase-ring centering.

14. Stage micrometer (0.01 mm divisions).

*Sampling*

1. Calibrate each personal sampling pump with a representative sampler in line.

2. Fasten the sampler to the worker's lapel as close as possible to the worker's mouth. Remove the top cover from the end of the cowl extension (open face) and orient face down. Wrap the joint between the extender and the monitor's body with shrink tape to prevent air leaks.

3. Submit at least two blanks (or 10 percent of the total samples, whichever is greater) for each set of samples. Remove the caps from the field blank cassettes and store the caps and cassettes in a clean area (bag or box) during the sampling period. Replace the caps in the cassettes when sampling is completed.

4. Sample at 0.5 L/min or greater. Do not exceed 1 mg total dust loading on the filter. Adjust sampling flow rate, Q (L/min), and time to produce a fiber density, E (fibers/$mm^2$), of 100 to 1,300 fibers/$m^2$ [3.85 x $10^4$ to 5 x $10^5$ fibers per 25-mm filter with effective collection area ($A_c$=385 $mm^2$)] for optimum counting precision (see step 21 below). Calculate the minimum sampling time, $t_{minimum}$ (min) at the action level (one-half of the current standard), L (f/cc) of the fibrous aerosol being sampled:

$$t_{minimum} = \frac{(A_c)(E)}{(Q)(L)10}$$

5. Remove the field monitor at the end of sampling, replace the plastic top cover and small end caps, and store the monitor.

6. Ship the samples in a rigid container with sufficient packing material to prevent jostling or damage.

NOTE: Do not use polystyrene foam in the shipping container because of electrostatic forces which may cause fiber loss from the sample filter.

*Sample Preparation*

NOTE: The object is to produce samples with a smooth (nongrainy) background in a medium with a refractive index equal to or less than 1.46. The method below collapses the filter for easier focusing and produces permanent mounts which are useful for quality control and interlaboratory comparison. Other mounting techniques meeting the above criteria may also be used, e.g., the nonpermanent field mounting technique used in P & CAM 239.

7. Ensure that the glass slides and cover slips are free of dust and fibers.

8. Place 40 to 60 ml of acetone into a Guth-type flask. Stopper the flask with a single-hole rubber stopper through which a glass tube extends 5 to 8 cm into the flask. The portion of the glass tube that exits the top of the stopper (8 to 10 cm) is bent downward in an elbow that makes an angle of 20 to 30 degrees with the horizontal.

9. Place the flask in a stirring hotplate or wrap in a heating mantle. Heat the acetone gradually to its boiling temperature (ca. 58°C).

*Caution.* The acetone vapor must be generated in a ventilated fume hood away from all open flames and spark sources. Alternate heating methods can be used, providing no open flame or sparks are present.

10. Mount either the whole sample filter or a wedge cut from the sample filter on a clean glass slide.

a. Cut wedges of ca. 25 percent of the filter area with a curved-blade steel surgical knife using a rocking motion to prevent tearing.

b. Place the filter or wedge, dust side up, on the slide. Static electricity will usually keep the filter on the slide until it is cleared.

c. Hold the glass slide supporting the filter approximately 1 to 2 cm from the glass tube port where the acetone vapor is escaping from the heated flask. The acetone vapor stream should cause a condensation spot on the glass slide ca. 2 to 3 cm in diameter. Move the glass slide gently in the vapor stream. The filter should clear in 2 to 5 sec. If the filter curls, distorts, or is otherwise rendered unusable, the vapor stream is probably not strong enough. Periodically wipe the outlet port with tissue to prevent liquid acetone dripping onto the filter.

d. Using the hypodermic syringe with a 22-gauge needle, place 1 to 2 drops of triacetin on the filter. Gently lower a clean 25-mm square cover slip down onto the filter at a slight angle to reduce the possibility of forming bubbles. If too many bubbles form or the amount of triacetin is insufficient, the cover slip may become detached within a few hours.

e. Glue the edges of the cover slip to the glass slide using a lacquer or nail polish.

NOTE: If clearing is slow, the slide preparation may be heated on a hotplate (surface temperature 50°C) for 15 min. to hasten clearing. Counting may proceed immediately after clearing and mounting are completed.

*Calibration and Quality Control*

11. *Calibration of the Walton-Beckett graticule.* The diameter, $d_c$ (mm), of the circular counting area and the disc diameter must be specified when ordering the graticule.

a. Insert any available graticule into the eyepiece and focus so that the graticule lines are sharp and clear.

b. Set the appropriate interpupillary distance and, if applicable, reset the binocular head adjustment so that the magnification remains constant.

c. Install the 40 to 45 X phase objective.

d. Place a stage micrometer on the microscope object stage and focus the microscope on the graduated lines.

e. Measure the magnified grid length, $L_o$ (um), using the stage micrometer.

f. Remove the graticule from the microscope and measure its actual grid length, $L_a$ (mm). This can best be accomplished by using a stage fitted with verniers.

g. Calculate the circle diameter, $d_c$ (mm), for the Walton-Beckett graticule:

$$d_c = \frac{L_a \times D}{L_o}$$

*Example:* If $L_o$=108 um, $L_a$=2.93 mm and D=100 um, then $d_c$=2.71 mm.

h. Check the field diameter, D(acceptable range 100 mm ±2 mm) with a stage micrometer upon receipt of the graticule from the manufacturer. Determine field area ($mm^2$).

12. *Microscope adjustments.* Follow the manufacturer's instructions and also the following:

a. Adjust the light source for even illumination across the field of view at the condenser iris.

NOTE: Kohler illumination is preferred, where available.

b. Focus on the particulate material to be examined.

c. Make sure that the field iris is in focus, centered on the sample, and open only enough to fully illuminate the field of view.

d. Use the telescope ocular supplied by the manufacturer to ensure that the phase rings (annular diaphragm and phase-shifting elements) are concentric.

13. Check the phase-shift detection limit of the microscope periodically.

a. Remove the HSE/NPL phase-contrast test slide from its shipping container and center it under the phase objective.

b. Bring the blocks of grooved lines into focus.

NOTE: The slide consists of seven sets of grooves (ca. 20 grooves to each block) in descending order of visibility from sets 1 to 7. The requirements for counting are that the microscope optics must resolve the grooved lines in set 3 completely, although they may appear somewhat faint, and that the grooved lines in sets 6 to 7 must be invisible. Sets 4 and 5 must be at least partially visible but may vary slightly in visibility between microscopes. A microscope which fails to meet these requirements has either too low or too high a resolution to be used for asbestos counting.

c. If the image quality deteriorates, clean the microscope optics and, if the problem persists, consult the microscope manufacturer.

14. *Quality control of fiber counts.*

a. Prepare and count field blanks along with the field samples. Report the counts on each blank. Calculate the mean of the field blank counts and subtract this value from each sample count before reporting the results.

NOTE 1: The identity of the blank filters should be unknown to the counter until all counts have been completed.

NOTE 2: If a field blank yields fiber counts greater than 7 fibers/100 fields, report possible contamination of the samples.

b. Perform blind recounts by the same counter on 10 percent of filters counted (slides relabeled by a person other than the counter).

15. Use the following test to determine whether a pair of counts on the same filter should be rejected because of possible bias. This statistic estimates the counting repeatability at the 95 percent confidence level. Discard the sample if the difference between the two counts exceeds 2.77 (F)$s_r$ where F=average of the two fiber counts and $s_r$=relative standard deviation, which should be derived by each laboratory based on historical in-house data.

NOTE: If a pair of counts is rejected as a result of this test, recount the remaining samples in the set and test the new counts against the first counts. Discard all rejected paired counts.

16. Enroll each new counter in a training course that compares performance of counters on a variety of samples using this procedure.

NOTE: To ensure good reproducibility, all laboratories engaged in asbestos counting are required to participate in the Proficiency Analytical Testing (PAT) Program and should routinely participate with other asbestos fiber counting laboratories in the exchange of field samples to compare performance of counters.

*Measurement*

17. Place the slide on the mechanical stage of the calibrated microscope with the center of the filter under the objective lens. Focus the microscope on the plane of the filter.

18. Regularly check phase-ring alignment and Kohler illumination.

19. The following are the counting rules:

a. Count only fibers longer than 5 um. Measure the length of curved fibers along the curve.

b. Count only fibers with a length-to-width ratio equal to or greater than 3:1.

c. For fibers that cross the boundary of the graticule field, do the following:

(1) Count any fiber longer than 5 um that lies entirely within the graticule area.

(2) Count as ½ fiber any fiber with only one end lying within the graticule area.

(3) Do not count any fiber that crosses the graticule boundary more than once.

(4) Reject and do not count all other fibers.

d. Count bundles of fibers as one fiber unless individual fibers can be identified by observing both ends of a fiber.

e. Count enough graticule fields to yield 100 fibers. Count a minimum of 20 fields. Stop at 100 fields regardless of fiber count.

20. Start counting from one end of the filter and progress along a radial line to the other end, shift either up or down on the filter, and continue in the reverse direction. Select fields randomly by looking away from the eyepiece briefly while advancing the mechanical stage. When an agglomerate covers ca. ⅙ or more of the field of view, reject the field and select another. Do not report rejected fields in the number of total fields counted.

NOTE: When counting a field, continuously scan a range of focal planes by moving the fine focus knob to detect very fine fibers which have become embedded in the filter. The small-diameter fibers will be very faint but are an important contribution to the total count.

*Calculations*

21. Calculate and report fiber density on the filter, E (fibers/mm$^2$); by dividing the total fiber count, F; minus the mean field blank count, B, by the number of fields, n; and the field area, $A_f$ (0.00785 mm$^2$ for a properly calibrated Walton-Beckett graticule):

$$E=\frac{(F/n_f-(B/n_b)\ \text{fibers/mm}^2}{A_f}$$

*where:*

$n_f$—number of fields in submission sample

$n_b$—number of fields in bulk sample

22. Calculate the concentration, C (f/cc), of fibers in the air volume sampled, V (L), using the effective collection area of the filter, $A_c$ (385 mm$^2$ for a 25-mm filter):

$$C=\frac{(E)(A_c)}{V(10^3)}$$

NOTE: Periodically check and adjust the value of $A_c$, if necessary.

## APPENDIX C TO § 763.121—QUALITATIVE AND QUANTITATIVE FIT TESTING PROCEDURES—MANDATORY

*Qualitative Fit Test Protocols*

I. Isoamyl Acetate Protocol

*A. Odor Threshold Screening.* 1. Three 1-liter glass jars with metal lids (e.g. Mason or Bell jars) are required.

2. Odor-free water (e.g. distilled or spring water) at approximately 25° shall be used for the solutions.

3. The isoamyl acetate (IAA) (also known as isopentyl acetate) stock solution is prepared by adding 1 cc of pure IAA to 800 cc of odor-free water in a 1-liter jar and shaking for 30 seconds. This solution shall be prepared new at least weekly.

4. The screening test shall be conducted in a room separate from the room used for actual fit testing. The two rooms shall be well ventilated but shall not be connected to the same recirculating ventilation system.

5. The odor test solution is prepared in a second jar by placing 0.4 cc of the stock solution into 500 cc of odor-free water using a clean dropper or pipette. Shake for 30 seconds and allow to stand for two to three minutes so that the IAA concentration above the liquid may reach equilibrium. This solution may be used for only one day.

6. A test blank is prepared in a third jar by adding 500 cc of odor-free water.

7. The odor test and test blank jars shall be labeled 1 and 2 for jar identification. If the labels are put on the lids they can be periodically peeled, dried off and switched to maintain the integrity of the test.

8. The following instructions shall be typed on a card and placed on the table in front of the two test jars (i.e. 1 and 2): ''The purpose of this test is to determine if you can smell banana oil at a low concentration. The two bottles in front of you contain water. One of these bottles also contains a small amount of banana oil. Be sure the covers are on tight, then shake each bottle for two seconds. Unscrew the lid of each bottle, one at a time, and sniff at the mouth of the bottle. Indicate to the test conductor which bottle contains banana oil.''

9. The mixtures used in the IAA odor detection test shall be prepared in an area separate from where the test is performed, in order to prevent olfactory fatigue in the subject.

10. If the test subject is unable to identify correctly the jar containing the odor test solution, the IAA qualitative fit test may not be used.

11. If the test subject correctly identifies the jar containing the odor test solution, the test subject may proceed to respirator selection and fit testing.

*B. Respirator selection.* 1. The test subject shall be allowed to pick the most comfortable respirator from a selection including respirators of various sizes from different manufacturers. The selection shall include at least five sizes of elastomeric half facepieces, from at least two manufacturers.

2. The selection process shall be conducted in a room separate from the fit-test chamber to prevent odor fatigue. Prior to the selection process, the test subject shall be shown how to put on a respirator, how it should be

positioned on the face, how to set strap tension and how to determine a ''comfortable'' respirator. A mirror shall be available to assist the subject in evaluating the fit and positioning of the respirator. This instruction may not constitute the subject's formal training on respirator use, as it is only a review.

3. The test subject should understand that the employee is being asked to select the respirator which provides the most comfortable fit. Each respirator represents a different size and shape and, if fitted properly and used properly, will provide adequate protection.

4. The test subject holds each facepiece up to the face and eliminates those which obviously do not give a comfortable fit. Normally, selection will begin with a half-mask and if a good fit cannot be found, the subject will be asked to test the full facepiece respirators. (A small percentage of users will not be able to wear any half-mask.)

5. The more comfortable facepieces are noted; the most comfortable mask is donned and *worn at least five minutes* to assess comfort. All donning and adjustments of the facepieces shall be performed by the test subject without assistance from the test conductor or other person. Assistance in assessing comfort can be given by discussing the points of #6 below. If the test subject is not familiar with using a particular respirator, the test subject shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.

6. Assessment of comfort shall include reviewing the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:

- Positioning of mask on nose.
- Room for eye protection.
- Room to talk
- Positioning mask on face and cheeks.

7. The following criteria shall be used to help determine the adequacy of the respirator fit:

- Chin properly placed.
- Strap tension.
- Fit across nose bridge.
- Distance from nose to chin.
- Tendency to slip.
- Self-observation in mirror.

8. The test subject shall conduct the conventional negative and positive-pressure fit checks (e.g. see ANSI Z88.2–1980). Before conducting the negative- or positive-pressure test, the subject shall be told to ''seat'' the mask by rapidly moving the head from side-to-side and up and down, while taking a few deep breaths.

9. The test subject is now ready for fit testing.

10. After passing the fit test, the test subject shall be questioned again regarding the comfort of the respirator. If it has become uncomfortable, another model of respirator shall be tried.

11. The employee shall be given the opportunity to select a different facepiece and be retested if the chosen facepiece becomes increasingly uncomfortable at any time.

*C. Fit test.* 1. The fit test chamber shall be similar to a clear 55 gallon drum liner suspended inverted over a 2 foot diameter frame, so that the top of the chamber is about 6 inches above the test subject's head. The inside top center of the chamber shall have a small hook attached.

2. Each respirator used for the fitting and fit testing shall be equipped with organic vapor cartridges or offer protection against organic vapors. The cartridges or masks shall be changed at least weekly.

3. After selection, donning, and properly adjusting a respirator, the test subject shall wear it to the fit testing room. This room shall be separate from the room used for odor threshold screening and respirator selection, and shall be well ventilated, as by an exhaust fan or lab hood, to prevent general room contamination.

4. A copy of the following test exercises and rainbow passage shall be taped to the inside of the test chamber:

*Test Exercises*

i. Breathe normally.

ii. Breathe deeply. Be certain breaths are *deep* and *regular*.

iii. Turn head all the way from one side to the other. Inhale on each side. Be certain movement is complete. Do not bump the respirator against the shoulders.

iv. Nod head up-and-down. Inhale when head is in the full up position (looking toward ceiling). Be certain motions are complete and made about every second. Do not bump the respirator on the chest.

v. *Talking.* Talk aloud and slowly for several minutes. The following paragraph is called the Rainbow Passage. Reading it will result in a wide range of facial movements, and thus be useful to satisfy this requirement. Alternative passages which serve the same purpose may also be used.

vi. Jogging in place.

vii. Breathe normally.

*Rainbow Passage.* When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

5. Each test subject shall wear the respirator for at least 10 minutes before starting the fit test.

6. Upon entering the test chamber, the test subject shall be given a 6 inch by 5 inch piece of paper towel or other porous absorbent single ply material, folded in half and wetted with three-quarters of one cc of pure IAA. The test subject shall hang the wet towel on the hook at the top of the chamber.

7. Allow two minutes for the IAA test concentration to be reached before starting the fit-test exercises. This would be an appropriate time to talk with the test subject, to explain the fit test, the importance of cooperation, the purpose for the head exercises, or to demonstrate some of the exercises.

8. Each exercise described in #4 above shall be performed for at least one minute.

9. If at any time during the test, the subject detects the banana-like odor of IAA, the test has failed. The subject shall quickly exit from the test chamber and leave the test area to avoid olfactory fatigue.

10. If the test is failed, the subject shall return to the selection room and remove the respirator, repeat the odor sensitivity test, select and put on another respirator, return to the test chamber, and again begin the procedure described in the c(4) through c(8) above. The process continues until a respirator that fits well has been found. Should the odor sensitivity test be failed, the subject shall wait about 5 minutes before retesting. Odor sensitivity will usually have returned by this time.

11. If a person cannot pass the fit test described above wearing a half-mask respirator from the available selection, full facepiece models must be used.

12. When a respirator is found that passes the test, the subject breaks the faceseal and takes a breath before exiting the chamber. This is to assure that the reason the test subject is not smelling the IAA is the good fit of the respirator facepiece seal and not olfactory fatigue.

13. When the test subject leaves the chamber, the subject shall remove the saturated towel and return it to the person conducting the test. To keep the area from becoming contaminated, the used towels shall be kept in a self-sealing bag so there is no significant IAA concentration buildup in the test chamber during subsequent tests.

14. At least two facepieces shall be selected for the IAA test protocol. The test subject shall be given the opportunity to wear them for one week to choose the one which is more comfortable to wear.

15. Persons who have successfully passed this fit test with a half-mask respirator may be assigned the use of the test respirator in atmospheres with up to 10 times the PEL of airborne asbestos.

16. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface.

17. If hair growth or apparel interfere with a satisfactory fit, then they shall be altered or removed so as to eliminate interference and allow a satisfactory fit. If a satisfactory fit is still not attained, the test subject must use a positive-pressure respirator such as powered air-purifying respirators, supplied air respirator, or self-contained breathing apparatus.

18. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician trained in respirator diseases or pulmonary medicine to determine whether the test subject can wear a respirator while performing her or his duties.

19. Qualitative fit testing shall be repeated at least every six months.

20. In addition, because the sealing of the respirator may be affected, qualitative fit testing shall be repeated immediately when the test subject has a:

(1) Weight change of 20 pounds or more,

(2) Significant facial scarring in the area of the facepiece seal.

(3) Significant dental changes; i.e., multiple extractions without prosthesis, or acquiring dentures.

(4) Reconstructive or cosmetic surgery, or

(5) Any other condition that may interfere with facepiece sealing.

*D. Recordkeeping.* A summary of all test results shall be maintained in each office for 3 years. The summary shall include:

(1) Name of test subject.

(2) Date of testing.

(3) Name of the test conductor.

(4) Respirators selected (indicate manufacturer, model, size and approval number).

(5) Testing agent.

II. Saccharin Solution Aerosol Protocol

*A. Respirator selection.* Respirators shall be selected as described in section IB (respirator selection) above, except that each respirator shall be equipped with a particulate filter.

*B. Taste threshold screening.* 1. An enclosure about head and shoulders shall be used for threshold screening (to determine if the individual can taste saccharin) and for fit testing. The enclosure shall be approximately 12 inches in diameter by 14 inches tall with at least the front clear to allow free movement of the head when a respirator is worn.

2. The test enclosure shall have a three-quarter inch hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle.

3. The entire screening and testing procedure shall be explained to the test subject prior to conducting the screening test.

4. During the threshold screening test, the test subject shall don the test enclosure and

breathe with mouth open with tongue extended.

5. Using a DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent, the test conductor shall spray the threshold check solution into the enclosure. This nebulizer shall be clearly marked to distinquish it from the fit test solution nebulizer.

6. The threshold check solution consists of 0.83 gram of sodium saccharin, USP in water. It can be prepared by putting 1 cc of the test solution (see C.7 below) in 100 cc of water.

7. To produce the aerosol, the nebulizer bulb is firmly squeezed so that it collapses completely, then is released and allowed to expand fully.

8. Ten squeezes of the nebulizer bulb are repeated rapidly and then the test subject is asked whether the saccharin can be tasted.

9. If the first response is negative, ten more squeezes of the nebulizer bulb are repeated rapidly and the test subject is again asked whether the saccharin can be tasted.

10. If the second response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the saccharin can be tasted.

11. The test conductor will take note of the number of squeezes required to elicit a taste response.

12. If the saccharin is not tasted after 30 squeezes (Step 10), the saccharin fit test cannot be performed on the test subject.

13. If a taste response is elicited, the test subject shall be asked to take note of the taste for reference in the fit test.

14. Correct use of the nebulizer means that approximately 1 cc of liquid is used at a time in the nebulizer body.

15. The nebulizer shall be thoroughly rinsed in water, shaken dry, and refilled at least every four hours.

*C. Fit Test.* 1. The test subject shall don and adjust the respirator without assistance from any person.

2. The fit test uses the same enclosure described in IIB above.

3. Each test subject shall wear the respirator for at least 10 minutes before starting the fit test.

4. The test subject shall don the enclosure while wearing the respirator selected in section IB above. This respirator shall be properly adjusted and equipped with a particulate filter.

5. The test subject may not eat, drink (except plain water), or chew gum for 15 minutes before the test.

6. A second DeVilbiss Model 40 Inhalation Medication Nebulizer is used to spray the fit test solution into the enclosure. This nebulizer shall be clearly marked to distinquish it from the screening test solution nebulizer.

7. The fit test solution is prepared by adding 83 grams of sodium saccharin to 100 cc of warm water.

8. As before, the test subject shall breathe with mouth open and tongue extended.

9. The nebulizer is inserted into the hole in the front of the enclosure and the fit test solution is sprayed into the enclosure using the same technique as for the taste threshold screening and the same number of squeezes required to elicit a taste response in the screening. (See B.8 through B.10 above).

10. After generation of the aerosol, read the following instructions to the test subject. The test subject shall perform the exercises for one minute each.

i. Breathe normally.

ii. Breathe deeply. Be certain breaths are *deep* and *regular*.

iii. Turn head all the way from one side to the other. Be certain movement is complete. Inhale on each side. Do not bump the respirator against the shoulders.

iv. Nod head up-and-down. Be certain motions are complete. Inhale when head is in the full up position (when looking toward the ceiling). Do not bump the respirator on the chest.

v. *Talking.* Talk aloud and slowly for several minutes. The following paragraph is called the Rainbow Passage. Reading it will result in a wide range of facial movements, and thus be useful to satisfy this requirement. Alternative passages which serve the same purpose may also be used.

*Rainbow Passage.* When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow.

vi. Jogging in place.

vii. Breathe normally.

11. At the beginning of each exercise, the aerosol concentration shall be replenished using one-half the number of squeezes as initially described in C.9.

12. The test subject shall indicate to the test conductor, if at any time during the fit test, the taste of saccharin is detected.

13. If the saccharin is detected, the fit is deemed unsatisfactory and a different respirator shall be tried.

14. At least two facepieces shall be selected by the saccharin solution aerosol test protocol. The test subject shall be given the opportunity to wear them for one week to choose the one which is more comfortable to wear.

15. Successful completion of the test protocol shall allow the use of the half mask tested respirator in contaminated atmospheres up to 10 times the PEL of asbestos. In other

words this protocol may be used to assign protection factors no higher than ten.

16. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface.

17. If hair growth or apparel interfere with a satisfactory fit, then they shall be altered or removed so as to eliminate interference and allow a satisfactory fit. If a satisfactory fit is still not attained, the test subject must use a positive-pressure respirator such as powered air-purifying respirators, supplied air respirator, or self-contained breathing apparatus.

18. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician trained in respirator diseases or pulmonary medicine to determine whether the test subject can wear a respirator while performing her or his duties.

19. Qualitative fit testing shall be repeated at least every six months.

20. In addition, because the sealing of the respirator may be affected, qualitative fit testing shall be repeated immediately when the test subject has a:

(1) Weight change of 20 pounds or more,

(2) Significant facial scarring in the area of the facepiece seal,

(3) Significant dental changes; i.e., multiple extractions without prosthesis, or acquiring dentures,

(4) Reconstructive or cosmetic surgery, or

(5) Any other condition that may interfere with facepiece sealing.

*D. Recordkeeping.* A summary of all test results shall be maintained in each office for 3 years. The summary shall include:

(1) Name of test subject.

(2) Date of testing.

(3) Name of test conductor.

(4) Respirators selected (indicate manufacturer, model, size and approval number).

(5) Testing agent.

III. Irritant Fume Protocol

*A. Respirator selection.* Respirators shall be selected as described in section IB above, except that each respirator shall be equipped with a high-efficiency cartridge.

*B. Fit test.* 1. The test subject shall be allowed to smell a weak concentration of the irritant smoke to familiarize the subject with the characteristic odor.

2. The test subject shall properly don the respirator selected as above, and wear it for at least 10 minutes before starting the fit test.

3. The test conductor shall review this protocol with the test subject before testing.

4. The test subject shall perform the conventional positive pressure and negative pressure fit checks (see ANSI Z88.2 1980). Failure of either check shall be cause to select an alternate respirator.

5. Break both ends of a ventilation smoke tube containing stannic oxychloride, such as the MSA part #5645, or equivalent. Attach a short length of tubing to one end of the smoke tube. Attach the other end of the smoke tube to a low pressure air pump set to deliver 200 milliliters per minute.

6. Advise the test subject that the smoke can be irritating to the eyes and instruct the subject to keep the eyes closed while the test is performed.

7. The test conductor shall direct the stream of irritant smoke from the tube towards the faceseal area of the test subject. The person conducting the test shall begin with the tube at least 12 inches from the facepiece and gradually move to within one inch, moving around the whole perimeter of the mask.

8. The test subject shall be instructed to do the following exercises while the respirator is being challenged by the smoke. Each exercise shall be performed for one minute.

i. Breathe normally.

ii. Breathe deeply. Be certain breaths are *deep* and *regular.*

iii. Turn head all the way from one side to the other. Be certain movement is complete. Inhale on each side. Do not bump the respirator against the shoulders.

iv. Nod head up-and-down. Be certain motions are complete and made every second. Inhale when head is in the full up position (looking toward ceiling). Do not bump the respirator against the chest.

v. *Talking.* Talk aloud and slowly for several minutes. The following paragraph is called the Rainbow Passage. Repeating it after the test conductor (keeping eyes closed) will result in a wide range of facial movements, and thus be useful to satisfy this requirement. Alternative passages which serve the same purpose may also be used.

*Rainbow Passage.* When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow.

vi. Jogging in place.

vii. Breathe normally.

9. The test subject shall indicate to the test conductor if the irritant smoke is detected. If smoke is detected, the test conductor shall stop the test. In this case, the tested respirator is rejected and another respirator shall be selected.

10. Each test subject passing the smoke test (i.e. without detecting the smoke) shall be given a sensitivity check of smoke from

the same tube to determine if the test subject reacts to the smoke. Failure to evoke a response shall void the fit test.

11. Steps B4, B9, B10 of this fit test protocol shall be performed in a location with exhaust ventilation sufficient to prevent general contamination of the testing area by the test agents.

12. At least two facepieces shall be selected by the irritant fume test protocol. The test subject shall be given the opportunity to wear them for one week to choose the one which is more comfortable to wear.

13. Respirators successfully tested by the protocol may be used in contaminated atmospheres up to ten times the PEL of asbestos.

14. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface.

15. If hair growth or apparel interfere with a satisfactory fit, then they shall be altered or removed so as to eliminate interference and allow a satisfactory fit. If a satisfactory fit is still not attained, the test subject must use a positive-pressure respirator such as powered air-purifying respirators, supplied air respirator, or self-contained breathing apparatus.

16. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician trained in respiratory diseases or pulmonary medicine to determine whether the test subject can wear a respirator while performing her or his duties.

17. Qualitative fit testing shall be repeated at least every six months.

18. In addition, because the sealing of the respirator may be affected, qualitative fit testing shall be repeated immediately when the test subject has a:

(1) Weight change of 20 pounds or more,

(2) Significant facial scarring in the area of the facepiece seal,

(3) Significant dental changes; i.e., multiple extractions without prosthesis, or acquiring dentures,

(4) Reconstructive or cosmetic surgery, or

(5) Any other condition that may interfere with facepiece sealing.

*C. Recordkeeping.* A summary of all test results shall be maintained in each office for 3 years. The summary shall include:

(1) Name of test subject.

(2) Date of testing.

(3) Name of test conductor.

(4) Respirators selected (indicate manufacturer, model, size and approval number).

(5) Testing agent.

*Quantitative Fit Test Procedures*

1. General

a. The method applies to the negative-pressure nonpowered air-purifying respirators only.

b. The employer shall assign one individual who shall assume the full responsibility for implementing the respirator quantitative fit test program.

2. Definitions

a. ''Quantitative Fit Test'' means the measurement of the effectiveness of a respirator seal in excluding the ambient atmosphere. The test is performed by dividing the measured concentration of challenge agent in a test chamber by the measured concentration of the challenge agent inside the respirator facepiece when the normal air purifying element has been replaced by an essentially perfect purifying element.

b. ''Challenge Agent'' means the air contaminant introduced into a test chamber so that its concentration inside and outside the respirator may be compared.

c. ''Test Subject'' means the person wearing the respirator for quantitative fit testing.

d. ''Normal Standing Position'' means standing erect and straight with arms down along the sides and looking straight ahead.

e. ''Fit Factor'' means the ratio of challenge agent concentration outside with respect to the inside of a respirator inlet covering (facepiece or enclosure).

3. Apparatus

a. *Instrumentation.* Corn oil, sodium chloride or other appropriate aerosol generation, dilution, and measurement systems shall be used for quantitative fit test.

b. *Test chamber.* The test chamber shall be large enough to permit all test subjects to perform freely all required exercises without distributing the challenge agent concentration or the measurement apparatus. The test chamber shall be equipped and constructed so that the challenge agent is effectively isolated from the ambient air yet uniform in concentration throughout the chamber.

c. When testing air-purifying respirators, the normal filter or cartridge element shall be replaced with a high-efficiency particulate filter supplied by the same manufacturer.

d. The sampling instrument shall be selected so that a strip chart record may be made of the test showing the rise and fall of challenge agent concentration with each inspiration and expiration at fit factors of at least 2,000.

e. The combination of substitute air-purifying elements (if any), challenge agent, and challenge agent concentration in the test chamber shall be such that the test subject is not exposed in excess of PEL to the challenge agent at any time during the testing process.

f. The sampling port on the test specimen respirator shall be placed and constructed so that there is no detectable leak around the

port, a free air flow is allowed into the sampling line at all times and so there is no interference with the fit or performance of the respirator.

g. The test chamber and test set-up shall permit the person administering the test to observe one test subject inside the chamber during the test.

h. The equipment generating the challenge atmosphere shall maintain the concentration of challenge agent constant within a 10 percent variation for the duration of the test.

i. The time lag (interval between an event and its being recorded on the strip chart) of the instrumentation may not exceed 2 seconds.

j. The tubing for the test chamber atmosphere and for the respirator sampling port shall be the same diameter, length and material. It shall be kept as short as possible. The smallest diameter tubing recommended by the manufacturer shall be used.

k. The exhaust flow from the test chamber shall pass through a high-efficiency filter before release to the room.

l. When sodium chloride aerosol is used, the relative humidity inside the test chamber shall not exceed 50 percent.

4. Procedural Requirements

a. The fitting of half-mask respirators should be started with those having multiple sizes and a variety of interchangeable cartridges and canisters such as the MSA Comfo II-M, North M, Survivair M, A–O M, or Scott–M. Use either of the tests outlined below to assure that the facepiece is properly adjusted.

(1) *Positive pressure test.* With the exhaust port(s) blocked, the negative pressure of slight inhalation should remain constant for several seconds.

(2) *Negative pressure test.* With the intake port(s) blocked, the negative pressure of slight inhalation should remain constant for several seconds.

b. After a facepiece is adjusted, the test subject shall wear the facepiece for at least 5 minutes before conducting a qualitative test by using either of the methods described below and using the exercise regime described in 5.a., b., c., d. and e.

(1) *Isoamyl acetate test.* When using organic vapor cartridges, the test subject who can smell the odor should be unable to detect the odor of isoamyl acetate squirted into the air near the most vulnerable portions of the facepiece seal. In a location which is separated from the test area, the test subject shall be instructed to close her/his eyes during the test period. A combination cartridge or canister with organic vapor and high-efficiency filters shall be used when available for the particular mask being tested. The test subject shall be given an opportunity to smell the odor of isoamyl acetate before the test is conducted.

(2) *Irritant fume test.* When using high-efficiency filters, the test subject should be unable to detect the odor of irritant fume (stannic chloride or titanium tetrachloride ventilation smoke tubes) squirted into the air near the most vulnerable portions of the facepiece seal. The test subject shall be instructed to close her/his eyes during the test period.

c. The test subject may enter the quantitative testing chamber only if she or he has obtained a satisfactory fit as stated in 4.b. of this Appendix.

d. Before the subject enters the test chamber, a reasonably stable challenge agent concentration shall be measured in the test chamber.

e. Immediately after the subject enters the test chamber, the challenge agent concentration inside the respirator shall be measured to ensure that the peak penetration does not exceed 5 percent for a half-mask and 1 percent for a full facepiece.

f. A stable challenge agent concentration shall be obtained prior to the actual start of testing.

g. Respirator restraining straps may not be overtightened for testing. The straps shall be adjusted by the wearer to give a reasonably comfortable fit typical of normal use.

5. Exercise Regime

Prior to entering the test chamber, the test subject shall be given complete instructions as to her/his part in the test procedures. The test subject shall perform the following exercises, in the order given, for each independent test.

a. *Normal Breathing (NB).* In the normal standing position, without talking, the subject shall breathe normally for at least one minute.

b. *Deep Breathing (DB).* In the normal standing position the subject shall do deep breathing for at least one minute pausing so as not to hyperventilate.

c. *Turning head side to side (SS).* Standing in place the subject shall slowly turn his/her head from side between the extreme positions to each side. The head shall be held at each extreme position for at least 5 seconds. Perform for at least three complete cycles.

d. *Moving head up and down (UD).* Standing in place, the subject shall slowly move his/her head up and down between the extreme position straight up and the extreme position straight down. The head shall be held at each extreme position for at least 5 seconds. Perform for at least three complete cycles.

e. *Reading (R).* The subject (keeping eyes closed) shall repeat after the test conductor or the 'rainbow passage' at the end of this section. The subject shall talk slowly aloud so as to be heard clearly by the test conductor or monitor.

f. *Grimace (G).* The test subject shall grimace, smile, frown, and generally contort the face using the facial muscles. Continue for at least 15 seconds.

g. *Bend over and touch toes (B).* The test subject shall bend at the waist and touch toes and return to upright position. Repeat for at least 30 seconds.

h. *Jogging in place (J).* The test subject shall jog in place for at least 30 seconds.

i. *Normal Breathing (NB).* Same as exercise a.

*Rainbow Passage.* When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

6. Termination of Test

The test shall be terminated whenever any single peak penetration exceeds 5 percent for halfmasks and 1 percent for full facepieces. The test subject may be refitted and retested. If two of the three required tests are terminated, the fit shall be deemed inadequate.

7. Calculation of Fit Factors

a. The fit factor determined by the quantitative fit test equals the average concentration inside the respirator.

b. The average test chamber concentration is the arithmetic average of the test chamber concentration at the beginning and the end of the test.

c. The average peak concentration of the challenge agent inside the respirator shall be the arithmetic average peak concentrations for each of the nine exercises of the test which are computed as the arithmetic average of the peak concentrations found for each breath during the exercise.

d. The average peak concentration for an exercise may be determined graphically if there is not a great variation in the peak concentrations during a single exercise.

8. Interpretation of Test Results

The fit factor measured by the quantitative fit testing shall be the lowest of the three protection factors resulting from three independent tests.

9. Other Requirements

a. The test subject shall not be permitted to wear a halfmask or full facepiece mask if the minimum fit factor of 100 or 1,000, respectively, cannot be obtained. If hair growth or apparel interfere with a satisfactory fit, then they shall be altered or removed so as to eliminate interference and allow a satisfactory fit. If a satisfactory fit is still not attained, the test subject must use a positive-pressure respirator such as powered air-purifying respirators, supplied air respirator, or self-contained breathing apparatus.

b. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface.

c. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician trained in respirator diseases or pulmonary medicine to determine whether the test subject can wear a respirator while performing her or his duties.

d. The test subject shall be given the opportunity to wear the assigned respirator for one week. If the respirator does not provide a satisfactory fit during actual use, the test subject may request another QNFT which shall be performed immediately.

e. A respirator fit factor card shall be issued to the test subject with the following information:

(1) Name.

(2) Date of fit test.

(3) Protection factors obtained through each manufacturer, model and approval number of respirator tested.

(4) Name and signature of the person that conducted the test.

f. Filters used for qualitative or quantitative fit testing shall be replaced weekly, whenever increased breathing resistance is encountered, or when the test agent has altered the integrity of the filter media. Organic vapor cartridges/canisters shall be replaced daily or sooner if there is any indication of breakthrough by the test agent.

10. Retesting

In addition, because the sealing of the respirator may be affected, quantitative fit testing shall be repeated immediately when the test subject has a:

a. Weight change of 20 pounds or more,

b. Significant facial scarring in the area of the facepiece seal,

c. Significant dental changes; i.e., multiple extractions without prosthesis, or acquiring dentures,

d. Reconstructive or cosmetic surgery, or

e. Any other condition that may interfere with facepiece sealing.

11. Recordkeeping

A summary of all test results shall be maintained for 3 years. The summary shall include:

a. Name of test subject.

b. Date of testing.

c. Name of the test conductor.

d. Fit factors obtained from every respirator tested (indicate manufacturer, model, size and approval number).

## APPENDIX D TO § 763.121—MEDICAL QUESTIONNAIRES—MANDATORY

This mandatory appendix contains the medical questionnaires that must be administered to all employees who are exposed to asbestos above the action level, and who will therefore be included in their employer's medical surveillance program. Part 1 of the appendix contains the Initial Medical Questionnaire, which must be obtained for all new hires who will be covered by the medical surveillance requirements. Part 2 includes the abbreviated Periodical Medical Questionnaire, which must be administered to all employees who are provided periodic medical examinations under the medical surveillance provisions of the standard.

Part 1
INITIAL MEDICAL QUESTIONNAIRE

1. NAME _____

2. SOCIAL SECURITY # ___ ___ ___ ___ ___ ___ ___ ___ ___
1 2 3 4 5 6 7 8 9

3. CLOCK NUMBER ___ ___ ___ ___ ___ ___
10 11 12 13 14 15

4. PRESENT OCCUPATION _____

5. PLANT _____

6. ADDRESS _____

7. _____
(Zip Code)

8. TELEPHONE NUMBER _____

9. INTERVIEWER _____

10. DATE _____ ___ ___ ___ ___ ___ ___
16 17 18 19 20 21

11. Date of Birth _____ ___ ___ ___ ___ ___ ___
Month Day Year 22 23 24 25 26 27

12. Place of Birth _____

13. Sex
1. Male ___
2. Female ___

14. What is your marital status?
1. Single ___
2. Married ___
3. Widowed ___
4. Separated/ Divorced ___

15. Race
1. White ___
2. Black ___
3. Asian ___
4. Hispanic ___
5. Indian ___
6. Other ___

16. What is the highest grade completed in school? _____
(For example 12 years is completion of high school)

OCCUPATIONAL HISTORY

17A. Have you ever worked full time (30 hours per week or more) for 6 months or more? 1. Yes ___ 2. No ___

IF YES TO 17A:

B. Have you ever worked for a year or more in any dusty job? 1. Yes ___ 2. No ___ 3. Does Not Apply ___

Specify job/industry _____ Total Years Worked ___

Was dust exposure: 1. Mild ___ 2. Moderate ___ 3. Severe ___

C. Have you even been exposed to gas or chemical fumes in your work? 1. Yes __ 2. No __
Specify job/industry _____ Total Years Worked ___

Was exposure: 1. Mild ___ 2. Moderate ___ 3. Severe ___

D. What has been your usual occupation or job--the one you have worked at the longest?

1. Job occupation _____

2. Number of years employed in this occupation _____

3. Position/job title _____

4. Business, field or industry _____

(Record on lines the years in which you have worked in any of these industries, e.g., 1960-1969).
Have you ever worked:

| | YES | NO |
|---|---|---|
| E. In a mine?..... | \|___\| | \|___\| |
| F. In a quarry?..... | \|___\| | \|___\| |
| G. In a foundry?..... | \|___\| | \|___\| |
| H. In a pottery?..... | \|___\| | \|___\| |
| I. In a cotton, flax or hemp mill?..... | \|___\| | \|___\| |
| J. With asbestos, tremolite, anthophyllite, or actinolite?..... | \|___\| | \|___\| |

18. PAST MEDICAL HISTORY

| | YES | NO |
|---|---|---|
| A. Do you consider yourself to be in good health? | \|___\| | \|___\| |

If "NO" state reason _____

B. Have you any defect of vision?..... |___| |___|

If "YES" state nature of defect_____

C. Have you any hearing defect?..... |___| |___|

If "YES" state nature of defect_____

D. Are you suffering from or have you ever suffered from:

a. Epilepsy (or fits, seizures, convulsions)? |___| |___|

b. Rheumatic fever? |___| |___|

c. Kidney disease? |___| |___|

d. Bladder disease? |___| |___|

e. Diabetes? |___| |___|

f. Jaundice? |___| |___|

19. CHEST COLDS AND CHEST ILLNESSES

19A. If you get a cold, does it usually go to your chest? (Usually means more then 1/2 the time) 1. Yes ___ 2. No ___ 3. Don't get colds___

20A. During the past 3 years, have you had any chest illnesses that have kept you off work, indoors at home, or in bed? 1. Yes ___ 2. No ___

IF YES TO 20A:

B. Did you produce phlegm with any of these chest illness? 1. Yes ___ 2. No ___ 3. Does not apply ___

C. In the last 3 years, how many illnesses with (increased) phlegm did you have which lasted a week or more? Number of illnesses ___ No such illnesses ___

21. Did you have any lung trouble before the age of 16? 1. Yes ___ 2. No ___

22. Have you ever had any of the following?

1A. Attacks of bronchitis? 1. Yes ___ 2. No ___

| | | |
|---|---|---|
| | IF YES TO 1A: | |
| B. | Was it confirmed by a doctor? | 1. Yes __ 2. No __<br>3. Does not apply __ |
| C. | At what age was your first attack? | Age in Years __<br>Does not apply __ |
| 2A. | Pneumonia (including bronchopneumonia)? | 1. Yes __ 2. No __ |
| | IF YES TO 2A: | |
| B. | Was it confirmed by a doctor? | 1. Yes __ 2. No __<br>3. Does Not Apply __ |
| C. | At what age did you first have it? | Age in Years __<br>Does Not Apply __ |
| 3A. | Hay Fever? | 1. Yes __ 2. No __ |
| | IF YES TO 3A: | |
| B. | Was it confirmed by a doctor? | 1. Yes __ 2. No __<br>3. Does Not Apply __ |
| C. | At what age did it start? | Age in Years __<br>Does Not Apply __ |
| 23A. | Have you ever had chronic bronchitis? | 1. Yes __ 2. No __ |
| | IF YES TO 23A: | |
| B. | Do you still have it? | 1. Yes __ 2. No __<br>3. Does Not Apply __ |
| C. | Was it confirmed by a doctor? | 1. Yes __ 2. No __<br>3. Does Not Apply __ |
| D. | At what age did it start? | Age in Years __<br>Does Not Apply __ |
| 24A. | Have you ever had emphysema? | 1. Yes __ 2. No __ |
| | IF YES TO 24A: | |
| B. | Do you still have it? | 1. Yes __ 2. No __<br>3. Does Not Apply __ |
| C. | Was it confirmed by a doctor? | 1. Yes __ 2. No __<br>3. Does Not Apply __ |
| D. | At what age did it start? | Age in Years __<br>Does Not Apply __ |
| 25A. | Have you ever had asthma? | 1. Yes __ 2. No __ |
| | IF YES TO 25A: | |
| B. | Do you still have it? | 1. Yes __ 2. No __<br>3. Does Not Apply __ |
| C. | Was it confirmed by a doctor? | 1. Yes __ 2. No __<br>3. Does Not Apply __ |
| D. | At what age did it start? | Age in Years __<br>Does Not Apply __ |

E. If you no longer have it, at what age did it stop? Age Stopped ___ Does Not Apply ___

26. Have you ever had:

A. Any other chest illness? 1. Yes ___ 2. No ___
If yes, please specify _____

B. Any chest operations? 1. Yes ___ 2. No ___
If yes, please specify _____

C. Any chest injuries? 1. Yes ___ 2. No ___
If yes, please specify _____

27A. Has a doctor ever told you that you had heart trouble? 1. Yes ___ 2. No ___

IF YES TO 27A:
B. Have you ever had treatment for heart trouble in the past 10 years? 1. Yes ___ 2. No ___ 3. Does Not Apply ___

28A. Has a doctor ever told you that you had high blood pressure? 1. Yes ___ 2. No ___

IF YES TO 28A:
B. Have you had any treatment for high blood pressure (hypertension) in the past 10 years? 1. Yes ___ 2. No ___ 3. Does Not Apply ___

29. When did you last have your chest X-rayed? (Year) 25 26 27 28

30. Where did you last have your chest X-rayed (if known) _____

What was the outcome? _____

FAMILY HISTORY

31. Were either of your natural parents ever told by a doctor that they had a chronic lung conditions such as:

| | Father | | | Mother | | |
|---|---|---|---|---|---|---|
| | 1. Yes | 2. No | 3. Don't Know | 1. Yes | 2. No | 3. Don't Know |
| A. Chronic Bronchitis? | ___ | ___ | ___ | ___ | ___ | ___ |
| B. Emphysema? | ___ | ___ | ___ | ___ | ___ | ___ |
| C. Asthma? | ___ | ___ | ___ | ___ | ___ | ___ |

| | Father 1. Yes | Father 2. No | Father 3. Don't Know | Mother 1. Yes | Mother 2. No | Mother 3. Don't Know |
|---|---|---|---|---|---|---|
| D. Lung cancer? | ___ | ___ | ___ | ___ | ___ | ___ |
| E. Other chest conditions | ___ | ___ | ___ | ___ | ___ | ___ |
| F. Is parent currently alive? | ___ | ___ | ___ | ___ | ___ | ___ |

G. Please Specify

Father: _____ Age if Living
_____ Age at Death
_____ Don't Know

Mother: _____ Age if Living
_____ Age at Death
_____ Don't Know

H. Please specify cause of death

_____ _____

COUGH

32A. Do you usually have a cough? (Count a cough with first smoke or on first going out of doors. Exclude clearing of throat.) [If no, skip to question 32C.] — 1. Yes ___ 2. No ___

B. Do you usually cough as much as 4 to 6 times a day 4 or more days out of the week? — 1. Yes ___ 2. No ___

C. Do you usually cough at all on getting up or first thing in the morning? — 1. Yes ___ 2. No ___

D. Do you usually cough at all during the rest of the day or at night? — 1. Yes ___ 2. No ___

IF YES TO ANY OF ABOVE (32A, B, C, OR D), ANSWER THE FOLLOWING. IF NO TO ALL, CHECK DOES NOT APPLY AND SKIP TO NEXT PAGE

E. Do you usually cough like this on most days for 3 consecutive months or more during the year? — 1. Yes ___ 2. No ___ 3. Does not apply ___

F. For how many years have you had the cough? — Number of Years ___ Does not apply ___

33A. Do you usually bring up phlegm from your chest? (Count phlegm with the first smoke or on first going out of doors. Exclude phlegm from the nose. Count swallowed phlegm.) (If no, skip to 33C) — 1. Yes ___ 2. No ___

B. Do you usually bring up phlegm like this as much as twice a day 4 or more days out of the week? — 1. Yes ___ 2. No ___

C. Do you usually bring up phlegm at all on getting up or first thing in the morning? — 1. Yes ___ 2. No ___

| | | |
|---|---|---|
| D. | Do you usually bring up phlegm at all during the rest of the day or at night? | 1. Yes ___ 2. No ___ |

IF YES TO ANY OF THE ABOVE (33A, B, C, OR D), ANSWER THE FOLLOWING:
IF NO TO ALL, CHECK DOES NOT APPLY AND SKIP TO 34A.

| | | |
|---|---|---|
| E. | Do you bring up phlegm like this on most days for 3 consecutive months or more during the year? | 1. Yes ___ 2. No ___<br>3. Does not apply ___ |
| F. | For how many years have you had trouble with phlegm? | Number of years ___<br>Does not apply ___ |

EPISODES OF COUGH AND PHLEGM

| | | |
|---|---|---|
| 34A. | Have you had periods of episodes of (increased*) cough and phlegm lasting for 3 weeks or more each year?<br>*(For persons who usually have cough and/or phlegm) | 1. Yes ___ 2. No ___ |
| | If YES to 34A | |
| B. | For how long have you had at least 1 such episode per year? | Number of years ___<br>Does not apply ___ |

WHEEZING

| | | |
|---|---|---|
| 35A. | Does your chest ever sound wheezy or whistling | |
| | 1. When you have a cold? | 1. Yes ___ 2. No ___ |
| | 2. Occasionally apart from colds? | 1. Yes ___ 2. No ___ |
| | 3. Most days or nights? | 1. Yes ___ 2. No ___ |
| | IF YES TO 1, 2, OR 3 IN 35A | |
| B. | For how many years has this been present? | Number of years ___<br>Does not apply ___ |
| 36A. | Have you ever had an attack of wheezing that has made you feel short of breath? | 1. Yes ___ 2. No ___ |
| | IF YES TO 36A | |
| B. | How old were you when you had your first such attack? | Age in years ___<br>Does not apply ___ |
| C. | Have you had 2 or more such episodes? | 1. Yes ___ 2. No ___<br>3. Does not apply ___ |
| D. | Have you ever required medicine or treatment for the(se) attack(s)? | 1. Yes ___ 2. No ___<br>3. Does not apply ___ |

BREATHLESSNESS

| | | |
|---|---|---|
| 37. | If disabled from walking by any condition other than heart or lung disease, please describe and proceed to question 39A. Nature of condition(s) _____ | |
| 38A. | Are you troubled by shortness of breath when hurrying on the level or walking up a slight hill? | 1. Yes __ 2. No __ |
| | IF YES TO 38 A | |
| B. | Do you have to walk slower than people of your age on the level because of breathlessness? | 1. Yes __ 2. No __<br>3. Does not apply __ |
| C. | Do you ever have to step for breath when walking at your own pace on the level? | 1. Yes __ 2. No __<br>3. Does not apply __ |
| D. | Do you ever have to stop for breath after walking about 100 yards (or after a few minutes) on the level? | 1. Yes __ 2. No __<br>3. Does not apply __ |
| E. | Are you too breathless to leave the house or breathless on dressing or climbing one flight of stairs? | 1. Yes __ 2. No __<br>3. Does not apply __ |

TOBACCO SMOKING

| | | |
|---|---|---|
| 39A. | Have you ever smoked cigarettes? (No means less than 20 packs of cigarettes or 12 oz. of tobacco in a lifetime or less than 1 cigarette a day for 1 year). | 1. Yes __ 2. No __ |
| | IF YES TO 39A | |
| B. | Do you now smoke cigarettes (as of one months ago) | 1. Yes __ 2. No __<br>3. Does not apply __ |
| C. | How old were you when you first started regular cigarette smoking? | Age in years __<br>Does not apply __ |
| D. | If you have stopped smoking cigarettes completely, how old were you when you stopped? | Age stopped __<br>Check if still smoking __<br>Does not apply __ |
| E. | How many cigarettes do you smoke per day now? | Cigarettes per day __<br>Does not apply __ |
| F. | On the average of the entire time you smoked, how many cigarettes did you smoke per day? | Cigarettes per day __<br>Does not apply __ |

G. Do or did you inhale the cigarette smoke?
1. Does not apply ___
2. Not at all ___
3. Slightly ___
4. Moderately ___
5. Deeply ___

40A. Have you ever smoked a pipe regularly? (Yes means more than 12 oz. of tobacco in a lifetime.) 1. Yes ___ 2. No ___

IF YES TO 40A:
FOR PERSONS WHO HAVE EVER SMOKED A PIPE

B. 1. How old were you when you started to smoke a pipe regularly? Age ___

2. If you have stopped smoking a pipe completely, how old were you when you stopped?
Age stopped ___ ___
Check if still smoking a pipe ___
Does not apply ___ ___

C. On the average over the entire time you smoked a pipe, how much pipe tobacco did you smoke per week?
___ oz. per week (a standard pouch of tobacco contains 1 1/2 oz.)
___ Does not apply

D. How much pipe tobacco are you smoking now?
oz. per week ___
Not currently smoking a pipe

E. Do you or did you inhale the pipe smoke?
1. Never smoked ___
2. Not at all ___
3. Slightly ___
4. Moderately ___
5. Deeply ___

41A. Have you ever smoked cigars regularly? (Yes means more than 1 cigar a week for a year) 1. Yes ___ 2. No ___

IF YES TO 41A
FOR PERSONS WHO HAVE EVER SMOKED CIGARS

B. 1. How old were you when you started smoking cigars regularly? Age ___

2. If you have stopped smoking cigars completely, how old were you when you stopped?
Age stopped ___
Check if still smoking cigars ___
Does not apply ___

C. On the average over the entire time you smoked cigars, how many cigars did you smoke per week?
Cigars per week ___
Does not apply ___

| | | | |
|---|---|---|---|
| D. | How many cigars are you smoking per week now? | Cigars per week | ___ |
| | | Check if not smoking cigars currently | ___ |
| E. | Do or did you inhale the cigar smoke? | 1. Never smoked | ___ |
| | | 2. Not at all | ___ |
| | | 3. Slightly | ___ |
| | | 4. Moderately | ___ |
| | | 5. Deeply | ___ |

Signature _____ Date _____

Part 2
PERIODIC MEDICAL QUESTIONNAIRE

1. NAME _____

2. SOCIAL SECURITY # ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
1 2 3 4 5 6 7 8 9

3. CLOCK NUMBER ___ ___ ___ ___ ___ ___
10 11 12 13 14 15

4. PRESENT OCCUPATION _____

5. PLANT _____

6. ADDRESS _____

7. _____
(Zip Code)

8. TELEPHONE NUMBER _____

9. INTERVIEWER _____

10. DATE _____ ___ ___ ___ ___ ___ ___ ___
16 17 18 19 20 21

11. What is your marital status?
1. Single ___
2. Married ___
3. Widowed ___
4. Separated/ Divorced ___

12. OCCUPATIONAL HISTORY

12A. In the past year, did you work full time (30 hours per week or more) for 6 months or more? 1. Yes ___ 2. No ___

12B. IF YES TO 12A:

In the past year, did you work in a dusty job? 1. Yes ___ 2. No ___ 3. Does not apply ___

12C. Was dust exposure: 1. Mild ___ 2. Moderate ___ 3. Severe ___

12D. In the past year, were you exposed to gas or chemical fumes in your work? 1. Yes ___ 2. No ___

12E. Was exposure: 1. Mild ___ 2. Moderate ___ 3. Severe ___

12F. In the past year, what was your:
1. Job/occupation? _____
2. Position/job title? _____

13. RECENT MEDICAL HISTORY

13A. Do you consider yourself to be in good health? Yes _____ No _____

If NO, state reason _____

13B. In the past year, have you developed:

| | Yes | No |
|---|---|---|
| Epilepsy? | ___ | ___ |
| Rheumatic fever? | ___ | ___ |
| Kidney disease? | ___ | ___ |
| Bladder disease? | ___ | ___ |
| Diabetes? | ___ | ___ |
| Jaundice? | ___ | ___ |
| Cancer? | ___ | ___ |

14. CHEST COLDS AND CHEST ILLNESSES

14A. If you get a cold, does it usually go to your chest? (Usually means more than 1/2 the time)

1. Yes ___ No ___
3. Don't get colds ___

15A. During the past year, have you had any chest illnesses that have kept you off work, indoors at home, or in bed?

1. Yes ___ 2. No ___
3. Does not apply ___

IF YES TO 15A:

15B. Did you produce phlegm with any of these chest illnesses

1. Yes ___ 2. No ___
3. Does not apply ___

15C. In the past year, how many such illnesses with (increased) phlegm did you have which lasted a week or more?

Number of illnesses ___
No such illnesses ___

16. RESPIRATORY SYSTEM

In the past year have you had:

| | Yes or No | Further Comment on Positive Answers |
|---|---|---|
| Asthma | _____ | |
| Bronchitis | _____ | |
| Hay Fever | _____ | |
| Other Allergies | _____ | |

| | Yes or No | Further Comment on Positive Answers |
|---|---|---|
| Pneumonia | _____ | |
| Tuberculosis | _____ | |
| Chest Surgery | _____ | |
| Other Lung Problems | _____ | |
| Heart Disease | _____ | |
| Do you have: | | |
| Frequent colds | _____ | |
| Chronic cough | _____ | |
| Shortness of breath when walking or climbing one flight of stairs | _____ | |
| Do you: | | |
| Wheeze | _____ | |
| Cough up phlegm | _____ | |
| Smoke cigarettes | _____ | Packs per day ___ How many years ___ |

Date _____ Signature _____

APPENDIX E TO § 763.121—INTERPRETATION AND CLASSIFICATION OF CHEST ROENTGENOGRAMS—MANDATORY

(a) Chest roentgenograms shall be interpreted and classified in accordance with a professionally accepted classification system and recorded on an interpretation form following the format of the CDC/NIOSH (M) 2.8 form. As a minimum, the content within the boldlines of this form (items 1 through 4) shall be included. This form is not to be submitted to NIOSH.

(b) Roentgenograms shall be interpreted and classified only by a B-reader, a board eligible/certified radiologist, or an experienced physician with known expertise in pneumoconioses.

(c) All interpreters, whenever interpreting chest roentgenograms made under this section, shall have immediately available for reference a complete set of the ILO–U/C International Classification of Radiographs for Pneumoconioses, 1980.

[52 FR 5623, Feb. 25, 1987; 52 FR 10817, Mar. 30, 1987; 53 FR 1022, Jan. 15, 1988]

### § 763.122 Exclusions for States.

(a) The States of Idaho, Kansas, Oklahoma, and Wisconsin have 6 months or such other reasonable time as suggested by the particular State and approved by the Director of the Office of Pollution Prevention and Toxics to make their regulations comparable to or more stringent than this part, and to submit their regulations to EPA's Office of Pollution Prevention and Toxics for review. If in such reasonable time after March 27, 1987, any of these States have not so revised their regulations and submitted them to EPA, State and local government employees in such States shall be covered by the requirements of this part.

(b) Any other State that wishes to be excluded from this rule shall send a copy of a regulation which it considers to be comparable to or more stringent than this part to EPA's Office of Pollution Prevention and Toxics for review. EPA will review the regulation and tentatively determine whether the regulation is comparable to or more stringent than this part. If EPA makes a positive tentative determination, EPA will propose an amendment to this rule excluding that State from coverage. Interested persons may comment on the proposed exclusion during the period for public comment. After considering any comments, EPA may promulgate the final amendment to the rule.

### § 763.124 Reporting.

(a) Employers subject to this rule must report to the Regional Asbestos Coordinator for the EPA Region in which the asbestos abatement project is located at least 10 days before they begin any asbestos abatement project, except one that involves less than either 3 linear feet or 3 square feet of friable asbestos material, and an emergency project. Employers must report any emergency project covered by this rule as soon as possible but in no case more than 48 hours after the project begins. A list of the EPA Regional Offices is given under § 1.7(b) of this chapter.

(b) The report must include:

(1) The employer's name and address.

(2) The location, including street address, of the asbestos abatement project.

(3) The scheduled starting and completion dates for the asbestos abatement project.

(c) If a report is mailed to EPA, the report must be postmarked at least 10 days before the asbestos abatement project begins unless the report is for an emergency project. In such a case, the report must be postmarked as soon as possible but in no case more than 48 hours after the project begins.

(d) Employers do not have to report under this section if they submit a notice to EPA under the National Emission Standard for Asbestos, § 61.146 of this chapter, at least 10 days before they begin the asbestos abatement project and that notice clearly indicates that employees covered by this rule will perform some or all of the asbestos abatement work.

[47 FR 23369, May 27, 1982, as amended at 58 FR 34205, June 23, 1993]

### § 763.125 Enforcement.

(a) Failure to comply with any provision of this part is a violation of section 15 of the Act (15 U.S.C. 2614).

(b) Failure or refusal to establish and maintain records or to permit access to or copying of records, as required by the Act, is a violation of section 15 of the Act (15 U.S.C. 2614).

(c) Failure or refusal to permit entry or inspection as required by section 11 of the Act (15 U.S.C. 2610) is a violation of section 15 of the Act (15 U.S.C. 2614).

(d) Violators may be subject to the civil and criminal penalties in section 16 of the Act (15 U.S.C. 2615) for each violation.

(e) EPA may seek to enjoin an asbestos abatement project in violation of this part, or take other actions under the authority of section 7 or 17 of the Act (15 U.S.C. 2606 or 2616).

### § 763.126 Inspections.

EPA will conduct inspections under section 11 of the Act (15 U.S.C. 2610) to ensure compliance with this part.

## Subpart H—[Reserved]

## Subpart I—Prohibition of the Manufacture, Importation, Processing, and Distribution in Commerce of Certain Asbestos-Containing Products; Labeling Requirements

SOURCE: 54 FR 29507, July 12, 1989, unless otherwise noted.

### § 763.160 Scope.

This subpart prohibits the manufacture, importation, processing, and distribution in commerce of the asbestos-containing products identified and at the dates indicated in §§ 763.165, 763.167, and 763.169. This subpart requires that products subject to this rule's bans, but not yet subject to a ban on distribution in commerce, be labeled. This subpart also includes general exemptions and procedures for requesting exemptions from the provisions of this subpart.

### § 763.163 Definitions.

For purposes of this subpart:

*Act* means the Toxic Substances Control Act, 15 U.S.C. 2601 *et seq.*

*Agency* means the United States Environmental Protection Agency.

*Asbestos* means the asbestiform varieties of: chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite-grunerite); tremolite; anthophyllite; and actinolite.

*Asbestos-containing product* means any product to which asbestos is deliberately added in any concentration or which contains more than 1.0 percent asbestos by weight or area.

*Chemical substance*, has the same meaning as in section 3 of the Act.

*Commerce* has the same meaning as in section 3 of the Act.

*Commercial paper* means an asbestos-containing product which is made of paper intended for use as general insulation paper or muffler paper. Major applications of commercial papers are insulation against fire, heat transfer, and corrosion in circumstances that require a thin, but durable, barrier.

*Corrugated paper* means an asbestos-containing product made of corrugated paper, which is often cemented to a flat backing, may be laminated with foils or other materials, and has a corrugated surface. Major applications of asbestos corrugated paper include: thermal insulation for pipe coverings; block insulation; panel insulation in elevators; insulation in appliances; and insulation in low-pressure steam, hot water, and process lines.

*Customs territory of the United States* means the 50 States, Puerto Rico, and the District of Columbia.

*Distribute in commerce* has the same meaning as in section 3 of the Act, but the term does not include actions taken with respect to an asbestos-containing product (to sell, resale, deliver, or hold) in connection with the end use of the product by persons who are users (persons who use the product for its intended purpose after it is manufactured or processed). The term also does not include distribution by manufacturers, importers, and processors, and other persons solely for purposes of disposal of an asbestos-containing product.

*Flooring felt* means an asbestos-containing product which is made of paper felt intended for use as an underlayer for floor coverings, or to be bonded to the underside of vinyl sheet flooring.

*Import* means to bring into the customs territory of the United States, except for: (1) Shipment through the customs territory of the United States for export without any use, processing, or disposal within the customs territory of the United States; or (2) entering the customs territory of the United States

as a component of a product during normal personal or business activities involving use of the product.

*Importer* means anyone who imports a chemical substance, including a chemical substance as part of a mixture or article, into the customs territory of the United States. *Importer* includes the person primarily liable for the payment of any duties on the merchandise or an authorized agent acting on his or her behalf. The term includes as appropriate:

(1) The consignee.

(2) The importer of record.

(3) The actual owner if an actual owner's declaration and superseding bond has been filed in accordance with 19 CFR 141.20.

(4) The transferee, if the right to withdraw merchandise in a bonded warehouse has been transferred in accordance with subpart C of 19 CFR Part 144.

*Manufacture* means to produce or manufacture in the United States.

*Manufacturer* means a person who produces or manufactures in the United States.

*New uses of asbestos* means commercial uses of asbestos not identified in § 763.165 the manufacture, importation or processing of which would be initiated for the first time after August 25, 1989.

*Person* means any natural person, firm, company, corporation, joint-venture, partnership, sole proprietorship, association, or any other business entity; any State or political subdivision thereof, or any municipality; any interstate body and any department, agency, or instrumentality of the Federal Government.

*Process* has the same meaning as in section 3 of the Act.

*Processor* has the same meaning as in section 3 of the Act.

*Rollboard* means an asbestos-containing product made of paper that is produced in a continuous sheet, is flexible, and is rolled to achieve a desired thickness. Asbestos rollboard consists of two sheets of asbestos paper laminated together. Major applications of this product include: office partitioning; garage paneling; linings for stoves and electric switch boxes; and fire-proofing agent for security boxes, safes, and files.

*Specialty paper* means an asbestos-containing product that is made of paper intended for use as filters for beverages or other fluids or as paper fill for cooling towers. Cooling tower fill consists of asbestos paper that is used as a cooling agent for liquids from industrial processes and air conditioning systems.

*State* has the same meaning as in section 3 of the Act.

*Stock-on-hand* means the products which are in the possession, direction, or control of a person and are intended for distribution in commerce.

*United States* has the same meaning as in section 3 of the Act.

[59 FR 33208, June 28, 1994]

### § 763.165 Manufacture and importation prohibitions.

(a) After August 27, 1990, no person shall manufacture or import the following asbestos-containing products, either for use in the United States or for export: flooring felt and new uses of asbestos.

(b) After August 26, 1996, no person shall manufacture or import the following asbestos-containing products, either for use in the United States or for export: commercial paper, corrugated paper, rollboard, and specialty paper.

(c) The import prohibitions of this subpart do not prohibit:

(1) The import into the customs territory of the United States of products imported solely for shipment outside the customs territory of the United States, unless further repackaging or processing of the product is performed in the United States; or

(2) Activities involving purchases or acquisitions of small quantities of products made outside the customs territory of the United States for personal use in the United States.

[59 FR 33209, June 28, 1994]

### § 763.167 Processing prohibitions.

(a) After August 27, 1990, no person shall process for any use, either in the United States or for export, any of the asbestos-containing products listed at § 763.165(a).

(b) After August 26, 1996, no person shall process for any use, either in the

United States or for export, any of the asbestos-containing products listed at § 763.165(b).

[59 FR 33209, June 28, 1994]

### § 763.169 Distribution in commerce prohibitions.

(a) After August 25, 1992, no person shall distribute in commerce, either for use in the United States or for export, any of the asbestos-containing products listed at § 763.165(a).

(b) After August 25, 1997, no person shall distribute in commerce, either for use in the United States or for export, any of the asbestos-containing products listed at § 763.165(b).

(c) A manufacturer, importer, processor, or any other person who is subject to a ban on distribution in commerce in paragraph (a) or (b) of this section must, within 6 months of the effective date of the ban of a specific asbestos-containing product from distribution in commerce, dispose of all their remaining stock-on-hand of that product, by means that are in compliance with applicable local, State, and Federal restrictions which are current at that time.

[59 FR 33209, June 28, 1994]

### § 763.171 Labeling requirements.

(a) After August 27, 1990, manufacturers, importers, and processors of all asbestos-containing products that are identified in § 763.165(a) shall label the products as specified in this subpart at the time of manufacture, import, or processing. This requirement includes labeling all manufacturers', importers', and processors' stock-on-hand as of August 27, 1990.

(b) After August 25, 1995, manufacturers, importers, and processors of all asbestos-containing products that are identified in § 763.165(b), shall label the products as specified in this subpart at the time of manufacture, import, or processing. This requirement includes labeling all manufacturers', importers', and processors' stock-on-hand as of August 25, 1995.

(c) The label shall be placed directly on the visible exterior of the wrappings and packaging in which the product is placed for sale, shipment, or storage. If the product has more than one layer of external wrapping or packaging, the label must be attached to the innermost layer adjacent to the product. If the innermost layer of product wrapping or packaging does not have a visible exterior surface larger than 5 square inches, either a tag meeting the requirements of paragraph (d) of this section must be securely attached to the product's innermost layer of product wrapping or packaging, or a label must be attached to the next outer layer of product packaging or wrapping. Any products that are distributed in commerce to someone other than the end user, shipped, or stored without packaging or wrapping must be labeled or tagged directly on a visible exterior surface of the product as described in paragraph (d) of this section.

(d)(1) Labels must be either printed directly on product packaging or in the form of a sticker or tag made of plastic, paper, metal, or other durable substances. Labels must be attached in such a manner that they cannot be removed without defacing or destroying them. Product labels shall appear as in paragraph (d)(2) of this section and consist of block letters and numerals of color that contrasts with the background of the label or tag. Labels shall be sufficiently durable to equal or exceed the life, including storage and disposal, of the product packaging or wrapping. The size of the label or tag must be at least 15.25 cm (6 inches) on each side. If the product packaging is too small to accommodate a label of this size, the label may be reduced in size proportionately to the size of the product packaging or wrapping down to a minimum 2.5 cm (1 inch) on each side if the product wrapping or packaging has a visible exterior surface larger than 5 square inches.

(2) Products subject to this subpart shall be labeled in English as follows:

NOTICE

This product contains *ASBESTOS*. The U.S. Environmental Protection Agency has banned the distribution in U.S. commerce of this product under section 6 of the Toxic Substances Control Act (15 U.S.C. 2605) as of (insert effective date of ban on distribution in commerce). Distribution of this product in commerce after this date and intentionally removing or tampering with this label are *violations of Federal law*.

(e) No one may intentionally remove, deface, cover, or otherwise obscure or tamper with a label or sticker that has been applied in compliance with this section, except when the product is used or disposed of.

[59 FR 33209, June 28, 1994]

**§ 763.173 Exemptions.**

(a) Persons who are subject to the prohibitions imposed by §§ 763.165, 763.167, or 763.169 may file an application for an exemption. Persons whose exemption applications are approved by the Agency may manufacture, import, process, or distribute in commerce the banned product as specified in the Agency's approval of the application. No applicant for an exemption may continue the banned activity that is the subject of an exemption application after the effective date of the ban unless the Agency has granted the exemption or the applicant receives an extension under paragraph (b)(4) or (5) of this section.

(b) Application filing dates. (1) Applications for products affected by the prohibitions under §§763.165(a) and 763.167(a) may be submitted at any time and will be either granted or denied by EPA as soon as is feasible.

(2) Applications for products affected by the ban under §763.169(a) may be submitted at any time and will be either granted or denied by EPA as soon as is feasible.

(3) Applications for products affected by the ban under §§763.165(b) and 763.167(b) may not be submitted prior to February 27, 1995. Complete applications received after that date, but before August 25, 1995, will be either granted or denied by the Agency prior to the effective date of the ban for the product. Applications received after August 25, 1995, will be either granted or denied by EPA as soon as is feasible.

(4) Applications for products affected by the ban under § 763.169(b) may not be submitted prior to February 26, 1996. Complete applications received after that date, but before August 26, 1996, will be either granted or denied by the Agency prior to the effective date of the ban for the product. Applications received after August 26, 1996, will be either granted or denied by EPA as soon as is feasible.

(5) The Agency will consider an application for an exemption from a ban under § 763.169 for a product at the same time the applicant submits an application for an exemption from a ban under § 763.165 or § 763.167 for that product. EPA will grant an exemption at that time from a ban under § 763.169 if the Agency determines it appropriate to do so.

(6) If the Agency denies an application less than 30 days before the effective date of a ban for a product, the applicant can continue the activity for 30 days after receipt of the denial from the Agency.

(7) If the Agency fails to meet the deadlines stated in paragraphs (b)(3) and (b)(4) of this section for granting or denying a complete application in instances in which the deadline is before the effective date of the ban to which the application applies, the applicant will be granted an extension of 1 year from the Agency's deadline date. During this extension period the applicant may continue the activity that is the subject of the exemption application. The Agency will either grant or deny the application during the extension period. The extension period will terminate either on the date the Agency grants the application or 30 days after the applicant receives the Agency's denial of the application. However, no extension will be granted if the Agency is scheduled to grant or deny an application at some date after the effective date of the ban, pursuant to the deadlines stated in paragraphs (b)(3) and (b)(4) of this section.

(c) Where to file. All applications must be submitted to the following location: TSCA Docket Receipts Office (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Rm E–G99, 401 M St., SW., Washington, DC 20460, ATTENTION: Asbestos Exemption. For information regarding the submission of exemptions containing information claimed as confidential business information (CBI), see § 763.179.

(d) Content of application and criteria for decisionmaking.

(1) Content of application. Each application must contain the following:

(i) Name, address, and telephone number of the applicant.

(ii) Description of the manufacturing, import, processing, and/or distribution in commerce activity for which an exemption is requested, including a description of the asbestos-containing product to be manufactured, imported, processed, or distributed in commerce.

(iii) Identification of locations at which the exempted activity would take place.

(iv) Length of time requested for exemption (maximum length of an exemption is 4 years).

(v) Estimated amount of asbestos to be used in the activity that is the subject of the exemption application.

(vi) Data demonstrating the exposure level over the life cycle of the product that is the subject of the application.

(vii) Data concerning:

(A) The extent to which non-asbestos substitutes for the product that is the subject of the application fall significantly short in performance under necessary product standards or requirements, including laws or ordinances mandating product safety standards.

(B) The costs of non-asbestos substitutes relative to the costs of the asbestos-containing product and, in the case in which the product is a component of another product, the effect on the cost of the end use product of using the substitute component.

(C) The extent to which the product or use serves a high-valued use.

(viii) Evidence of demonstrable good faith attempts by the applicant to develop and use a non-asbestos substance or product which may be substituted for the asbestos-containing product or the asbestos in the product or use that is the subject to the application.

(ix) Evidence, in addition to that provided in the other information required with the application, showing that the continued manufacture, importation, processing, distribution in commerce, and use, as applicable, of the product will not present an unreasonable risk of injury to human health.

(2) Criteria for decision (existing products). After considering all the information provided by an applicant under paragraphs (d)(1) and (e) of this section, and any other information available to EPA, EPA will grant an exemption from the prohibitions in §§ 763.165, 763.167, or 763.169 for an applicant's asbestos-containing product only if EPA determines both of the following:

(i) The applicant has made good faith attempts to develop and use a non-asbestos substance or product which may be substituted for the asbestos-containing product or the asbestos in the product or use, and those attempts have failed to produce a substitute or a substitute that results in a product that can be economically produced.

(ii) Continued manufacturing, processing, distribution in commerce, and use, as applicable, of the product will not present an unreasonable risk of injury to human health.

(3) Criteria for decision (new products). Requests to develop and use an asbestos substance or product will be treated as a petition pursuant to Section 21 of TSCA.

(e) The Agency reserves the right to request further information from an exemption applicant if necessary to complete the Agency's evaluation of an application.

(f) Upon receipt of a complete application, the Agency will issue a notice in the FEDERAL REGISTER announcing its receipt and invite public comments on the merits of the application.

(g) If the application does not include all of the information required in paragraph (d) of this section, the Agency will return it to the applicant as incomplete and any resubmission of the application will be considered a new application for purposes of the availability of any extension period. If the application is substantially inadequate to allow the Agency to make a reasoned judgment on any of the information required in paragraph (d) of this section and the Agency chooses to request additional information from the applicant, the Agency may also determine that an extension period provided for in paragraph (b)(5) of this section is unavailable to the applicant.

(h) When denying an application, the Agency will notify the applicant by registered mail of its decision and rationale. Whenever possible, the Agency will send this letter prior to the appropriate ban. This letter will be considered a final Agency action for purposes of judicial review. A notice announcing the Agency's denial of the application

will be published in the FEDERAL REGISTER.

(i) If the Agency proposes to approve an exemption, it will issue a notice in the FEDERAL REGISTER announcing this intent and invite public comments. If, after considering any timely comments received, the Agency approves an exemption, its decision will be published in the FEDERAL REGISTER. This notice will be considered a final Agency action for purposes of judicial review.

(j) The length of an exemption period will be specified by the agency when it approves the exemption. To extend an exemption period beyond the period stipulated by EPA, applicants must submit a new application to the Agency, following the application procedures described in this section. Applications may not be submitted prior to 15 months before the expiration of the exemption period, unless stated otherwise in the notice granting the exemption. Applications received between 15 months and 1 year before the end of the exemption period will be either granted or denied by the Agency before the end of the exemption period. Applications received after the date 1 year prior to the end of the exemption period will be either granted or denied by the Agency as soon as is feasible. Applicants may not continue the activity that is the subject of the renewal application after the date of the end of the exemption period.

[54 FR 29507, July 12, 1989; 54 FR 37531, Sept. 11, 1989, as amended at 54 FR 46898, Nov. 8, 1989; 59 FR 33210, June 28, 1994]

### § 763.175 Enforcement.

(a) Failure to comply with any provision of this subpart is a violation of section 15 of the Act (15 U.S.C. 2614).

(b) Failure or refusal to establish and maintain records, or to permit access to or copying of records as required by section 11 of the Act (15 U.S.C. 2610) is a violation of section 15 of the Act (15 U.S.C. 2614).

(c) Failure or refusal to permit entry or inspection as required by section 11 of the Act (15 U.S.C. 2610) is a violation of section 15 of the Act (15 U.S.C. 2614).

(d) Violators may be subject to the civil and criminal penalties in section 16 of the Act (15 U.S.C. 2615) for each violation.

(e) The Agency may seek to enjoin the manufacture, import, processing, or distribution in commerce of asbestos-containing products in violation of this subpart, or act to seize any asbestos-containing products manufactured, imported, processed, or distributed in commerce in violation of this subpart, or take any other actions under the authority of section 7 or 17 of the act (15 U.S.C. 2606 or 2616) that are appropriate.

### § 763.176 Inspections.

The Agency will conduct inspections under section 11 of the Act (15 U.S.C. 2610) to ensure compliance with this subpart.

### § 763.178 Recordkeeping.

(a) *Inventory*. (1) Each person who is subject to the prohibitions imposed by §§ 763.165 and 763.167 must perform an inventory of the stock-on-hand of each banned product as of the effective date of the ban for that product for the applicable activity.

(2) The inventory shall be in writing and shall include the type of product, the number of product units currently in the stock-on-hand of the person performing the inventory, and the location of the stock.

(3) Results of the inventory for a banned product must be maintained by the person for 3 years after the effective date of the § 763.165 or § 763.167 ban on the product.

(b) *Records*. (1) Each person whose activities are subject to the bans imposed by §§ 763.165, 763.167, and 763.169 for a product must, between the effective date of the § 763.165 or § 763.167 ban on the product and the § 763.169 ban on the product, keep records of all commercial transactions regarding the product, including the dates of purchases and sales and the quantities purchased or sold. These records must be maintained for 3 years after the effective date of the § 763.169 ban for the product.

(2) Each person who is subject to the requirements of § 763.171 must, for each product required to be labeled, maintain a copy of the label used in compliance with § 763.171. These records must be maintained for 3 years after the effective date of the ban on distribution

in commerce for the product for which the § 763.171 requirements apply.

[54 FR 29507, July 12, 1989, as amended by 54 FR 46898, Nov. 8, 1989; 58 FR 34205, June 23, 1993]

### § 763.179 Confidential business information claims.

(a) Applicants for exemptions under § 763.173 may assert a Confidential Business Information (CBI) claim for information in an exemption application or supplement submitted to the Agency under this subpart only if the claim is asserted in accordance with this section, and release of the information would reveal trade secrets or confidential commercial or financial information, as provided in section 14(a) of the Act. Information covered by a CBI claim will be treated in accordance with the procedures set forth in 40 CFR Part 2, subpart B. The Agency will place all information not claimed as CBI in the manner described in this section in a public file without further notice to the applicant.

(b) Applicants may assert CBI claims only at the time they submit a completed exemption application and only in the specified manner. If no such claim accompanies the information when it is received by the Agency, the information may be made available to the public without further notice to the applicant. Submitters that claim information as business confidential must do so by writing the word ''Confidential'' at the top of the page on which the information appears and by underlining, circling, or placing brackets ([ ]) around the information claimed CBI.

(c) Applicants who assert a CBI claim for submitted information must provide the Agency with two copies of their exemption application. The first copy must be complete and contain all information being claimed as CBI. The second copy must contain only information not claimed as CBI. The Agency will place the second copy of the submission in a public file. Failure to furnish a second copy of the submission when information is claimed as CBI in the first copy will be considered a presumptive waiver of the claim of confidentiality. The Agency will notify the applicant by certified mail that a finding of a presumptive waiver of the claim of confidentiality has been made. The applicant has 30 days from the date of receipt of notification to submit the required second copy. Failure to submit the second copy will cause the Agency to place the first copy in a public file.

(d) Applicants must substantiate all claims of CBI at the time the applicant asserts the claim, i.e., when the exemption application or supplement is submitted, by responding to the questions in paragraph (e) of this section. Failure to provide substantiation of a claim at the time the applicant submits the application will result in a waiver of the CBI claim, and the information may be disclosed to the public without further notice to the applicant.

(e) Applicants who assert any CBI claims must substantiate all claims by providing detailed responses to the following:

(1) Is this information subject to a patent or patent application in the United States or elsewhere? If so, why is confidentiality necessary?

(2) For what period do you assert a claim of confidentiality? If the claim is to extend until a certain event or point in time, please indicate that event or time period. Explain why such information should remain confidential until such point.

(3) Has the information that you are claiming as confidential been disclosed to persons outside of your company? Will it be disclosed to such persons in the future? If so, what restrictions, if any, apply to use or further disclosure of the information?

(4) Briefly describe measures taken by your company to guard against undesired disclosure of the information you are claiming as confidential to others.

(5) Does the information claimed as confidential appear or is it referred to in advertising or promotional materials for the product or the resulting end product, safety data sheets or other similar materials for the product or the resulting end product, professional or trade publications, or any other media available to the public or to your competitors? If you answered yes, indicate where the information appears.

(6) If the Agency disclosed the information you are claiming as confidential to the public, how difficult would it be for the competitor to enter the market for your product? Consider in your answer such constraints as capital and marketing cost, specialized technical expertise, or unusual processes.

(7) Has the Agency, another Federal agency, or a Federal court made any confidentiality determination regarding this information? If so, provide copies of such determinations.

(8) How would your company's competitive position be harmed if the Agency disclosed this information? Why should such harm be considered substantial? Describe the causal relationship between the disclosure and harm.

(9) In light of section 14(b) of TSCA, if you have claimed information from a health and safety study as confidential, do you assert that disclosure of this information would disclose a process used in the manufacturing or processing of a product or information unrelated to the effects of asbestos on human health and the environment? If your answer is yes, explain.

# PART 766—DIBENZO-PARA-DIOXINS/DIBENZOFURANS

## Subpart A—General Provisions

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AUTHORITY: 15 U.S.C. 2603 and 2607.

SOURCE: 52 FR 21437, June 5, 1987, unless otherwise noted.

## Subpart A—General Provisions

### § 766.1 Scope and purpose.

(a) This part identifies requirements for testing under section 4 of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2603, to ascertain whether certain specified chemical substances may be contaminated with halogenated dibenzodioxins (HDDs)/dibenzofurans (HDFs) as defined in § 766.3, and requirements for reporting under section 8 of TSCA, 15 U.S.C. 2607.

(b) Section 766.35(b) requires manufacturers and processors of chemical substances identified in § 766.25 to submit to EPA:

(1) Any existing test data showing analysis of the chemical substances for concentrations of HDDs/HDFs, applicable protocols, and the results of the analysis for HDDs/HDFs, (2) allegations of significant adverse reactions to HDDs/HDFs, compiled in accordance with Part 717 of this chapter, and (3) health and safety studies on the HDDs/HDFs, in accordance with applicable provisions of Part 716 of this chapter.

(c) Section 766.35(a) requires manufacturers and, under certain circumstances, processors of chemical substances identified in § 766.25 to submit letters of intent to test and protocols for the analysis of the chemical substances for the presence of HDDs/HDFs. Section 766.20 requires these manufacturers and processors to test their chemical substances for the presence of HDDs/HDFs. Any submissions must be in accordance with the EPA Procedures Governing Testing Consent Agreements and Test Rules contained in Part 790 of this chapter and any modifications to such procedures contained in this part.

(d) Section 766.32 specifies conditions under which persons required to test may request an exclusion or waiver from testing.

(e) Deadlines for submission to EPA of protocols, reports, studies, and test results are specified in Part 790, subpart C and § 766.35.

(f) Sections 766.10, 766.12, 766.14, 766.16, and 766.18 prescribe analytical methods required; §766.27 prescribes target levels of quantitation (LOQ) for each congener for which quantitation is required.

(g) If results of existing tests or tests performed under this part indicate the presence of HDDs/HDFs in the identified chemical substance above the LOQ specified in §766.27, §766.35(c) requires the following additional reporting on the specified chemicals: production, process, use, exposure and disposal data under section 8(a) of TSCA; health and safety studies under section 8(d) of TSCA; and reports of allegations of significant adverse reactions under section 8(c) of TSCA. In some cases, additional reporting may be required of manufacturers reporting no contamination of the identified chemical substances under §766.35(c)(2).

(h) Section 766.38 requires manufacturers of chemical substances produced from chemical substances identified as possible precursors to HDD/HDF formation, to report on chemical substances produced from such precursors.

### §766.2 Applicability and duration of this part.

(a) *Chemical substances subject to testing.* (1) This part is applicable to each person who, at any time during the duration of this part, manufactures (and/or imports), or processes, a chemical substance identified under §766.25.

(2) The duration of this part for any testing requirement for any chemical substance is the period commencing with the effective date of this part to the end of the reimbursement period, as defined in §766.3, for each chemical substance. All reporting requirements for any chemical substance listed under §766.25 shall be in effect for the same period as the testing requirement.

(b) *Precursor chemical substances.* (1) This part is applicable to each person who manufactures (and/or imports) a chemical substance from any precursor chemical substance identified in §766.38.

(2) The requirement for precursor reporting under §766.38 shall be in effect until three years after the effective date of this part.

(3) Small manufacturers are exempt from reporting process and reaction condition data on chemical substances made from precursor chemical substances listed under §766.38.

### §766.3 Definitions.

The definitions in section 3 of TSCA and the definitions of §§704.3, 716.3, 717.3, and 790.3 of this chapter also apply to this part.

*Congener* means any one particular member of a class of chemical substances. A specific congener is denoted by unique chemical structure, for example 2,3,7,8-tetrachlorodibenzofuran.

*Dibenzofuran* means any of a family of compounds which has as a nucleus a triple-ring structure consisting of two benzene rings connected through a pair of bridges between the benzene rings. The bridges are a carbon-carbon bridge and a carbon-oxygen-carbon bridge at both substitution positions.

*Dibenzo-p-dioxin* or *dioxin* means any of a family of compounds which has as a nucleus a triple-ring structure consisting of two benzene rings connected through a pair of oxygen atoms.

*Guidelines* means the Midwest Research Institute (MRI) publication *Guidelines for the Determination of Polyhalogenated Dioxins and Dibenzofurans in Commercial Products,* EPA contract No. 68–02–3938; MRI Project No. 8201–A(41), 1985.

*HDD* or *2,3,7,8-HDD* means any of the dibenzo-p-dioxins totally chlorinated or totally brominated at the following positions on the molecular structure: 2,3,7,8; 1,2,3,7,8; 1,2,3,4,7,8; 1,2,3,6,7,8; 1,2,3,7,8,9; and 1,2,3,4,7,8,9.

*HDF* or *2,3,7,8-HDF* means any of the dibenzofurans totally chlorinated or totally brominated at the following positions on the molecular structure: 2,3,7,8; 1,2,3,7,8; 2,3,4,7,8; 1,2,3,4,7,8; 1,2,3,6,7,8; 1,2,3,7,8,9; 2,3,4,6,7,8; 1,2,3,4,6,7,8; and 1,2,3,4,7,8,9.

*Homolog* means a group of isomers that have the same degree of halogenation. For example, the homologous class of tetrachlorodibenzo-p-dioxins consists of all dibenzo-p-dioxins containing four chlorine atoms. When the homologous classes discussed in this part are referred to, the following abbreviations for the prefix denoting the number of halogens are used:

tetra-, T (4 atoms)
penta-, Pe (5 atoms)
hexa-, Hx (6 atoms)
hepta-, Hp (7 atoms)

*HRGC* means high resolution gas chromatography.

*HRMS* means high resolution mass spectrometry.

*Level of quantitation* or *LOQ* means the lowest concentration at which HDDs/HDFs can be reproducibly measured in a specific chemical substance within specified confidence limits, as described in this part.

*Polybrominated dibenzofurans* refers to any member of a class of dibenzofurans with two to eight bromine substituents.

*Polybrominated dibenzo-p-dioxin* or *PBDD* means to any member of a class of dibenzo-p-dioxins with two to eight bromine substituents.

*Polychlorinated dibenzofuran* means any member of a class of dibenzofurans with two to eight chlorine substituents.

*Polychlorinated dibenzo-p-dioxin* or *PCDD* means any member of a class of dibenzo-p-dioxins with two to eight chlorine substituents.

*Polyhalogenated dibenzofuran* or *PHDF* means any member of a class of dibenzofurans containing two to eight chlorine, bromine, or a combination of chlorine and bromine substituents.

*Polyhalogenated dibenzo-p-dioxin* or *PHDD* means any member of a class of dibenzo-p-dioxins containing two to eight chlorine substituents or two to eight bromine substituents.

*Positive test result* means: (1) Any resolvable gas chromatographic peak for any 2,3,7,8-HDD or HDF which exceeds the LOQ listed under § 766.27 for that congener, or (2) exceeds LOQs approved by EPA under § 766.28.

*Precursor* means a chemical substance which is not contaminated due to the process conditions under which it is manufactured, but because of its molecular structure, and under favorable process conditions, it may cause or aid the formation of HDDs/HDFs in other chemicals in which it is used as a feedstock or intermediate.

*QA* means quality assurance.

*QC* means quality control.

*Reimbursement period* means the period that begins when the data from the last test to be completed under this part for a specific chemical substance listed in § 766.25 is submitted to EPA, and ends after an amount of time equal to that which had been required to develop that data or 5 years, whichever is later.

*TSCA* means the Toxic Substances Control Act, 15 U.S.C. 2601 *et seq.*

### § 766.5 Compliance.

Any person who fails or refuses to comply with any aspect of this part is in violation of section 15 of TSCA. Section 15(1) makes it unlawful for any person to fail or refuse to comply with any rule or order issued under section 4. Section 15(3) makes it unlawful for any person to fail or refuse to submit information required under this part. Section 16 provides that a violation of section 15 renders a person liable to the United States for a civil penalty and possible criminal prosecution. Under section 17 of TSCA, the district courts of the United States have jurisdiction to restrain any violation of section 15.

### § 766.7 Submission of information.

All information (including letters of intent, protocols, data, forms, studies, and allegations) submitted to EPA under this part must bear the applicable Code of Federal Regulations (CFR) section number (e.g., § 766.20) and must be addressed to: Document Control Office, (7407), Information Management Division, Office of Polution Prevention and Toxics, Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, ATTN: Dioxin/Furan Report.

[52 FR 21437, June 5, 1987, as amended at 60 FR 31922, June 19, 1995]

### § 766.10 Test standards.

Testing required under subpart B of this part must be performed using the protocols submitted to and reviewed by the EPA expert panel established under § 766.28. All new data, documentation, records, protocols, specimens, and reports generated as a result of testing under subpart B of this part must be fully developed and retained in accordance with Part 792 of this chapter. These items must be made available during an inspection or submitted to EPA upon request by EPA or its authorized representative. Laboratories

conducting testing for submission to EPA in response to a test rule promulgated under section 4 of TSCA must adhere to the TSCA Good Laboratory Practices (GLPs) published in Part 792 of this chapter. Sponsors must notify the laboratory that the testing is being conducted pursuant to TSCA section 4. Sponsors are also responsible for ensuring that laboratories conducting the testing abide by the TSCA GLP standards. At the time test data are submitted, manufacturers must submit a certification to EPA that the laboratory performing the testing adhered to the TSCA GLPs.

**§766.12 Testing guidelines.**

Analytical test methods must be developed using methods equivalent to those described or reviewed in *Guidelines for the Determination of Polyhalogenated Dibenzo-p-dioxins and Dibenzofurans in Commercial Products.* Copies are available from the Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, U.S.Environmental Protection Agency, Room E–543B, 401 M St., SW., Washington, DC, 20460, Telephone: (202) 554–1404, TDD: (202) 544–0551. Copies are also located in the public docket for this part (Docket No. OPPTS–83002) and are available for inspection in the Non-Confidential Information Center (NCIC) (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room B–607 NEM, 401 M Street, SW., Washington, DC, 20460, between the hours of 12 p.m. and 4 p.m. weekdays excluding legal holidays.

[60 FR 34466, July 3, 1995]

**§766.14 Contents of protocols.**

Protocols should include all parts of the *Quality Assurance Plan for Measurement of Brominated or Chlorinated Dibenzofurans and Dibenzodioxins,* as stated in the Guidelines. For each chemical substance and each process, the manufacturer must submit a statement of how many grades of the chemical substance it produces, a justification for selection of the specific grade of chemical substance for testing, specific plans for collection of samples from the process stream, naming the point of collection, the method of collecting the sample, and an estimate of how well the samples will represent the material to be characterized; a description of how control samples (blanks) and HDD/HDF-reinforced control samples, or isotopically labeled compounds (standards) and duplicate samples will be handled; a description of the chemical extraction and clean up procedures to be used; how extraction efficiency and measurement efficiency will be established; and a description of instrument hardware and operating conditions, including type and source of columns, carrier gas and flow rate, operating temperature range, and ion source temperature.

**§766.16 Developing the analytical test method.**

Because of the matrix differences of the chemicals listed for testing, no one method for sample selection, preparation, extraction and clean up is prescribed. For analysis, High Resolution Gas Chromatography (HRGC) with High Resolution Mass Spectrometry (HRMS) is the method of choice, but other methods may be used if they can be demonstrated to reach the target LOQs as well as HRGC/HRMS.

(a) *Sample selection.* The chemical product to be tested should be sampled so that the specimens collected for analysis are representative of the whole. Additional guidance for sample selection is provided under §766.12.

(b) *Sample preparation.* The sample must be mechanically homogenized and subsampled as necessary. Subsamples must be spiked or reinforced with surrogate compounds or with standard stock solutions, and the surrogates or standards must be thoroughly incorporated by mechanical agitation. Additional guidance is provided under §766.12.

(c) *Sample extraction and cleanup.* The spiked samples must be treated to separate the HDDs/HDFs from the sample matrix. Methods are reviewed in the Guidelines under §766.12, but the final method or methods are left to the discretion of the analyst, provided the instrumental response of the surrogates meets the criteria listed in the *Quality Assurance Plan for Measurement of Brominated or Chlorinated Dibenzofurans and Dibenzodioxins,* Appendixes B and C

of the Guidelines. Cleanup techniques are described in the Guidelines. These are chosen at the discretion of the analyst to meet the requirements of the chemical matrix.

(d) *Analysis.* The method of choice is High Resolution Gas Chromatographic/High Resolution Mass Spectrometric Determination, (HRGC/HRMS) but alternate methods may be used if the manufacturer can demonstrate that the method will reach the target LOQs as well as HRGC/HRMS. Specific operating requirements are found in the Guidelines.

### § 766.18 Method sensitivity.

The target level of quantitation required under § 766.27 for each HDD/HDF congener is the level which must be attempted for each resolved HRGC peak for that congener. For at least one product sample, at least two analyses of the same isotopically labeled HDD/HDF internal calibration standards spiked to a final product concentration equal to the LOQ for that congener must be reproducibly extracted, cleaned up, and quantified to within ±20 percent of each other. For each spiked product sample, the signal to noise ratio for the calibration standard peaks after complete extraction and cleanup must be 10:1 or greater. The recovery of the internal calibration standards in the extracted and cleaned up product samples must be within 50 to 150 percent of the amount spiked, and the results must be corrected for recovery.

## Subpart B—Specific Chemical Testing/Reporting Requirements

### § 766.20 Who must test.

(a) Any person who manufactures, imports, or processes a chemical substance listed in § 766.25 must test that chemical substance and must submit appropriate information to EPA according to the schedules described in § 766.35. Chemical substances manufactured, imported or processed between January 1, 1984 and the date of promulgation of this part are subject to testing upon the effective date of this part. All other chemical substances are subject to testing immediately upon manufacture, import or processing. EPA expects that only manufacturers and importers will perform testing, and that the cost of testing will be passed on to processors through the pricing mechanism, thereby enabling them to share in the cost of testing. However, processors will be called upon to sponsor testing should manufacturers and importers fail to do so. A processor may apply for an exemption from testing upon certification to EPA that a manufacturer or importer is testing the chemical substance which that person processes.

(b) If no manufacturer or importer described in § 766.20 submits a letter of intent to perform testing within the period described under § 766.35(a), or an exemption application under § 790.45(a), or a request for an exclusion or waiver under § 766.32, EPA will issue a notice in the FEDERAL REGISTER to notify all processors of that chemical substance. The notice will state that EPA has not received any of the documents described in the previous sentence, and that current processors will have 30 days to submit either a letter of intent to perform the test or submit an exemption application.

(c) If no manufacturer, importer or processor submits a letter of intent to perform testing of a specific chemical substance produced by a specific process, EPA will notify all manufacturers, importers, and processors, either by notice in the FEDERAL REGISTER or by letter, that all exemption applications will be denied and that within 30 days all manufacturers, importers, and processors will be in violation of this part until a proposed study plan is submitted for required testing.

(d) Manufacturers, importers, and processors who are subject to this part must comply with the test rule development and exemption procedures in Part 790 of this chapter, except as modified in this part.

### § 766.25 Chemical substances for testing.

(a) *Listing of chemical substances.* Chemical substances required to be tested for HDDs/HDFs under this rule are listed in this section. The listing is by Chemical Abstracts Service (CAS) Number and common name.

NOTE: For purposes of guidance only, EPA lists the chemical substances subject to testing under this part in two classes—those known to be manufactured or imported between January 1, 1984, and promulgation of this part, and those not known to be manufactured or imported at the time of promulgation of this part.

(1) *Chemicals substances known to be manufactured between January 1, 1984 and date of promulgation of this part.*

| CAS No. | Chemical name |
|---|---|
| 79–94–7 | Tetrabromobisphenol-A. |
| 118–75–2 | 2,3,5,6-Tetrachloro-2,5-cyclohexadiene-1,4-dione. |
| 118–79–6 | 2,4,6-Tribromophenol. |
| 120–83–2 | 2,4-Dichlorophenol. |
| 1163–19–5 | Decabromodiphenyloxide. |
| 4162–45–2 | Tetrabromobisphenol-A-bisethoxylate. |
| 21850–44–2 | Tetrabromobisphenol-A-bis-2,3-dibromopropyl ether. |
| 25327–89–3 | Allyl ether of tetrabromobisphenol-A. |
| 32534–81–9 | Pentabromodiphenyloxide. |
| 32536–52–0 | Octabromodiphenyloxide. |
| 37853–59–1 | 1,2-Bis(tribromophenoxy)-ethane. |
| 55205–38–4 | Tetrabromobisphenol-A diacrylate. |

(2) *Chemicals not known to be manufactured between January 1, 1984 and the date of promulgation of this part.*

| CAS No. | Chemical name |
|---|---|
| 79–95–8 | Tetrachlorobisphenol-A. |
| 87–10–5 | 3,4',5-Tribromosalicylanilide. |
| 87–65–0 | 2,6-Dichlorophenol. |
| 95–77–2 | 3,4-Dichlorophenol. |
| 95–95–4 | 2,4,5-Trichlorophenol. |
| 99–28–5 | 2,6-Dibromo-4-nitrophenol. |
| 120–36–5 | 2[2,4-(Dichlorophenoxy)]-propionic acid. |
| 320–72–9 | 3,5-Dichlorosalicyclic acid. |
| 488–47–1 | Tetrabromocatechol. |
| 576–24–9 | 2,3-Dichlorophenol. |
| 583–78–8 | 2,5-Dichlorophenol. |
| 608–71–9 | Pentabromophenol. |
| 615–58–7 | 2,4-Dibromophenol. |
| 933–75–5 | 2,3,6-Trichlorophenol. |
| 1940–42–7 | 4-Bromo-2,5-dichlorophenol. |
| 2577–72–2 | 3,5-Dibromosalicylanilide. |
| 3772–94–9 | Pentachlorophenyl laurate. |
| 37853–61–5 | Bismethylether of tetrabromobisphenol-A. |
| | Alkylamine tetrachlorophenate. |
| | Tetrabromobisphenol-B. |

(b) *Grade to be tested.* If the same process is used to manufacture all grades of the same chemical substance, only one grade need be tested. The grade to be tested must be the grade subject to the most intense heat and alkalinity for the longest duration of time, manufactured under each different process. If the heat, alkalinity and duration of reaction do not differ for various grades, the test substance must be the grade of chemical substance with the highest volume of sales.

## § 766.27 Congeners and LOQs for which quantitation is required.

Quantitation at the target LOQ shown for each of the following HDDs/HDFs which may be present in the chemical substances is required for the chemical substances listed under § 766.25. Analysis must take place for either chlorinated or brominated dibenzodioxins or dibenzofurans, whichever is predominantly expected to occur in the chemical substance to be tested. Only chlorinated and brominated congeners need be quantified; for chemical substances containing predominantly chlorine atoms, only congeners totally chlorinated at the numbered positions need be quantified; for chemical substances containing predominantly bromine atoms, only congeners totally brominated at the numbered positions need be quantified.

| Chlorinated dioxins | Brominated dioxins | LOQ |
|---|---|---|
| 2,3,7,8-TCDD | 2,3,7,8-TBDD | 0.1 ppb. |
| 1,2,3,7,8-PeCDD | 1,2,3,7,8-PeBDD | 0.5 ppb. |
| 1,2,3,4,7.8-HxCDD | 1,2,3,4,7,8-HxBDD | 2.5 ppb. |
| 1,2,3,6,7,8-HxCDD | 1,2,3,6,7,8-HxBDD | 2.5 ppb. |
| 1,2,3,7,8,9-HxCDD | 1,2,3,7,8,9-HxBDD | 2.5 ppb. |
| 1,2,3,4,6,7,8-HpCDD | 1,2,3,4,6,7,8-HpBDD | 100 ppb. |
| 2,3,7,8-TCDF | 2,3,7,8-TBDF | 1 ppb. |
| 1,2,3,7,8-PeCDF | 1,2,3,7,8-PeBDF | 5 ppb. |
| 2,3,4,7,8-PeCDF | 2,3,4,7,8-PeBDF | 5 ppb. |
| 1,2,3,4,7,8-HxCDF | 1,2,3,4,7,8-HxBDF | 25 ppb. |
| 1,2,3,6,7,8-HxCDF | 1,2,3,6,7,8-HxBDF | 25 ppb. |
| 1,2,3,7,8,9-HxCDF | 1,2,3,7,8,9-HxBDF | 25 ppb. |
| 2,3,4,6,7,8-HxCDF | 2,3,4,6,7,8-HxBDF | 25 ppb. |
| 1,2,3,4,6,7,8-HpCDF | 1,2,3,4,6,7,8-HpBDF | 1 ppm. |
| 1,2,3,4,7,8,9-HpCDF | 1,2,3,4,7,8,9-HpBDF | 1 ppm. |

## § 766.28 Expert review of protocols.

EPA will gather a panel of experts in analysis of chemical matrices for HDDs/HDFs to review the protocols for testing submitted to EPA. The panel members will be employees of EPA and/or of other U.S. Government agencies who have had experience in analysis of chemical matrices and/or chemical wastes for HDDs/HDFs. The panel will recommend to the Director, EPA Office of Pollution Prevention and Toxics, whether the protocol submitted is likely to allow analysis down to the target LOQs, or if not, whether the protocol represents a good faith effort on the part of the tester to achieve the lowest possible LOQs. The final determination to accept or reject the protocol will be made by the Director, Office

of Pollution Prevention and Toxics. EPA will review the submitted protocols as rapidly as possible and will complete the review within 90 days after receipt. EPA may require submission of revised protocols. Comments and recommendations will be transmitted to the submitter, and if revisions are required, a final protocol must be submitted to EPA within 90 days after EPA transmits such recommendations.

**§ 766.32 Exclusions and waivers.**

(a) *Reasons for exclusions and waivers.* Any person subject to the testing requirements of this part may request an exclusion or waiver from testing for any one of the following reasons:

(1) *Exclusions may be granted if.* (i) Testing of the appropriate grade of the chemical substance has already been carried out, either analytical testing at the lowest LOQ possible, with appropriate QA/QC, or a well-designed bioassay with appropriate QA/QC or;

(ii) Process and reaction conditions of the chemical substance such that no HDDs/HDFs could be produced under those conditions;

(2) *Waivers may be granted if.* (i) A responsible company official certifies that the chemical substance is produced only in quantities of 100 kilograms or less per year, only for research and development purposes; or

(ii) In the judgement of EPA, the cost of testing would drive the chemical substance off the market, or prevent resumption of manufacture or import of the chemical substance, if it is not currently manufactured, and the chemical substance will be produced so that no unreasonable risk will occur due to its manufacture, import, processing, distribution, use, or disposal. (In this case, the manufacturer must submit to EPA all data supporting the determination.)

(iii) Waivers may be appropriately conditioned with respect to such factors as time and conditions of manufacture or use. The grade of decabromodiphenyl oxide produced by Dow Chemical Company (Dow) for the National Toxicology Program (NTP) bioassay on that chemical is excluded from the testing requirement under this part. Provided, however, that this exclusion will not apply if Dow fails to supply to EPA within 60 days of the effective date of this section evidence showing which grade was used for the NTP bioassay.

(b) *Timing.* Exclusion or waiver requests and detailed supporting data must be submitted to EPA within 60 days from the effective date of this part for persons manufacturing, importing or processing a chemical substance as of the date of promulgation, or 60 days prior to the date of resumption of manufacture or import for a chemical substance produced by a specific process if the chemical substance is not manufactured, imported or processed as of the date of promulgation.

(c) *Publication.* Within 10 days of receipt of any exclusion or waiver request, EPA will issue in the FEDERAL REGISTER a notice of such receipt. EPA will also issue a notice of its decision on each exclusion or waiver request within 60 days of receipt.

(d) *Decision.* The EPA Director of the Office of Pollution Prevention and Toxics will make the decision to grant or deny waivers or exclusions.

**§ 766.35 Reporting requirements.**

(a) *Letters of intent, exemption applications, and protocols*—(1) *Letters of Intent.* (i) Persons who have manufactured or imported chemical substances listed under § 766.25 between January 1, 1984, and the effective date of this part are required to submit under § 790.45 of this chapter a letter of intent to test or an exemption application. These letters must be submitted no later than September 3, 1987.

(ii) Persons who commence manufacture, import or processing of a chemical substance listed under § 766.25 that has not been manufactured, imported or processed between January 1, 1984 and the effective date of this part must submit under § 790.45 of this chapter, within 60 days after the commencement of manufacture, import, or processing of the chemical substance, a letter of intent to test or an exemption application.

(iii) Persons who commence manufacture, import or processing of a chemical substance listed under § 766.25 between the effective date of this part

and the end of the reimbursement period for that particular chemical substance produced by a specific process must submit under § 790.45 of this chapter, within 60 days after the commencement of manufacture, import or processing of the chemical substance, a letter of intent to test or an exemption application.

(2) *Protocols.* (i) Each person who is manufacturing or processing a chemical substance listed in § 766.25 as of the effective date of this part who submits a notice of intent to test under § 766.35(a)(1) must submit a protocol for the test as follows:

(A) The protocols for each chlorinated chemical substance produced by each process to be tested must be submitted to EPA no later than 12 months after the effective date of this part.

(B) The protocol for each brominated chemical substance produced by each process to be tested must be submitted to EPA no later than 24 months after the effective date of this part except for the following chemicals.

(*1*) The deadline for submitting the protocols for tetrabromobisphenol-A (CAS No. 79–94–7); 2,4,6 tribromophenol (CAS. No. 118–79–6); decabromodiphenyloxide (CAS No. 1163–19–5); and 1,2-bis(tribromophenoxy)-ethane (CAS No. 37853–59–1) is January 31, 1991.

(*2*) The deadline for submitting protocols for octabromodiphenyloxide (CAS No. 32536–52–0) and allyl ether of tetrabromobisphenol-A (CAS No. 25327–89–3) is January 31, 1991.

(*3*) The deadline for submitting protocols for pentabromodiphenyloxide (CAS No. 32534–81–9) is February 6, 1995. The deadline for submitting tetrabromobisphenol-A-bisethoxylate (CAS No. 4126–45–2) is January 31, 1991.

(*4*) The deadline for submitting protocols for 3,4',5-tribromosalicylanilide (CAS No. 87–10–5) is September 5, 1990.

(ii) For chemical substances produced by a specific process not manufactured or processed as of the effective date of this part, a person who begins manufacture and submits a notice of intent to test must submit protocols for the test as follows:

(A) Except as noted for the submitter and substance specified in the following table, protocols for testing must be submitted 12 months after manufacture or importation begins for chlorinated chemical substances.

| CAS No. | Submitter | Chemical | Due date |
|---|---|---|---|
| 118–75–2 | Rhone-Poulenc | 2,3,5,6-tetrachloro-2,5-cyclohexaniene-1,4-dione | March 4, 1994 |

(B) Protocols for testing must be submitted 24 months after manufacture begins for brominated chemical substances.

(iii) For persons who have been granted exemptions, waivers or exclusions from testing, protocols must be submitted 12 months after expiration of the exemption, waiver or exclusion for chlorinated chemical substances, and 24 months after expiration of the exemption, waiver or exclusion for brominated chemical substances.

(b) *Information that must be submitted to EPA.* (1) Persons who manufacture or import a chemical substance listed under § 766.25 must report no later than October 5, 1987 or 90 days after the person first manufactures or imports the chemical substance, whichever is later, the results of all existing test data which show that chemical substance has been tested for the presence of HDDs/HDFs.

(2) Any manufacturer or importer of a chemical substance listed in § 766.25 in possession of unpublished health and safety studies on HDDs/HDFs is required to submit copies of such studies to EPA no later than October 5, 1987 or 90 days after the person first manufactures or imports the chemical substance, whichever is later. The following provisions of Part 716 of this chapter apply to submission of these studies: §§ 716.3, 716.10(a) (1) and (4); 716.20(a) (1), (2), (3), (4), (7), (8) and (10); 716.25; 716.30; 716.35(a) (1), (2), and (4) [if applicable]; 716.35 (b) and (c); 716.40 (a) and (b); 716.50; 716.55; and 716.60(a)(2).

(3) No later than October 5, 1987 or 90 days after the person first manufactures or imports the substance listed in § 766.25, any manufacturer or importer

of a chemical substance listed in § 766.25 must submit records required to be held under Part 717 of this chapter on any HDDs/HDFs.

(4) *Test results.* (i) Test results must be submitted to EPA not later than 270 days after EPA's transmission of comments or 180 days after a final protocol is submitted to EPA, whichever is shorter, except as noted for the submitters and substances specified in the following table:

| CAS No. | Submitter | Chemical | Due Date | Effective Date |
|---|---|---|---|---|
| 79–94–7 | Great Lakes | Tetrabromobisphenol-A | May 26, 1992 | May 28, 1993 |
| 79–94–7 | Ethyl | Tetrabromobisphenol-A | August 10, 1992 | May 28, 1993 |
| 79–94–7 | Ameribrom | Tetrabromobisphenol-A | April 15, 1994 | September 29, 1995 |
| 87–10–5 | Pfister | 3,4',5-tribromosalicylanilide | 45 days after protocol approval | May 28, 1993 |
| 118–79–6 | Great Lakes | 2,4,6-Tribromophenol | May 26, 1992 | May 28, 1993 |
| 1163–19–5 | Ameribrom | Decabromodiphenyloxide | April 15, 1994 | September 29, 1995 |
| 1163–19–5 | Ethyl | Decabromodiphenyloxide | May 26, 1992 | May 28, 1993 |
| 1163–19–5 | Great Lakes | Decabromodiphenyloxide | May 26, 1992 | May 28, 1993 |
| 4162–45–2 | Great Lakes | Tetrabromobisphenol-A-bisethoxylate | June 2, 1993 | September 8, 1994 |
| 25327–89–3 | Great Lakes | Allyl Ether of Tetrabromobisphenol-A | August 10, 1992 | May 28, 1993 |
| 32534–81–9 | Great Lakes | Pentabromodiphenyloxide | March 22, 1993 | September 8, 1994 |
| 32534–81–9 | Akzo Chemicals Inc. | Pentabromodiphenyloxide | February 6, 1995 | September 29, 1995 |
| 32534–81–9 | Ameribrom | Pentabromodiphenyloxide | March 22, 1993 | September 8, 1994 |
| 32536–52–0 | Ameribrom | Octabromodiphenyloxide | January 8, 1993 | September 29, 1995 |
| 32536–52–0 | Ethyl | Octabromodiphenyloxide | May 15, 1994 | May 28, 1993 |
| 32536–52–0 | Great Lakes | Octabromodiphenyloxide | May 26, 1992 | May 28, 1993 |
| 37853–59–1 | Great Lakes | 1,2-bis(tribromophenoxy)ethane | January 24, 1995 | September 29, 1995 |

(ii) For purposes of reporting test results to EPA, and for further reporting triggered by a positive test result under § 766.35(c), a positive test result is defined at § 766.3.

(iii) Reporting of test results must follow procedures set out in Part 790 of this chapter, except as modified in this part.

(c) *Information required to be submitted to EPA after submission of a positive test result.* (1) Any person who submits a positive test result for a specific chemical substance listed under § 766.25 must submit to EPA no later than 90 days after the date of submission of the positive test result the following:

(i) A completed form (EPA 7710-51) for that chemical substance. The form and instructions are available from the Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC, 20460. One form must be submitted for each chemical substance for which a positive test result has been submitted.

(ii) Health and safety studies for the chemical substance for which a positive test result has been reported. The following provisions of part 716 of this chapter apply to submission of these studies: §§ 716.3; 716.10 (a) (1), (2), (3) and (4); 716.20; 716.25; 716.30; 716.35(a) (1), (2), and (4), [if applicable]; 716.35 (b) and (c); 716.40 (a) and (b); 716.50; 716.55; 716.60(a)(2).

(iii) Copies of records on the chemical substances required to be held under part 717 of this chapter.

(2) If a positive test result on a chemical substance is received from one person but not from others, EPA may

issue a notice in the FEDERAL REGISTER listing that chemical substance and requiring any person manufacturing, importing or processing that chemical substance who has not submitted a positive test result to submit the information required in Part II of EPA Form 7710–51. Such a notice will be published only if EPA needs additional process data to make a determination of unreasonable risk.

(d)–(e) [Reserved]

(f) *Effective date.* (1) The effective date of this final rule is July 6, 1987, except for paragraphs (a)(2)(i)(B) introductory text, (a)(2)(i)(B)(*1*), (a)(2)(i)(B)(*2*), (a)(2)(i)(B)(*3*), (a)(2)(i)(B)(*4*), the table in paragraph (a)(2)(ii)(A), and the table in paragraph (b)(4)(i) of this section.

(2) The effective date for paragraph (a)(2)(i)(B) introductory text, (a)(2)(i)(B)(*1*), (a)(2)(i)(B)(*2*), and (a)(2)(i)(B)(*4*), is May 21, 1991. The effective date of paragraphs (a)(2)(i)(B)(*3*), and the table in paragraph (a)(2)(ii)(A) is September 29, 1995. The effective date of paragraph (b)(4)(i) introductory text is May 28, 1993, and the effective date of the entries in the table in paragraph (b)(4)(i) is shown in the effective dates column of the table.

(3) The guidelines and other test methods cited in this rule are referenced as they exist on the effective date of the final rule.

[52 FR 21437, June 5, 1987, as amended at 56 FR 23229, May 21, 1991; 57 FR 24960, June 12, 1992; 58 FR 30991, May 28, 1993, 58 FR 34205, June 23, 1993; 59 FR 46356, Sept. 8, 1994; 60 FR 31922, June 19, 1995; 60 FR 50433, Sept. 29, 1995; 60 FR 56955, Nov. 13, 1995]

### § 766.38 Reporting on precursor chemical substances.

(a) *Identification of precursor chemical substances.* Precursor chemical substances are produced under conditions that will not yield HDDs and HDFs, but their molecular structure is conducive to HDD/HDF formation under favorable reaction conditions when they are used to produce other chemicals or products. The following precursor chemical substances are identified by Chemical Abstract Service (CAS) number and name.

| CAS No. | Chemical name |
|---|---|
| 85–22–3 ... | Pentabromoethylbenzene. |
| 87–61–6 ... | 1,2,3-Trichlorobenzene. |
| 87–84–3 ... | 1,2,3,4,5-Pentabromo-6-chloro-cyclohexane. |
| 89–61–2 ... | 1,4-Dichloro-2-nitrobenzene. |
| 89–64–5 ... | 4-Chloro-2-nitrophenol. |
| 89–69–0 ... | 2,4,5-Trichloronitrobenzene. |
| 92–04–6 ... | 2-Chloro-4-phenylphenol. |
| 94–74–6 ... | 4-Chloro-o-toloxy acetic acid. |
| 94–81–5 ... | 4-(2-Methyl-4-chlorophenoxy) butyric acid. |
| 95–50–1 ... | o-Dichlorobenzene. |
| 95–56–7 ... | o-Bromophenol. |
| 95–57–8 ... | o-Chlorophenol. |
| 95–88–5 ... | 4-Chlororesorcinol. |
| 95–94–3 ... | 1,2,4,5-Tetrachlorobenzene. |
| 97–50–7 ... | 5-Chloro-2,4-dimethoxyaniline. |
| 99–30–9 ... | 2,6-Dichloro-4-nitroaniline. |
| 99–54–7 ... | 1,2-Dichloro-4-nitrobenzene. |
| 106–46–7 | p-Dichlorobenzene. |
| 108–70–3 | 1,3,5-Trichlorobenzene. |
| 108–86–1 | Bromobenzene. |
| 108–90–7 | Chlorobenzene. |
| 117–18–0 | 1,2,4,5-Tetrachloro-3-nitrobenzene. |
| 120–82–1 | 1,2,4-Trichlorobenzene. |
| 348–51–6 | o-Chorofluorobenzene. |
| 350–30–1 | 3-Chloro-4-fluoronitrobenzene. |
| 615–67–8 | Chlorohydroquinone. |
| 626–39–1 | 1,3,5-Tribromobenzene. |
| 827–94–1 | 2,6-Dibromo-4-nitroaniline. |

(b) *Persons required to report.* All persons who manufacture or import a chemical product produced using any of the chemical substances listed in paragraph (a) of this section as feedstocks or intermediates must report no later than September 29, 1987. Small manufacturers and those manufacturers and importers who produce the precursor chemical substances in quantities of 100 kilograms or less per year only for research and development purposes are not required to report under this section

(c) *Data to be reported.* Manufacturers and importers of chemical products made from precursor chemical substances identified in paragraph (a) of this section must report process and reaction condition data on Part II of EPA Form 7710–51 for each chemical product. A separate EPA Form 7710–51 must be submitted for each chemical product reported, and the precursor chemical substance used must be identified. All forms must be submitted to EPA no later than September 29, 1987.

[52 FR 21437, June 5, 1987, as amended at 60 FR 31922, June 19, 1995]

## PART 767–789 [Reserved]