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# Protection of Environment

# 40

PARTS 190 to 259

**Revised as of July 1, 1998**

CONTAINING
A CODIFICATION OF DOCUMENTS
OF GENERAL APPLICABILITY
AND FUTURE EFFECT

AS OF JULY 1, 1998

*With Ancillaries*

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*Cite this Code:* CFR

*To cite the regulations in this volume use title, part and section number. Thus,* 40 CFR 190.01 *refers to title 40, part 190, section 01.*

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Each volume of the Code is revised at least once each calendar year and issued on a quarterly basis approximately as follows:

Title 1 through Title 16.....as of January 1
Title 17 through Title 27.....as of April 1
Title 28 through Title 41.....as of July 1
Title 42 through Title 50.....as of October 1

The appropriate revision date is printed on the cover of each volume.

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The Paperwork Reduction Act of 1980 (Pub. L. 96–511) requires Federal agencies to display an OMB control number with their information collection request.

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RAYMOND A. MOSLEY,
*Director,*
*Office of the Federal Register.*

*July 1, 1998.*

# THIS TITLE

Title 40—PROTECTION OF ENVIRONMENT is composed of twenty–three volumes. The parts in these volumes are arranged in the following order: parts 1–49, parts 50–51, parts 52.01–52.1018, part 52.1019–end, parts 53–59, part 60, parts 61–62, part 63, parts 64–71, parts 72–80, parts 81–85, part 86, parts 87–135, parts 136–149, parts 150–189, parts 190–259, parts 260–265, parts 266–299, parts 300–399, parts 400–424, parts 425–699, parts 700–789, and part 790 to end. The contents of these volumes represent all current regulations codified under this title of the CFR as of July 1, 1998.

Chapter I—Environmental Protection Agency appears in all twenty–two volumes. A Pesticide Tolerance Commodity/Chemical Index appears in parts 150–189. A Toxic Substances Chemical—CAS Number Index appears in parts 700–789 and part 790 to end. Redesignation Tables appear in the volumes containing parts 50–51, parts 150–189, and parts 700–789. Regulations issued by the Council on Environmental Quality appear in the volume containing part 790 to end.

The OMB control numbers for title 40 appear in §9.1 of this chapter. For the convenience of the user, §9.1 appears in the Finding Aids section of the volumes containing part 50 to the end.

For this volume, Gregory R. Walton was Chief Editor. The Code of Federal Regulations publication program is under the direction of Frances D. McDonald, assisted by Alomha S. Morris.

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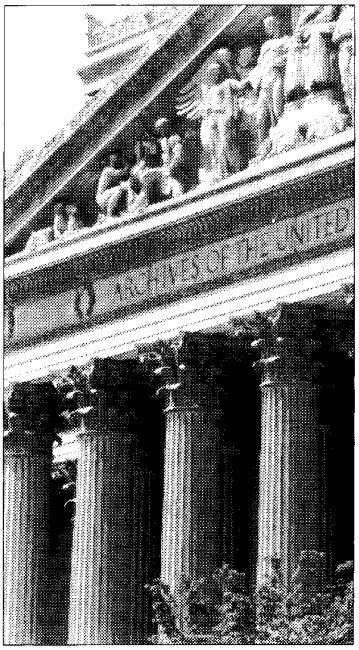

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# Title 40—Protection of Environment

(This book contains parts 190 to 259)

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# CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)

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# SUBCHAPTER F—RADIATION PROTECTION PROGRAMS

## PART 190—ENVIRONMENTAL RADIATION PROTECTION STANDARDS FOR NUCLEAR POWER OPERATIONS

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### Subpart B—Environmental Standards for the Uranium Fuel Cycle

190.10 Standards for normal operations.
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190.12 Effective date.

AUTHORITY: Atomic Energy Act of 1954, as amended; Reorganization Plan No. 3, of 1970.

SOURCE: 42 FR 2860, Jan. 13, 1977, unless otherwise noted.

## Subpart A—General Provisions

### § 190.01 Applicability.

The provisions of this part apply to radiation doses received by members of the public in the general environment and to radioactive materials introduced into the general environment as the result of operations which are part of a nuclear fuel cycle.

### § 190.02 Definitions.

(a) *Nuclear fuel cycle* means the operations defined to be associated with the production of electrical power for public use by any fuel cycle through utilization of nuclear energy.

(b) *Uranium fuel cycle* means the operations of milling of uranium ore, chemical conversion of uranium, isotopic enrichment of uranium, fabrication of uranium fuel, generation of electricity by a light-water-cooled nuclear power plant using uranium fuel, and reprocessing of spent uranium fuel, to the extent that these directly support the production of electrical power for public use utilizing nuclear energy, but excludes mining operations, operations at waste disposal sites, transportation of any radioactive material in support of these operations, and the reuse of recovered non-uranium special nuclear and by-product materials from the cycle.

(c) *General environment* means the total terrestrial, atmospheric and aquatic environments outside sites upon which any operation which is part of a nuclear fuel cycle is conducted.

(d) *Site* means the area contained within the boundary of a location under the control of persons possessing or using radioactive material on which is conducted one or more operations covered by this part.

(e) *Radiation* means any or all of the following: Alpha, beta, gamma, or X-rays; neutrons; and high-energy electrons, protons, or other atomic particles; but not sound or radio waves, nor visible, infrared, or ultraviolet light.

(f) *Radioactive material* means any material which spontaneously emits radiation.

(g) *Curie* (Ci) means that quantity of radioactive material producing 37 billion nuclear transformations per second. (One millicurie (mCi)=0.001 Ci.)

(h) *Dose equivalent* means the product of absorbed dose and appropriate factors to account for differences in biological effectiveness due to the quality of radiation and its spatial distribution in the body. The unit of dose equivalent is the ''rem.'' (One millirem (mrem)= 0.001 rem.)

(i) *Organ* means any human organ exclusive of the dermis, the epidermis, or the cornea.

(j) *Gigawatt-year* refers to the quantity of electrical energy produced at the busbar of a generating station. A gigawatt is equal to one billion watts. A gigawatt-year is equivalent to the amount of energy output represented by an average electric power level of one gigawatt sustained for one year.

(k) *Member of the public* means any individual that can receive a radiation dose in the general environment, whether he may or may not also be exposed to radiation in an occupation associated with a nuclear fuel cycle. However, an individual is not considered a member of the public during any

period in which he is engaged in carrying out any operation which is part of a nuclear fuel cycle.

(l) *Regulatory agency* means the government agency responsible for issuing regulations governing the use of sources of radiation or radioactive materials or emissions therefrom and carrying out inspection and enforcement activities to assure compliance with such regulations.

## Subpart B—Environmental Standards for the Uranium Fuel Cycle

### § 190.10 Standards for normal operations.

Operations covered by this subpart shall be conducted in such a manner as to provide reasonable assurance that:

(a) The annual dose equivalent does not exceed 25 millirems to the whole body, 75 millirems to the thyroid, and 25 millirems to any other organ of any member of the public as the result of exposures to planned discharges of radioactive materials, radon and its daughters excepted, to the general environment from uranium fuel cycle operations and to radiation from these operations.

(b) The total quantity of radioactive materials entering the general environment from the entire uranium fuel cycle, per gigawatt-year of electrical energy produced by the fuel cycle, contains less than 50,000 curies of krypton-85, 5 millicuries of iodine-129, and 0.5 millicuries combined of plutonium-239 and other alpha-emitting transuranic radionuclides with half-lives greater than one year.

### § 190.11 Variances for unusual operations.

The standards specified in § 190.10 may be exceeded if:

(a) The regulatory agency has granted a variance based upon its determination that a temporary and unusual operating condition exists and continued operation is in the public interest, and

(b) Information is promptly made a matter of public record delineating the nature of unusual operating conditions, the degree to which this operation is expected to result in levels in excess of the standards, the basis of the variance, and the schedule for achieving conformance with the standards.

### § 190.12 Effective date.

(a) The standards in § 190.10(a) shall be effective December 1, 1979, except that for doses arising from operations associated with the milling of uranium ore the effective date shall be December 1, 1980.

(b) The standards in § 190.10(b) shall be effective December 1, 1979, except that the standards for krypton-85 and iodine-129 shall be effective January 1, 1983, for any such radioactive materials generated by the fission process after these dates.

# PART 191—ENVIRONMENTAL RADIATION PROTECTION STANDARDS FOR MANAGEMENT AND DISPOSAL OF SPENT NUCLEAR FUEL, HIGH-LEVEL AND TRANSURANIC RADIOACTIVE WASTES

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APPENDIX B TO PART 191—CALCULATION OF ANNUAL COMMITTED EFFECTIVE DOSE

APPENDIX C TO PART 191—GUIDANCE FOR IMPLEMENTATION OF SUBPART B

AUTHORITY: The Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011–2296; Reorganization Plan No. 3 of 1970, 5 U.S.C. app. 1; the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. 10101–10270; and the Waste Isolation Pilot Plant Land Withdrawal Act, Pub. L. 102–579, 106 Stat. 4777.

SOURCE: 50 FR 38084, Sept. 19, 1985, unless otherwise noted.

## Subpart A—Environmental Standards for Management and Storage

### § 191.01 Applicability.

This subpart applies to:

(a) Radiation doses received by members of the public as a result of the management (except for transportation) and storage of spent nuclear fuel or high-level or transuranic radioactive wastes at any facility regulated by the Nuclear Regulatory Commission or by Agreement States, to the extent that such management and storage operations are not subject to the provisions of part 190 of title 40; and

(b) Radiation doses received by members of the public as a result of the management and storage of spent nuclear fuel or high-level or transuranic wastes at any disposal facility that is operated by the Department of Energy and that is not regulated by the Commission or by Agreement States.

### § 191.02 Definitions.

Unless otherwise indicated in this subpart, all terms shall have the same meaning as in Subpart A of Part 190.

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

(b) *Administrator* means the Administrator of the Environmental Protection Agency.

(c) *Commission* means the Nuclear Regulatory Commission.

(d) *Department* means the Department of Energy.

(e) *NWPA* means the Nuclear Waste Policy Act of 1982 (Pub. L. 97–425).

(f) *Agreement State* means any State with which the Commission or the Atomic Energy Commission has entered into an effective agreement under subsection 274b of the Atomic Energy Act of 1954, as amended (68 Stat. 919).

(g) *Spent nuclear fuel* means fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing.

(h) *High-level radioactive waste,* as used in this part, means high-level radioactive waste as defined in the Nuclear Waste Policy Act of 1982 (Pub. L. 97–425).

(i) *Transuranic radioactive waste,* as used in this part, means waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes, with half-lives greater than twenty years, per gram of waste, except for: (1) High-level radioactive wastes; (2) wastes that the Department has determined, with the concurrence of the Administrator, do not need the degree of isolation required by this part; or (3) wastes that the Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61.

(j) *Radioactive waste,* as used in this part, means the high-level and transuranic radioactive waste covered by this part.

(k) *Storage* means retention of spent nuclear fuel or radioactive wastes with the intent and capability to readily retrieve such fuel or waste for subsequent use, processing, or disposal.

(l) *Disposal* means permanent isolation of spent nuclear fuel or radioactive waste from the accessible environment with no intent of recovery, whether or not such isolation permits the recovery of such fuel or waste. For example, disposal of waste in a mined geologic repository occurs when all of the shafts to the repository are backfilled and sealed.

(m) *Management* means any activity, operation, or process (except for transportation) conducted to prepare spent nuclear fuel or radioactive waste for storage or disposal, or the activities associated with placing such fuel or waste in a disposal system.

(n) *Site* means an area contained within the boundary of a location under the effective control of persons possessing or using spent nuclear fuel or radioactive waste that are involved in any activity, operation, or process covered by this subpart.

(o) *General environment* means the total terrestrial, atmospheric, and aquatic environments outside sites within which any activity, operation, or process associated with the management and storage of spent nuclear fuel or radioactive waste is conducted.

(p) *Member of the public* means any individual except during the time when that individual is a worker engaged in any activity, operation, or process that is covered by the Atomic Energy Act of 1954, as amended.

(q) *Critical organ* means the most exposed human organ or tissue exclusive of the integumentary system (skin) and the cornea.

### § 191.03 Standards.

(a) Management and storage of spent nuclear fuel or high-level or transuranic radioactive wastes at all facilities regulated by the Commission or by Agreement States shall be conducted in such a manner as to provide reasonable assurance that the combined annual dose equivalent to any member of the public in the general environment resulting from: (1) Discharges of radioactive material and direct radiation from such management and storage and (2) all operations covered by Part 190; shall not exceed 25 millirems to the whole body, 75 millirems to the thyroid, and 25 millirems to any other critical organ.

(b) Management and storage of spent nuclear fuel or high-level or transuranic radioactive wastes at all facilities for the disposal of such fuel or waste that are operated by the Department and that are not regulated by the Commission or Agreement States shall be conducted in such a manner as to provide reasonable assurance that the combined annual dose equivalent to any member of the public in the general environment resulting from discharges of radioactive material and direct radiation from such management and storage shall not exceed 25 millirems to the whole body and 75 millirems to any critical organ.

### § 191.04 Alternative standards.

(a) The Administrator may issue alternative standards from those standards established in § 191.03(b) for waste management and storage activities at facilities that are not regulated by the Commission or Agreement States if, upon review of an application for such alternative standards:

(1) The Administrator determines that such alternative standards will prevent any member of the public from receiving a continuous exposure of more than 100 millirems per year dose equivalent and an infrequent exposure of more than 500 millirems dose equivalent in a year from all sources, excluding natural background and medical procedures; and

(2) The Administrator promptly makes a matter of public record the degree to which continued operation of the facility is expected to result in levels in excess of the standards specified in § 191.03(b).

(b) An application for alternative standards shall be submitted as soon as possible after the Department determines that continued operation of a facility will exceed the levels specified in § 191.03(b) and shall include all information necessary for the Administrator to make the determinations called for in § 191.04(a).

(c) Requests for alternative standards shall be submitted to the Administrator, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

### § 191.05 Effective date.

The standards in this subpart shall be effective on November 18, 1985.

## Subpart B—Environmental Standards for Disposal

### § 191.11 Applicability.

(a) This subpart applies to:

(1) Radioactive materials released into the accessible environment as a result of the disposal of spent nuclear fuel or high-level or transuranic radioactive wastes;

(2) Radiation doses received by members of the public as a result of such disposal; and

(3) Radioactive contamination of certain sources of ground water in the vicinity of disposal systems for such fuel or wastes.

(b) This subpart does not apply to:

(1) Disposal directly into the oceans or ocean sediments;

(2) Wastes disposed of before November 18, 1985; and

(3) The characterization, licensing, construction, operation, or closure of any site required to be characterized under section 113(a) of Public Law 97–425, 96 Stat. 2201.

[50 FR 38084, Sept. 19, 1985, as amended at 58 FR 66414, Dec. 20, 1993]

### § 191.12 Definitions.

Unless otherwise indicated in this subpart, all terms shall have the same meaning as in subpart A of this part.

*Accessible environment* means: (1) The atmosphere; (2) land surfaces; (3) surface waters; (4) oceans; and (5) all of the lithosphere that is beyond the controlled area.

*Active institutional control* means: (1) Controlling access to a disposal site by any means other than passive institutional controls; (2) performing maintenance operations or remedial actions at a site, (3) controlling or cleaning up releases from a site, or (4) monitoring parameters related to disposal system performance.

*Annual committed effective dose* means the committed effective dose resulting from one-year intake of radionuclides released plus the annual effective dose caused by direct radiation from facilities or activities subject to subparts B and C of this part.

*Aquifer* means an underground geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

*Barrier* means any material or structure that prevents or substantially delays movement of water or radionuclides toward the accessible environment. For example, a barrier may be a geologic structure, a canister, a waste form with physical and chemical characteristics that significantly decrease the mobility of radionuclides, or a material placed over and around waste, provided that the material or structure substantially delays movement of water or radionuclides.

*Controlled area* means: (1) A surface location, to be identified by passive institutional controls, that encompasses no more than 100 square kilometers and extends horizontally no more than five kilometers in any direction from the outer boundary of the original location of the radioactive wastes in a disposal system; and (2) the subsurface underlying such a surface location.

*Disposal system* means any combination of engineered and natural barriers that isolate spent nuclear fuel or radioactive waste after disposal.

*Dose equivalent* means the product of absorbed dose and appropriate factors to account for differences in biological effectiveness due to the quality of radiation and its spatial distribution in the body; the unit of dose equivalent is the ''rem'' (''sievert'' in SI units).

*Effective dose* means the sum over specified tissues of the products of the dose equivalent received following an exposure of, or an intake of radionuclides into, specified tissues of the body, multiplied by appropriate weighting factors. This allows the various tissue-specific health risks to be summed into an overall health risk. The method used to calculate effective dose is described in appendix B of this part.

*Ground water* means water below the land surface in a zone of saturation.

*Heavy metal* means all uranium, plutonium, or thorium placed into a nuclear reactor.

*Implementing agency* means:

(1) The Commission for facilities licensed by the Commission;

(2) The Agency for those implementation responsibilities for the Waste Isolation Pilot Plant, under this part, given to the Agency by the Waste Isolation Pilot Plant Land Withdrawal Act (Pub. L. 102–579, 106 Stat. 4777) which, for the purposes of this part, are:

(i) Determinations by the Agency that the Waste Isolation Pilot Plant is in compliance with subpart A of this part;

(ii) Issuance of criteria for the certifications of compliance with subparts B and C of this part of the Waste Isolation Pilot Plant's compliance with subparts B and C of this part;

(iii) Certifications of compliance with subparts B and C of this part of the Waste Isolation Pilot Plant's compliance with subparts B and C of this part;

(iv) If the initial certification is made, periodic recertification of the

Waste Isolation Pilot Plant's continued compliance with subparts B and C of this part;

(v) Review and comment on performance assessment reports of the Waste Isolation Pilot Plant; and

(vi) Concurrence by the Agency with the Department's determination under § 191.02(i) that certain wastes do not need the degree of isolation required by subparts B and C of this part; and

(3) The Department of Energy for any other disposal facility and all other implementation responsibilities for the Waste Isolation Pilot Plant, under this part, not given to the Agency.

*International System of Units* is the version of the metric system which has been established by the International Bureau of Weights and Measures and is administered in the United States by the National Institute of Standards and Technology. The abbreviation for this system is ''SI.''

*Lithosphere* means the solid part of the Earth below the surface, including any ground water contained within it.

*Passive institutional control* means: (1) Permanent markers placed at a disposal site, (2) public records and archives, (3) government ownership and regulations regarding land or resource use, and (4) other methods of preserving knowledge about the location, design, and contents of a disposal system.

*Performance assessment* means an analysis that: (1) Identifies the processes and events that might affect the disposal system; (2) examines the effects of these processes and events on the performance of the disposal system; and (3) estimates the cumulative releases of radionuclides, considering the associated uncertainties, caused by all significant processes and events. These estimates shall be incorporated into an overall probability distribution of cumulative release to the extent practicable.

*Radioactive material* means matter composed of or containing radionuclides, with radiological half-lives greater than 20 years, subject to the Atomic Energy Act of 1954, as amended.

*SI unit* means a unit of measure in the International System of Units.

*Sievert* is the SI unit of effective dose and is equal to 100 rem or one joule per kilogram. The abbreviation is ''Sv.''

*Undisturbed performance* means the predicted behavior of a disposal system, including consideration of the uncertainties in predicted behavior, if the disposal system is not disrupted by human intrusion or the occurrence of unlikely natural events.

*Waste,* as used in this subpart, means any spent nuclear fuel or radioactive waste isolated in a disposal system.

*Waste form* means the materials comprising the radioactive components of waste and any encapsulating or stabilizing matrix.

[50 FR 38084, Sept. 19, 1985, as amended at 58 FR 66414, Dec. 20, 1993]

### § 191.13 Containment requirements.

(a) Disposal systems for spent nuclear fuel or high-level or transuranic radioactive wastes shall be designed to provide a reasonable expectation, based upon performance assessments, that the cumulative releases of radionuclides to the accessible environment for 10,000 years after disposal from all significant processes and events that may affect the disposal system shall:

(1) Have a likelihood of less than one chance in 10 of exceeding the quantities calculated according to Table 1 (appendix A); and

(2) Have a likelihood of less than one chance in 1,000 of exceeding ten times the quantities calculated according to Table 1 (appendix A).

(b) Performance assessments need not provide complete assurance that the requirements of § 191.13(a) will be met. Because of the long time period involved and the nature of the events and processes of interest, there will inevitably be substantial uncertainties in projecting disposal system performance. Proof of the future performance of a disposal system is not to be had in the ordinary sense of the word in situations that deal with much shorter time frames. Instead, what is required is a reasonable expectation, on the basis of the record before the implementing agency, that compliance with § 191.13 (a) will be achieved.

**§191.14 Assurance requirements.**

To provide the confidence needed for long-term compliance with the requirements of §191.13, disposal of spent nuclear fuel or high-level or transuranic wastes shall be conducted in accordance with the following provisions, except that these provisions do not apply to facilities regulated by the Commission (see 10 CFR Part 60 for comparable provisions applicable to facilities regulated by the Commission):

(a) Active institutional controls over disposal sites should be maintained for as long a period of time as is practicable after disposal; however, performance assessments that assess isolation of the wastes from the accessible environment shall not consider any contributions from active institutional controls for more than 100 years after disposal.

(b) Disposal systems shall be monitored after disposal to detect substantial and detrimental deviations from expected performance. This monitoring shall be done with techniques that do not jeopardize the isolation of the wastes and shall be conducted until there are no significant concerns to be addressed by further monitoring.

(c) Disposal sites shall be designated by the most permanent markers, records, and other passive institutional controls practicable to indicate the dangers of the wastes and their location.

(d) Disposal systems shall use different types of barriers to isolate the wastes from the accessible environment. Both engineered and natural barriers shall be included.

(e) Places where there has been mining for resources, or where there is a reasonable expectation of exploration for scarce or easily accessible resources, or where there is a significant concentration of any material that is not widely available from other sources, should be avoided in selecting disposal sites. Resources to be considered shall include minerals, petroleum or natural gas, valuable geologic formations, and ground waters that are either irreplaceable because there is no reasonable alternative source of drinking water available for substantial populations or that are vital to the preservation of unique and sensitive ecosystems. Such places shall not be used for disposal of the wastes covered by this part unless the favorable characteristics of such places compensate for their greater likelihood of being disturbed in the future.

(f) Disposal systems shall be selected so that removal of most of the wastes is not precluded for a reasonable period of time after disposal.

**§191.15 Individual protection requirements.**

(a) Disposal systems for waste and any associated radioactive material shall be designed to provide a reasonable expectation that, for 10,000 years after disposal, undisturbed performance of the disposal system shall not cause the annual committed effective dose, received through all potential pathways from the disposal system, to any member of the public in the accessible environment, to exceed 15 millirems (150 microsieverts).

(b) Annual committed effective doses shall be calculated in accordance with appendix B of this part.

(c) Compliance assessments need not provide complete assurance that the requirements of paragraph (a) of this section will be met. Because of the long time period involved and the nature of the processes and events of interest, there will inevitably be substantial uncertainties in projecting disposal system performance. Proof of the future performance of a disposal system is not to be had in the ordinary sense of the word in situations that deal with much shorter time frames. Instead, what is required is a reasonable expectation, on the basis of the record before the implementing agency, that compliance with paragraph (a) of this section will be achieved.

(d) Compliance with the provisions in this section does not negate the necessity to comply with any other applicable Federal regulations or requirements.

(e) The standards in this section shall be effective on January 19, 1994.

[58 FR 66414, Dec. 20, 1993]

### § 191.16 Alternative provisions for disposal.

The Administrator may, by rule, substitute for any of the provisions of subpart B alternative provisions chosen after:

(a) The alternative provisions have been proposed for public comment in the FEDERAL REGISTER together with information describing the costs, risks, and benefits of disposal in accordance with the alternative provisions and the reasons why compliance with the existing provisions of Subpart B appears inappropriate;

(b) A public comment period of at least 90 days has been completed, during which an opportunity for public hearings in affected areas of the country has been provided; and

(c) The public comments received have been fully considered in developing the final version of such alternative provisions.

[50 FR 38084, Sept. 19, 1985. Redesignated at 58 FR 66414, Dec. 20, 1993]

### § 191.17 Effective date.

The standards in this subpart shall be effective on November 18, 1985.

[50 FR 38084, Sept. 19, 1985; 50 FR 40003, Oct. 1, 1985. Redesignated at 58 FR 66414, Dec. 20, 1993]

## Subpart C—Environmental Standards for Ground-Water Protection

SOURCE: 58 FR 66415, Dec. 20, 1993, unless otherwise noted.

### § 191.21 Applicability.

(a) This subpart applies to:

(1) Radiation doses received by members of the public as a result of activities subject to subpart B of this part; and

(2) Radioactive contamination of underground sources of drinking water in the accessible environment as a result of such activities.

(b) This subpart does not apply to:

(1) Disposal directly into the oceans or ocean sediments;

(2) Wastes disposed of before the effective date of this subpart; and

(3) The characterization, licensing, construction, operation, or closure of any site required to be characterized under section 113(a) of Public Law 97–425, 96 Stat. 2201.

### § 191.22 Definitions.

Unless otherwise indicated in this subpart, all terms have the same meaning as in subparts A and B of this part.

*Public water system* means a system for the provision to the public of piped water for human consumption, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals. Such term includes:

(1) Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system; and

(2) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system.

*Total dissolved solids* means the total dissolved (filterable) solids in water as determined by use of the method specified in 40 CFR part 136.

*Underground source of drinking water* means an aquifer or its portion which:

(1) Supplies any public water system; or

(2) Contains a sufficient quantity of ground water to supply a public water system; and

(i) Currently supplies drinking water for human consumption; or

(ii) Contains fewer than 10,000 milligrams of total dissolved solids per liter.

### § 191.23 General provisions.

(a) Determination of compliance with this subpart shall be based upon underground sources of drinking water which have been identified on the date the implementing agency determines compliance with subpart C of this part.

(b) [Reserved]

### § 191.24 Disposal standards.

(a) Disposal systems.

(1) *General.* Disposal systems for waste and any associated radioactive material shall be designed to provide a reasonable expectation that 10,000 years of undisturbed performance after disposal shall not cause the levels of radioactivity in any underground

source of drinking water, in the accessible environment, to exceed the limits specified in 40 CFR part 141 as they exist on January 19, 1994.

(2) *Disposal systems above or within a formation which within one-quarter (¼) mile contains an underground source of drinking water.* [Reserved]

(b) Compliance assessments need not provide complete assurance that the requirements of paragraph (a) of this section will be met. Because of the long time period involved and the nature of the processes and events of interest, there will inevitably be substantial uncertainties in projecting disposal system performance. Proof of the future performance of a disposal system is not to be had in the ordinary sense of the word in situations that deal with much shorter time frames. Instead, what is required is a reasonable expectation, on the basis of the record before the implementing agency, that compliance with paragraph (a) of this section will be achieved.

### § 191.25 Compliance with other Federal regulations.

Compliance with the provisions in this subpart does not negate the necessity to comply with any other applicable Federal regulations or requirements.

### § 191.26 Alternative provisions.

The Administrator may, by rule, substitute for any of the provisions of this subpart alternative provisions chosen after:

(a) The alternative provisions have been proposed for public comment in the FEDERAL REGISTER together with information describing the costs, risks, and benefits of disposal in accordance with the alternative provisions and the reasons why compliance with the existing provisions of this subpart appears inappropriate;

(b) A public comment period of at least 90 days has been completed, during which an opportunity for public hearings in affected areas of the country has been provided; and

(c) The public comments received have been fully considered in developing the final version of such alternative provisions.

### § 191.27 Effective date.

The standards in this subpart shall be effective on January 19, 1994.

## APPENDIX A TO PART 191—TABLE FOR SUBPART B

TABLE 1—RELEASE LIMITS FOR CONTAINMENT REQUIREMENTS

[Cumulative releases to the accessible environment for 10,000 years after disposal]

| Radionuclide | Release limit per 1,000 MTHM or other unit of waste (see notes) (curies) |
|---|---|
| Americium-241 or -243 | 100 |
| Carbon-14 | 100 |
| Cesium-135 or -137 | 1,000 |
| Iodine-129 | 100 |
| Neptunium-237 | 100 |
| Plutonium-238, -239, -240, or -242 | 100 |
| Radium-226 | 100 |
| Strontium-90 | 1,000 |
| Technetium-99 | 10,000 |
| Thorium-230 or -232 | 10 |
| Tin-126 | 1,000 |
| Uranium-233, -234, -235, -236, or -238 | 100 |
| Any other alpha-emitting radionuclide with a half-life greater than 20 years | 100 |
| Any other radionuclide with a half-life greater than 20 years that does not emit alpha particles | 1,000 |

### APPLICATION OF TABLE 1

NOTE 1: *Units of Waste.* The Release Limits in Table 1 apply to the amount of wastes in any one of the following:

(a) An amount of spent nuclear fuel containing 1,000 metric tons of heavy metal (MTHM) exposed to a burnup between 25,000 megawatt-days per metric ton of heavy metal (MWd/MTHM) and 40,000 MWd/MTHM;

(b) The high-level radioactive wastes generated from reprocessing each 1,000 MTHM exposed to a burnup between 25,000 MWd/MTHM and 40,000 MWd/MTHM;

(c) Each 100,000,000 curies of gamma or beta-emitting radionuclides with half-lives greater than 20 years but less than 100 years (for use as discussed in Note 5 or with materials that are identified by the Commission as high-level radioactive waste in accordance with part B of the definition of high-level waste in the NWPA);

(d) Each 1,000,000 curies of other radionuclides (i.e., gamma or beta-emitters with half-lives greater than 100 years or any alpha-emitters with half-lives greater than 20 years) (for use as discussed in Note 5 or with materials that are identified by the Commission as high-level radioactive waste in accordance with part B of the definition of high-level waste in the NWPA); or

(e) An amount of transuranic (TRU) wastes containing one million curies of alpha-emitting transuranic radionuclides with half-lives greater than 20 years.

NOTE 2: *Release Limits for Specific Disposal Systems.* To develop Release Limits for a particular disposal system, the quantities in Table 1 shall be adjusted for the amount of waste included in the disposal system compared to the various units of waste defined in Note 1. For example:

(a) If a particular disposal system contained the high-level wastes from 50,000 MTHM, the Release Limits for that system would be the quantities in Table 1 multiplied by 50 (50,000 MTHM divided by 1,000 MTHM).

(b) If a particular disposal system contained three million curies of alpha-emitting transuranic wastes, the Release Limits for that system would be the quantities in Table 1 multiplied by three (three million curies divided by one million curies).

(c) If a particular disposal system contained both the high-level wastes from 50,000 MTHM *and* 5 million curies of alpha-emitting transuranic wastes, the Release Limits for that system would be the quantities in Table 1 multiplied by 55:

$$\frac{50{,}000\,\text{MTHM}}{1{,}000\,\text{MTHM}} + \frac{5{,}000{,}000\,\text{curies TRU}}{1{,}000{,}000\,\text{curies TRU}} = 55$$

NOTE 3: *Adjustments for Reactor Fuels with Different Burnup.* For disposal systems containing reactor fuels (or the high-level wastes from reactor fuels) exposed to an average burnup of less than 25,000 MWd/MTHM or greater than 40,000 MWd/MTHM, the units of waste defined in (a) and (b) of Note 1 shall be adjusted. The unit shall be multiplied by the ratio of 30,000 MWd/MTHM divided by the fuel's actual average burnup, except that a value of 5,000 MWd/MTHM may be used when the average fuel burnup is below 5,000 MWd/MTHM and a value of 100,000 MWd/MTHM shall be used when the average fuel burnup is above 100,000 MWd/MTHM. This adjusted unit of waste shall then be used in determining the Release Limits for the disposal system.

For example, if a particular disposal system contained only high-level wastes with an average burnup of 3,000 MWd/MTHM, the unit of waste for that disposal system would be:

$$1{,}000\,\text{MTHM} \times \frac{(30{,}000)}{(5{,}000)} = 6{,}000\,\text{MTHM}$$

If that disposal system contained the high-level wastes from 60,000 MTHM (with an average burnup of 3,000 MWd/MTHM), then the Release Limits for that system would be the quantities in Table 1 multiplied by ten:

$$\frac{60{,}000\ \text{MTHM}}{6{,}000\ \text{MTHM}} = 10$$

which is the same as:

$$\frac{60{,}000\,\text{MTHM}}{1{,}000\,\text{MTHM}} \times \frac{(5{,}000\,\text{MWd/MTHM})}{(30{,}000\,\text{MWd/MTHM})} = 10$$

NOTE 4: *Treatment of Fractionated High-Level Wastes.* In some cases, a high-level waste stream from reprocessing spent nuclear fuel may have been (or will be) separated into two or more high-level waste components destined for different disposal systems. In such cases, the implementing agency may allocate the Release Limit multiplier (based upon the original MTHM and the average fuel burnup of the high-level waste stream) among the various disposal systems as it chooses, provided that the total Release Limit multiplier used for that waste stream at all of its disposal systems may not exceed the Release Limit multiplier that would be used if the entire waste stream were disposed of in one disposal system.

NOTE 5: *Treatment of Wastes with Poorly Known Burnups or Original MTHM.* In some cases, the records associated with particular high-level waste streams may not be adequate to accurately determine the original metric tons of heavy metal in the reactor fuel that created the waste, or to determine the average burnup that the fuel was exposed to. If the uncertainties are such that the original amount of heavy metal or the average fuel burnup for particular high-level waste streams cannot be quantified, the units of waste derived from (a) and (b) of Note 1 shall no longer be used. Instead, the units of waste defined in (c) and (d) of Note 1 shall be used for such high-level waste streams. If the uncertainties in such information allow a range of values to be associated with the original amount of heavy metal or the average fuel burnup, then the calculations described in previous Notes will be conducted using the values that result in the smallest Release Limits, except that the Release Limits need not be smaller than those that would be calculated using the units of waste defined in (c) and (d) of Note 1.

NOTE 6: *Uses of Release Limits to Determine Compliance with §191.13* Once release limits for a particular disposal system have been determined in accordance with Notes 1 through 5, these release limits shall be used to determine compliance with the requirements of §191.13 as follows. In cases where a mixture of radionuclides is projected to be released to the accessible environment, the limiting values shall be determined as follows: For each radionuclide in the mixture, determine the ratio between the cumulative release quantity projected over 10,000 years

and the limit for that radionuclide as determined from Table 1 and Notes 1 through 5. The sum of such ratios for all the radionuclides in the mixture may not exceed one with regard to §191.13(a)(1) and may not exceed ten with regard to §191.13(a)(2).

For example, if radionuclides A, B, and C are projected to be released in amounts $Q_a$, $Q_b$, and $Q_c$, and if the applicable Release Limits are $RL_a$, $RL_b$, and $RL_c$, then the cumulative releases over 10,000 years shall be limited so that the following relationship exists:

$$\frac{Q_a}{RL_a} + \frac{Q_b}{RL_b} + \frac{Q_c}{RL_c} \leq 1$$

[50 FR 38084, Sept. 19, 1985, as amended at 58 FR 66415, Dec. 20, 1993]

## APPENDIX B TO PART 191—CALCULATION OF ANNUAL COMMITTED EFFECTIVE DOSE

### *I. Equivalent Dose*

The calculation of the committed effective dose (CED) begins with the determination of the equivalent dose, $H_T$, to a tissue or organ, T, listed in Table B.2 below by using the equation:

$$H_T = \sum_R D_{T,R} \cdot w_R$$

where $D_{T,R}$ is the absorbed dose in rads (one gray, an SI unit, equals 100 rads) averaged over the tissue or organ, T, due to radiation type, R, and $w_R$ is the radiation weighting factor which is given in Table B.1 below. The unit of equivalent dose is the rem (sievert, in SI units).

TABLE B.1.—RADIATION WEIGHTING FACTORS, $w_R$[1]

| Radiation type and energy range[2] | $w_R$ value |
|---|---|
| Photons, all energies | 1 |
| Electrons and muons, all energies | 1 |
| Neutrons, energy < 10 keV | 5 |
| 10 keV to 100 keV | 10 |
| >100 keV to 2 MeV | 20 |
| >2 MeV to 20 MeV | 10 |
| >20 MeV | 5 |
| Protons, other than recoil protons, >2 MeV | 5 |
| Alpha particles, fission fragments, heavy nuclei | 20 |

[1] All values relate to the radiation incident on the body or, for internal sources, emitted from the source.

[2] See paragraph A14 in ICRP Publication 60 for the choice of values for other radiation types and energies not in the table.

### *II. Effective Dose*

The next step is the calculation of the effective dose, E. The probability of occurrence of a stochastic effect in a tissue or organ is assumed to be proportional to the equivalent dose in the tissue or organ. The constant of proportionality differs for the various tissues of the body, but in assessing health detriment the total risk is required. This is taken into account using the tissue weighting factors, $w_T$ in Table B.2, which represent the proportion of the stochastic risk resulting from irradiation of the tissue or organ to the total risk when the whole body is irradiated uniformly and $H_T$ is the equivalent dose in the tissue or organ, T, in the equation:

$$E = \sum w_T \cdot H_T$$

TABLE B.2—TISSUE WEIGHTING FACTORS, $w_T$[1]

| Tissue or organ | $w_T$ value |
|---|---|
| Gonads | 0.25 |
| Breast | 0.15 |
| Red bone marrow | 0.12 |
| Lung | 0.12 |
| Thyroid | 0.03 |
| Bone surfaces | 0.03 |
| Remainder | [2] 0.30 |

[1] The values are considered to be appropriate for protection for individuals of both sexes and all ages.

[2] For purposes of calculation, the remainder is comprised of the five tissues or organs not specifically listed in Table B.2 that receive the highest dose equivalents; a weighting factor of 0.06 is applied to each of them, including the various sections of the gastrointestinal tract which are treated as separate organs. This covers all tissues and organs except the hands and forearms, the feet and ankles, the skin and the lens of the eye. The excepted tissues and organs should be excluded from the computation of $H_E$.

### *III. Annual Committed Tissue or Organ Equivalent Dose*

For internal irradiation from incorporated radionuclides, the total absorbed dose will be spread out in time, being gradually delivered as the radionuclide decays. The time distribution of the absorbed dose rate will vary with the radionuclide, its form, the mode of intake and the tissue within which it is incorporated. To take account of this distribution the quantity committed equivalent dose, $HT(\tau)$ where is the integration time in years following an intake over any particular year, is used and is the integral over time of the equivalent dose rate in a particular tissue or organ that will be received by an individual following an intake of radioactive material into the body. The time period, $\tau$, is taken as 50 years as an average time of exposure following intake:

$$H_T(\tau) = \int_{t_0}^{t_0+50} H_T(t)dt$$

for a single intake of activity at time $t_0$ where $H_T(t)$ is the relevant equivalent-dose rate in a tissue or organ at time t. For the purposes of this part, the previously mentioned single intake may be considered to be an annual intake.

*IV. Annual Committed Effective Dose*

If the committed equivalent doses to the individual tissues or organs resulting from an annual intake are multiplied by the appropriate weighting factors, $w_T$, and then summed, the result will be the annual committed effective dose, $E(\tau)$:

$$E(\tau) = \sum_T w_T \cdot H_T(\tau).$$

[58 FR 66415, Dec. 20, 1993]

## APPENDIX C TO PART 191—GUIDANCE FOR IMPLEMENTATION OF SUBPART B

[NOTE: The supplemental information in this appendix is not an integral part of 40 CFR part 191. Therefore, the implementing agencies are not bound to follow this guidance. However, it is included because it describes the Agency's assumptions regarding the implementation of subpart B. This appendix will appear in the Code of Federal Regulations.]

The Agency believes that the implementing agencies must determine compliance with §§191.13, 191.15, and 191.16 of subpart B by evaluating long-term predictions of disposal system performance. Determining compliance with §191.13 will also involve predicting the likelihood of events and processes that may disturb the disposal system. In making these various predictions, it will be appropriate for the implementing agencies to make use of rather complex computational models, analytical theories, and prevalent expert judgment relevant to the numerical predictions. Substantial uncertainties are likely to be encountered in making these predictions. In fact, sole reliance on these numerical predictions to determine compliance may not be appropriate; the implementing agencies may choose to supplement such predictions with qualitative judgments as well. Because the procedures for determining compliance with subpart B have not been formulated and tested yet, this appendix to the rule indicates the Agency's assumptions regarding certain issues that may arise when implementing §§191.13, 191.15, and 191.16. Most of this guidance applies to any type of disposal system for the wastes covered by this rule. However, several sections apply only to disposal in mined geologic repositories and would be inappropriate for other types of disposal systems.

*Consideration of Total Disposal System.* When predicting disposal system performance, the Agency assumes that reasonable projections of the protection expected from all of the engineered and natural barriers of a disposal system will be considered. Portions of the disposal system should not be disregarded, even if projected performance is uncertain, except for portions of the system that make negligible contributions to the overall isolation provided by the disposal system.

*Scope of Performance Assessments.* Section 191.13 requires the implementing agencies to evaluate compliance through performance assessments as defined in §191.12(q). The Agency assumes that such performance assessments need not consider categories of events or processes that are estimated to have less than one chance in 10,000 of occurring over 10,000 years. Furthermore, the performance assessments need not evaluate in detail the releases from all events and processes estimated to have a greater likelihood of occurrence. Some of these events and processes may be omitted from the performance assessments if there is a reasonable expectation that the remaining probability distribution of cumulative releases would not be significantly changed by such omissions.

*Compliance with §191.13.* The Agency assumes that, whenever practicable, the implementing agency will assemble all of the results of the performance assessments to determine compliance with §191.13 into a ''complementary cumulative distribution function'' that indicates the probability of exceeding various levels of cumulative release. When the uncertainties in parameters are considered in a performance assessment, the effects of the uncertainties considered can be incorporated into a single such distribution function for each disposal system considered. The Agency assumes that a disposal system can be considered to be in compliance with §191.13 if this single distribution function meets the requirements of §191.13(a).

*Compliance with §§191.15 and 191.16.* When the uncertainties in undisturbed performance of a disposal system are considered, the implementing agencies need not require that a very large percentage of the range of estimated radiation exposures or radionuclide concentrations fall below limits established in §§191.15 and 191.16, respectively. The Agency assumes that compliance can be determined based upon ''best estimate'' predictions (e.g., the mean or the median of the appropriate distribution, whichever is higher).

*Institutional Controls.* To comply with §191.14(a), the implementing agency will assume that none of the active institutional controls prevent or reduce radionuclide releases for more than 100 years after disposal. However, the Federal Government is committed to retaining ownership of all disposal sites for spent nuclear fuel and high-level and transuranic radioactive wastes and will establish appropriate markers and records, consistent with §191.14(c). The Agency assumes that, as long as such passive institutional controls endure and are understood, they: (1) Can be effective in deterring systematic or persistent exploitation of these

disposal sites; and (2) can reduce the likelihood of inadvertent, intermittent human intrusion to a degree to be determined by the implementing agency. However, the Agency believes that passive institutional controls can never be assumed to eliminate the chance of inadvertent and intermittent human intrusion into these disposal sites.

*Consideration of Inadvertent Human Intrusion into Geologic Repositories.* The most speculative potential disruptions of a mined geologic repository are those associated with inadvertent human intrusion. Some types of intrusion would have virtually no effect on a repository's containment of waste. On the other hand, it is possible to conceive of intrusions (involving widespread societal loss of knowledge regarding radioactive wastes) that could result in major disruptions that no reasonable repository selection or design precautions could alleviate. The Agency believes that the most productive consideration of inadvertent intrusion concerns those realistic possibilities that may be usefully mitigated by repository design, site selection, or use of passive controls (although passive institutional controls should not be assumed to completely rule out the possibility of intrusion). Therefore, inadvertent and intermittent intrusion by exploratory drilling for resources (other than any provided by the disposal system itself) can be the most severe intrusion scenario assumed by the implementing agencies. Furthermore, the implementing agencies can assume that passive institutional controls or the intruders' own exploratory procedures are adequate for the intruders to soon detect, or be warned of, the incompatibility of the area with their activities.

*Frequency and Severity of Inadvertent Human Intrusion into Geologic Repositories.* The implementing agencies should consider the effects of each particular disposal system's site, design, and passive institutional controls in judging the likelihood and consequences of such inadvertent exploratory drilling. However, the Agency assumes that the likelihood of such inadvertent and intermittent drilling need not be taken to be greater than 30 boreholes per square kilometer of repository area per 10,000 years for geologic repositories in proximity to sedimentary rock formations, or more than 3 boreholes per square kilometer per 10,000 years for repositories in other geologic formations. Furthermore, the Agency assumes that the consequences of such inadvertent drilling need not be assumed to be more severe than: (1) Direct release to the land surface of all the ground water in the repository horizon that would promptly flow through the newly created borehole to the surface due to natural lithostatic pressure—or (if pumping would be required to raise water to the surface) release of 200 cubic meters of ground water pumped to the surface if that much water is readily available to be pumped; and (2) creation of a ground water flow path with a permeability typical of a borehole filled by the soil or gravel that would normally settle into an open hole over time—not the permeability of a carefully sealed borehole.

[50 FR 38084, Sept. 19, 1985. Redesignated and amended at 58 FR 66415, Dec. 20, 1993]

# PART 192—HEALTH AND ENVIRONMENTAL PROTECTION STANDARDS FOR URANIUM AND THORIUM MILL TAILINGS

## Subpart A—Standards for the Control of Residual Radioactive Materials from Inactive Uranium Processing Sites

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192.00 Applicability.
192.01 Definitions.
192.02 Standards.
192.03 Monitoring.
192.04 Corrective action.
TABLE 1 TO SUBPART A—MAXIMUM CONCENTRATION OF CONSTITUENTS FOR GROUNDWATER PROTECTION

## Subpart B—Standards for Cleanup of Land and Buildings Contaminated with Residual Radioactive Materials from Inactive Uranium Processing Sites

192.10 Applicability.
192.11 Definitions.
192.12 Standards.

## Subpart C—Implementation

192.20 Guidance for implementation.
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192.22 Supplemental standards.
192.23 Effective date.

## Subpart D—Standards for Management of Uranium Byproduct Materials Pursuant to Section 84 of the Atomic Energy Act of 1954, as Amended

192.30 Applicability.
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APPENDIX I TO PART 192—LISTED CONSTITUENTS

AUTHORITY: Sec. 275 of the Atomic Energy Act of 1954, 42 U.S.C. 2022, as added by the Uranium Mill Tailings Radiation Control Act of 1978, Pub. L. 95–604, as amended.

SOURCE: 48 FR 602, Jan. 5, 1983, unless otherwise noted.

## Subpart A—Standards for the Control of Residual Radioactive Materials from Inactive Uranium Processing Sites

### § 192.00 Applicability.

This subpart applies to the control of residual radioactive material at designated processing or depository sites under section 108 of the Uranium Mill Tailings Radiation Control Act of 1978 (henceforth designated ''the Act''), and to restoration of such sites following any use of subsurface minerals under section 104(h) of the Act.

### § 192.01 Definitions.

(a) *Residual radioactive material* means:

(1) Waste (which the Secretary determines to be radioactive) in the form of tailings resulting from the processing of ores for the extraction of uranium and other valuable constituents of the ores; and

(2) Other wastes (which the Secretary determines to be radioactive) at a processing site which relate to such processing, including any residual stock of unprocessed ores or low-grade materials.

(b) *Remedial* action means any action performed under section 108 of the Act.

(c) *Control* means any remedial action intended to stabilize, inhibit future misuse of, or reduce emissions or effluents from residual radioactive materials.

(d) *Disposal site* means the region within the smallest perimeter of residual radioactive material (excluding cover materials) following completion of control activities.

(e) *Depository site* means a site (other than a processing site) selected under Section 104(b) or 105(b) of the Act.

(f) *Curie* (Ci) means the amount of radioactive material that produces 37 billion nuclear transformation per second. One picocurie (pCi) = $10^{-12}$ Ci.

(g) *Act* means the Uranium Mill Tailings Radiation Control Act of 1978, as amended.

(h) *Administrator* means the Administrator of the Environmental Protection Agency.

(i) *Secretary* means the Secretary of Energy.

(j) *Commission* means the Nuclear Regulatory Commission.

(k) *Indian tribe* means any tribe, band, clan, group, pueblo, or community of Indians recognized as eligible for services provided by the Secretary of the Interior to Indians.

(l) *Processing site* means:

(1) Any site, including the mill, designated by the Secretary under Section 102(a)(1) of the Act; and

(2) Any other real property or improvement thereon which is in the vicinity of such site, and is determined by the Secretary, in consultation with the Commission, to be contaminated with residual radioactive materials derived from such site.

(m) *Tailings* means the remaining portion of a metal-bearing ore after some or all of such metal, such as uranium, has been extracted.

(n) *Disposal period* means the period of time beginning March 7, 1983 and ending with the completion of all subpart A requirements specified under a plan for remedial action except those specified in § 192.03 and § 192.04.

(o) *Plan for remedial action* means a written plan (or plans) for disposal and cleanup of residual radioactive materials associated with a processing site that incorporates the results of site characterization studies, environmental assessments or impact statements, and engineering assessments so as to satisfy the requirements of subparts A and B of this part. The plan(s) shall be developed in accordance with the provisions of Section 108(a) of the Act with the concurrence of the Commission and in consultation, as appropriate, with the Indian Tribe and the Secretary of Interior.

(p) *Post-disposal period* means the period of time beginning immediately after the disposal period and ending at

termination of the monitoring period established under §192.03.

(q) *Groundwater* means water below the ground surface in a zone of saturation.

(r) *Underground source of drinking water* means an aquifer or its portion:

(1)(i) Which supplies any public water system as defined in §141.2 of this chapter; or

(ii) Which contains a sufficient quantity of groundwater to supply a public water system; and

(A) Currently supplies drinking water for human consumption; or

(B) Contains fewer than 10,000 mg/l total dissolved solids; and

(2) Which is not an exempted aquifer as defined in §144.7 of this chapter.

[48 FR 602, Jan. 5, 1983, as amended at 60 FR 2865, Jan. 11, 1995]

### §192.02 Standards.

Control of residual radioactive materials and their listed constituents shall be designed[1] to:

(a) Be effective for up to one thousand years, to the extent reasonably achievable, and, in any case, for at least 200 years, and,

(b) Provide reasonable assurance that releases of radon-222 from residual radioactive material to the atmosphere will not:

(1) Exceed an average[2] release rate of 20 picocuries per square meter per second, or

(2) Increase the annual average concentration of radon-222 in air at or above any location outside the disposal site by more than one-half picocurie per liter.

(c) Provide reasonable assurance of conformance with the following groundwater protection provisions:

(1) The Secretary shall, on a site-specific basis, determine which of the constituents listed in Appendix I to Part 192 are present in or reasonably derived from residual radioactive materials and shall establish a monitoring program adequate to determine background levels of each such constituent in groundwater at each disposal site.

(2) The Secretary shall comply with conditions specified in a plan for remedial action which includes engineering specifications for a system of disposal designed to ensure that constituents identified under paragraph (c)(1) of this section entering the groundwater from a depository site (or a processing site, if residual radioactive materials are retained on the site) will not exceed the concentration limits established under paragraph (c)(3) of this section (or the supplemental standards established under §192.22) in the uppermost aquifer underlying the site beyond the point of compliance established under paragraph (c)(4) of this section.

(3) Concentration limits:

(i) Concentration limits shall be determined in the groundwater for listed constituents identified under paragraph (c)(1) of this section. The concentration of a listed constituent in groundwater must not exceed:

(A) The background level of that constituent in the groundwater; or

(B) For any of the constituents listed in Table 1 to subpart A, the respective value given in that Table if the background level of the constituent is below the value given in the Table; or

(C) An alternate concentration limit established pursuant to paragraph (c)(3)(ii) of this section.

(ii)(A) The Secretary may apply an alternate concentration limit if, after considering remedial or corrective actions to achieve the levels specified in paragraphs (c)(3)(i)(A) and (B) of this section, he has determined that the constituent will not pose a substantial present or potential hazard to human health and the environment as long as the alternate concentration limit is not exceeded, and the Commission has concurred.

(B) In considering the present or potential hazard to human health and the

[1] Because the standard applies to design, monitoring after disposal is not required to demonstrate compliance with respect to §192.02(a) and (b).

[2] This average shall apply over the entire surface of the disposal site and over at least a one-year period. Radon will come from both residual radioactive materials and from materials covering them. Radon emissions from the covering materials should be estimated as part of developing a remedial action plan for each site. The standard, however, applies only to emissions from residual radioactive materials to the atmosphere.

environment of alternate concentration limits, the following factors shall be considered:

(*1*) Potential adverse effects on groundwater quality, considering:

(*i*) The physical and chemical characteristics of constituents in the residual radioactive material at the site, including their potential for migration;

(*ii*) The hydrogeological characteristics of the site and surrounding land;

(*iii*) The quantity of groundwater and the direction of groundwater flow;

(*iv*) The proximity and withdrawal rates of groundwater users;

(*v*) The current and future uses of groundwater in the region surrounding the site;

(*vi*) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

(*vii*) The potential for health risks caused by human exposure to constituents;

(*viii*) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to constituents;

(*ix*) The persistence and permanence of the potential adverse effects;

(*x*) The presence of underground sources of drinking water and exempted aquifers identified under § 144.7 of this chapter; and

(*2*) Potential adverse effects on hydraulically-connected surface-water quality, considering:

(*i*) The volume and physical and chemical characteristics of the residual radioactive material at the site;

(*ii*) The hydrogeological characteristics of the site and surrounding land;

(*iii*) The quantity and quality of groundwater, and the direction of groundwater flow;

(*iv*) The patterns of rainfall in the region;

(*v*) The proximity of the site to surface waters;

(*vi*) The current and future uses of surface waters in the region surrounding the site and any water quality standards established for those surface waters;

(*vii*) The existing quality of surface water, including other sources of contamination and their cumulative impact on surface water quality;

(*viii*) The potential for health risks caused by human exposure to constituents;

(*ix*) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to constituents; and

(*x*) The persistence and permanence of the potential adverse effects.

(4) Point of compliance: The point of compliance is the location at which the groundwater concentration limits of paragraph (c)(3) of this section apply. The point of compliance is the intersection of a vertical plane with the uppermost aquifer underlying the site, located at the hydraulically downgradient limit of the disposal area plus the area taken up by any liner, dike, or other barrier designed to contain the residual radioactive material.

(d) Each site on which disposal occurs shall be designed and stabilized in a manner that minimizes the need for future maintenance.

[60 FR 2865, Jan. 11, 1995]

### § 192.03 Monitoring.

A groundwater monitoring plan shall be implemented, to be carried out over a period of time commencing upon completion of remedial actions taken to comply with the standards in § 192.02, and of a duration which is adequate to demonstrate that future performance of the system of disposal can reasonably be expected to be in accordance with the design requirements of § 192.02(c). This plan and the length of the monitoring period shall be modified to incorporate any corrective actions required under § 192.04 or § 192.12(c).

[60 FR 2866, Jan. 11, 1995]

### § 192.04 Corrective action.

If the groundwater concentration limits established for disposal sites under provisions of § 192.02(c) are found or projected to be exceeded, a corrective action program shall be placed into operation as soon as is practicable, and in no event later than eighteen (18) months after a finding of exceedance. This corrective action program will restore the performance of the system of disposal to the original concentration limits established under

§ 192.02(c)(3), to the extent reasonably achievable, and, in any case, as a minimum shall:

(a) Conform with the groundwater provisions of § 192.02(c)(3), and

(b) Clean up groundwater in conformance with subpart B, modified as appropriate to apply to the disposal site.

[60 FR 2866, Jan. 11, 1995]

TABLE 1 TO SUBPART A.—MAXIMUM CONCENTRATION OF CONSTITUENTS FOR GROUNDWATER PROTECTION

| Constituent concentration [1] | Maximum |
|---|---|
| Arsenic | 0.05 |
| Barium | 1.0 |
| Cadmium | 0.01 |
| Chromium | 0.05 |
| Lead | 0.05 |
| Mercury | 0.002 |
| Selenium | 0.01 |
| Silver | 0.05 |
| Nitrate (as N) | 10. |
| Molybdenum | 0.1 |
| Combined radium-226 and radium-228 | 5 pCi/liter |
| Combined uranium-234 and uranium-238 [2]. | 30 pCi/liter |
| Gross alpha-particle activity (excluding radon and uranium). | 15 pCi/liter |
| Endrin (1,2,3,4,10,10-hexachloro-6,7-exposy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo,endo-5,8-dimethanonaphthalene). | 0.0002 |
| Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma insomer). | 0.004 |
| Methoxychlor (1,1,1-trichloro-2,2'-bis(p-methoxyphenylethane)). | 0.1 |
| Toxaphene ($C_{10}$ $H_{10}$ $Cl_6$, technical chlorinated camphene, 67–69 percent chlorine). | 0.005 |
| 2,4-D (2,4-dichlorophenoxyacetic acid) | 0.1 |
| 2,4,5-TP Silvex (2,4,5-trichlorophenoxypropionic acid). | 0.01 |

[1] Milligrams per liter, unless stated otherwise.

[2] Where secular equilibrium obtains, this criterion will be satisfied by a concentration of 0.044 milligrams per liter (0.044 mg/l). For conditions of other than secular equilibrium, a corresponding value may be derived and applied, based on the measured site-specific ratio of the two isotopes of uranium.

[60 FR 2866, Jan. 11, 1995]

## Subpart B—Standards for Cleanup of Land and Buildings Contaminated with Residual Radioactive Materials from Inactive Uranium Processing Sites

### § 192.10 Applicability.

This subpart applies to land and buildings that are part of any processing site designated by the Secretary of Energy under section 102 of the Act. section 101 of the Act, states, in part, that ''processing site'' means—

(a) Any site, including the mill, containing residual radioactive materials at which all or substantially all of the uranium was produced for sale to any Federal agency prior to January 1, 1971, under a contract with any Federal agency, except in the case of a site at or near Slick Rock, Colorado, unless—

(1) Such site was owned or controlled as of Januray 1, 1978, or is thereafter owned or controlled, by any Federal agency, or

(2) A license (issued by the (Nuclear Regulatory) Commission or its predecessor agency under the Atomic Energy Act of 1954 or by a State as permitted under section 274 of such Act) for the production at site of any uranium or thorium product derived from ores is in effect on January 1, 1978, or is issued or renewed after such date; and

(b) Any other real property or improvement thereon which—

(1) Is in the vicinity of such site, and

(2) Is determined by the Secretary, in consultation with the Commission, to be contaminated with residual radioactive materials derived from such site.

### § 192.11 Definitions.

(a) Unless otherwise indicated in this subpart, all terms shall have the same meaning as defined in subpart A.

(b) *Land* means any surface or subsurface land that is not part of a disposal site and is not covered by an occupiable building.

(c) *Working Level* (WL) means any combination of short-lived radon decay products in one liter of air that will result in the ultimate emission of alpha particles with a total energy of 130 billion electron volts.

(d) *Soil* means all unconsolidated materials normally found on or near the surface of the earth including, but not limited to, silts, clays, sands, gravel, and small rocks.

(e) *Limited use groundwater* means groundwater that is not a current or potential source of drinking water because (1) the concentration of total dissolved solids is in excess of 10,000 mg/l,

or (2) widespread, ambient contamination not due to activities involving residual radioactive materials from a designated processing site exists that cannot be cleaned up using treatment methods reasonably employed in public water systems, or (3) the quantity of water reasonably available for sustained continuous use is less than 150 gallons per day. The parameters for determining the quantity of water reasonably available shall be determined by the Secretary with the concurrence of the Commission.

[48 FR 602, Jan. 5, 1983, as amended at 60 FR 2866, Jan. 11, 1995]

**§ 192.12 Standards.**

Remedial actions shall be conducted so as to provide reasonable assurance that, *as a result of residual radioactive materials from any designated processing site:*

(a) The concentration of radium-226 in land averaged over any area of 100 square meters shall not exceed the background level by more than—

(1) 5 pCi/g, averaged over the first 15 cm of soil below the surface, and

(2) 15 pCi/g, averaged over 15 cm thick layers of soil more than 15 cm below the surface.

(b) In any occupied or habitable building—

(1) The objective of remedial action shall be, and reasonable effort shall be made to achieve, an annual average (or equivalent) radon decay product concentration (including background) not to exceed 0.02 WL. In any case, the radon decay product concentration (including background) shall not exceed 0.03 WL, and

(2) The level of gamma radiation shall not exceed the background level by more than 20 microroentgens per hour.

(c) The Secretary shall comply with conditions specified in a plan for remedial action which provides that contamination of groundwater by listed constituents from residual radioactive material at any designated processing site (§ 192.01(1)) shall be brought into compliance as promptly as is reasonably achievable with the provisions of § 192.02(c)(3) or any supplemental standards established under § 192.22. For the purposes of this subpart:

(1) A monitoring program shall be carried out that is adequate to define backgroundwater quality and the areal extent and magnitude of groundwater contamination by listed constituents from residual radioactive materials (§ 192.02(c)(1)) and to monitor compliance with this subpart. The Secretary shall determine which of the constituents listed in Appendix I to part 192 are present in or could reasonably be derived from residual radioactive material at the site, and concentration limits shall be established in accordance with § 192.02(c)(3).

(2) (i) If the Secretary determines that sole reliance on active remedial procedures is not appropriate and that cleanup of the groundwater can be more reasonably accomplished in full or in part through natural flushing, then the period for remedial procedures may be extended. Such an extended period may extend to a term not to exceed 100 years if:

(A) The concentration limits established under this subpart are projected to be satisfied at the end of this extended period,

(B) Institutional control, having a high degree of permanence and which will effectively protect public health and the environment and satisfy beneficial uses of groundwater during the extended period and which is enforceable by the administrative or judicial branches of government entities, is instituted and maintained, as part of the remedial action, at the processing site and wherever contamination by listed constituents from residual radioactive materials is found in groundwater, or is projected to be found, and

(C) The groundwater is not currently and is not now projected to become a source for a public water system subject to provisions of the Safe Drinking Water Act during the extended period.

(ii) Remedial actions on groundwater conducted under this subpart may occur before or after actions under Section 104(f)(2) of the Act are initiated.

(3) Compliance with this subpart shall be demonstrated through the monitoring program established under paragraph (c)(1) of this section at those locations not beneath a disposal site

and its cover where groundwater contains listed constituents from residual radioactive material.

[48 FR 602, Jan. 5, 1983, as amended at 60 FR 2867, Jan. 11, 1995]

## Subpart C—Implementation

### § 192.20 Guidance for implementation.

Section 108 of the Act requires the Secretary of Energy to select and perform remedial actions with the concurrence of the Nuclear Regulatory Commission and the full participation of any State that pays part of the cost, and in consultation, as appropriate, with affected Indian Tribes and the Secretary of the Interior. These parties, in their respective roles under section 108, are referred to hereafter as ''the implementing agencies.'' The implementing agencies shall establish methods and procedures to provide ''reasonable assurance'' that the provisions of Subparts A and B are satisfied. This should be done as appropriate through use of analytic models and site-specific analyses, in the case of Subpart A, and for Subpart B through measurements performed within the accuracy of currently available types of field and laboratory instruments in conjunction with reasonable survey and sampling procedures. These methods and procedures may be varied to suit conditions at specific sites. In particular:

(a)(1) The purpose of Subpart A is to provide for long-term stabilization and isolation in order to inhibit misuse and spreading of residual radioactive materials, control releases of radon to air, and protect water. Subpart A may be implemented through analysis of the physical properties of the site and the control system and projection of the effects of natural processes over time. Events and processes that could significantly affect the average radon release rate from the entire disposal site should be considered. Phenomena that are localized or temporary, such as local cracking or burrowing of rodents, need to be taken into account only if their cumulative effect would be significant in determining compliance with the standard. Computational models, theories, and prevalent expert judgment may be used to decide that a control system design will satisfy the standard. The numerical range provided in the standard for the longevity of the effectiveness of the control of residual radioactive materials allows for consideration of the various factors affecting the longevity of control and stabilization methods and their costs. These factors have different levels of predictability and may vary for the different sites.

(2) Protection of water should be considered on a case-specific basis, drawing on hydrological and geochemical surveys and all other relevant data. The hydrologic and geologic assessment to be conducted at each site should include a monitoring program sufficient to establish background groundwater quality through one or more upgradient or other appropriately located wells. The groundwater monitoring list in Appendix IX of part 264 of this chapter (plus the additional constituents in Table A of this paragraph) may be used for screening purposes in place of Appendix I of part 192 in the monitoring program. New depository sites for tailings that contain water at greater than the level of ''specific retention'' should use aliner or equivalent. In considering design objectives for groundwater protection, the implementing agencies should give priority to concentration levels in the order listed under § 192.02(c)(3)(i). When considering the potential for health risks caused by human exposure to known or suspected carcinogens, alternate concentration limits pursuant to paragraph 192.02(c)(3)(ii) should be established at concentration levels which represent an excess lifetime risk, at a point of exposure, to an average individual no greater than between $10^{-4}$ and $10^{-6}$.

TABLE A TO § 192.20(a)(2)—ADDITIONAL LISTED CONSTITUENTS

| |
|---|
| Nitrate (as N) |
| Molybdenum |
| Combined radium-226 and radium-228 |
| Combined uranium-234 and uranium-238 |
| Gross alpha-particle activity (excluding radon and uranium) |

(3) The plan for remedial action, concurred in by the Commission, will specify how applicable requirements of

subpart A are to be satisfied. The plan should include the schedule and steps necessary to complete disposal operations at the site. It should include an estimate of the inventory of wastes to be disposed of in the pile and their listed constituents and address any need to eliminate free liquids; stabilization of the wastes to a bearing capacity sufficient to support the final cover; and the design and engineering specifications for a cover to manage the migration of liquids through the stabilized pile, function without maintenance, promote drainage and minimize erosion or abrasion of the cover, and accommodate settling and subsidence so that cover integrity is maintained. Evaluation of proposed designs to conform to subpart A should be based on realistic technical judgments and include use of available empirical information. The consideration of possible failure modes and related corrective actions should be limited to reasonable failure assumptions, with a demonstration that the disposal design is generally amenable to a range of corrective actions.

(4) The groundwater monitoring list in Appendix IX of part 264 of this chapter (plus the additional constituents in Table A in paragraph (a)(2) of this section) may be used for screening purposes in place of Appendix I of part 192 in monitoring programs. The monitoring plan required under § 192.03 should be designed to include verification of site-specific assumptions used to project the performance of the disposal system. Prevention of contamination of groundwater may be assessed by indirect methods, such as measuring the migration of moisture in the various components of the cover, the tailings, and the area between the tailings and the nearest aquifer, as well as by direct monitoring of groundwater. In the case of vicinity properties (§ 192.01(l)(2)), such assessments may not be necessary, as determined by the Secretary, with the concurrence of the Commission, considering such factors as local geology and the amount of contamination present. Temporary excursions from applicable limits of groundwater concentrations that are attributable to a disposal operation itself shall not constitute a basis for considering corrective action under § 192.04 during the disposal period, unless the disposal operation is suspended prior to completion for other than seasonal reasons.

(b)(1) Compliance with § 192.12(a) and (b) of subpart B, to the extent practical, should be demonstrated through radiation surveys. Such surveys may, if appropriate, be restricted to locations likely to contain residual radioactive materials. These surveys should be designed to provide for compliance averaged over limited areas rather than point-by-point compliance with the standards. In most cases, measurement of gamma radiation exposure rates above and below the land surface can be used to show compliance with § 192.12(a). Protocols for making such measurements should be based on realistic radium distributions near the surface rather than extremes rarely encountered.

(2) In § 192.12(a), ''background level'' refers to the native radium concentration in soil. Since this may not be determinable in the presence of contamination by residual radioactive materials, a surrogate ''background level'' may be established by simple direct or indirect (e.g., gamma radiation) measurements performed nearby but outside of the contaminated location.

(3) Compliance with § 192.12(b) may be demonstrated by methods that the Department of Energy has approved for use under Pub. L. 92–314 (10 CFR part 712), or by other methods that the implementing agencies determine are adequate. Residual radioactive materials should be removed from buildings exceeding 0.03 WL so that future replacement buildings will not pose a hazard [unless removal is not practical—see § 192.21(c)]. However, sealants, filtration, and ventilation devices may provide reasonable assurance of reductions from 0.03 WL to below 0.02 WL. In unusual cases, indoor radiation may exceed the levels specified in § 192.12(b) due to sources other than residual radioactive materials. Remedial actions are not required in order to comply with the standard when there is reasonable assurance that residual radioactive materials are not the cause of such an excess.

(4) The plan(s) for remedial action will specify how applicable requirements of subpart B would be satisfied. The plan should include the schedule and steps necessary to complete the cleanup of groundwater at the site. It should document the extent of contamination due to releases prior to final disposal, including the identification and location of listed constituents and the rate and direction of movement of contaminated groundwater, based upon the monitoring carried out under §192.12(c)(1). In addition, the assessment should consider future plume movement, including an evaluation of such processes as attenuation and dilution and future contamination from beneath a disposal site. Monitoring for assessment and compliance purposes should be sufficient to establish the extent and magnitude of contamination, with reasonable assurance, through use of a carefully chosen minimal number of sampling locations. The location and number of monitoring wells, the frequency and duration of monitoring, and the selection of indicator analytes for long-term groundwater monitoring, and, more generally, the design and operation of the monitoring system, will depend on the potential for risk to receptors and upon other factors, including characteristics of the subsurface environment, such as velocity of groundwater flow, contaminant retardation, time of groundwater or contaminant transit to receptors, results of statistical evaluations of data trends, and modeling of the dynamics of the groundwater system. All of these factors should be incorporated into the design of a site-specific monitoring program that will achieve the purpose of the regulations in this subpart in the most cost-effective manner. In the case of vicinity properties (§192.01(l)(2)), such assessments will usually not be necessary. The Secretary, with the concurrence of the Commission, may consider such factors as local geology and amount of contamination present in determining criteria to decide when such assessments are needed. In cases where §192.12(c)(2) is invoked, the plan should include a monitoring program sufficient to verify projections of plume movement and attenuation periodically during the extended cleanup period. Finally, the plan should specify details of the method to be used for cleanup of groundwater.

[48 FR 602, Jan. 5, 1983, as amended at 60 FR 2867, Jan. 11, 1995]

### §192.21 Criteria for applying supplemental standards.

Unless otherwise indicated in this subpart, all terms shall have the same meaning as defined in Title I of the Act or in subparts A and B. The implementing agencies may (and in the case of paragraph (h) of this section shall) apply standards under §192.22 in lieu of the standards of subparts A or B if they determine that any of the following circumstances exists:

(a) Remedial actions required to satisfy subpart A or B would pose a clear and present risk of injury to workers or to members of the public, notwithstanding reasonable measures to avoid or reduce risk.

(b) Remedial actions to satisfy the cleanup standards for land, §192.12(a), and groundwater, §192.12(c), or the acquisition of minimum materials required for control to satisfy §§192.02(b) and (c), would, notwithstanding reasonable measures to limit damage, directly produce health and environmental harm that is clearly excessive compared to the health and environmental benefits, now or in the future. A clear excess of health and environmental harm is harm that is long-term, manifest, and grossly disproportionate to health and environmental benefits that may reasonably be anticipated.

(c) The estimated cost of remedial action to satisfy §192.12(a) at a ''vicinity'' site (described under section 101(6)(B) of the Act) is unreasonably high relative to the long-term benefits, and the residual radioactive materials do not pose a clear present or future hazard. The likelihood that buildings will be erected or that people will spend long periods of time at such a vicinity site should be considered in evaluating this hazard. Remedial action will generally not be necessary where residual radioactive materials have been placed semi-permanently in a location where site-specific factors limit their hazard and from which they are costly or difficult to remove, or

where only minor quantities of residual radioactive materials are involved. Examples are residual radioactive materials under hard surface public roads and sidewalks, around public sewer lines, or in fence post foundations. Supplemental standards should not be applied at such sites, however, if individuals are likely to be exposed for long periods of time to radiation from such materials at levels above those that would prevail under § 192.12(a).

(d) The cost of a remedial action for cleanup of a building under § 192.12(b) is clearly unreasonably high relative to the benefits. Factors that should be included in this judgment are the anticipated period of occupancy, the incremental radiation level that would be affected by the remedial action, the residual useful lifetime of the building, the potential for future construction at the site, and the applicability of less costly remedial methods than removal of residual radioactive materials.

(e) There is no known remedial action.

(f) The restoration of groundwater quality at any designated processing site under § 192.12(c) is technically impracticable from an engineering perspective.

(g) The groundwater meets the criteria of § 192.11(e).

(h) Radionuclides other than radium-226 and its decay products are present in sufficient quantity and concentration to constitute a significant radiation hazard from residual radioactive materials.

[48 FR 602, Jan. 5, 1983, as amended at 60 FR 2868, Jan. 11, 1995]

### § 192.22 Supplemental standards.

Federal agencies implementing subparts A and B may in lieu thereof proceed pursuant to this section with respect to generic or individual situations meeting the eligibility requirements of § 192.21.

(a) When one or more of the criteria of § 192.21(a) through (g) applies, the Secretary shall select and perform that alternative remedial action that comes as close to meeting the otherwise applicable standard under § 192.02(c)(3) as is reasonably achievable.

(b) When § 192.21(h) applies, remedial actions shall reduce other residual radioactivity to levels that are as low as is reasonably achievable and conform to the standards of subparts A and B to the maximum extent practicable.

(c) The implementing agencies may make general determinations concerning remedial actions under this section that will apply to all locations with specified characteristics, or they may make a determination for a specific location. When remedial actions are proposed under this section for a specific location, the Department of Energy shall inform any private owners and occupants of the affected location and solicit their comments. The Department of Energy shall provide any such comments to the other implementing agencies. The Department of Energy shall also periodically inform the Environmental Protection Agency of both general and individual determinations under the provisions of this section.

(d) When § 192.21(b), (f), or (g) apply, implementing agencies shall apply any remedial actions for the restoration of contamination of groundwater by residual radioactive materials that is required to assure, at a minimum, protection of human health and the environment. In addition, when § 192.21(g) applies, supplemental standards shall ensure that current and reasonably projected uses of the affected groundwater are preserved.

[48 FR 602, Jan. 5, 1983, as amended at 60 FR 2868, Jan. 11, 1995]

### § 192.23 Effective date.

Subparts A, B, and C shall be effective March 7, 1983.

## Subpart D—Standards for Management of Uranium Byproduct Materials Pursuant to Section 84 of the Atomic Energy Act of 1954, as Amended

SOURCE: 48 FR 45946, Oct. 7, 1983, unless otherwise noted.

### § 192.30 Applicability.

This subpart applies to the management of uranium byproduct materials under section 84 of the Atomic Energy Act of 1954 (henceforth designated ''the Act''), as amended, during and following processing of uranium ores, and to

restoration of disposal sites following any use of such sites under section 83(b)(1)(B) of the Act.

**§ 192.31 Definitions and cross-references.**

References in this subpart to other parts of the Code of Federal Regulations are to those parts as codified on January 1, 1983.

(a) Unless otherwise indicated in this subpart, all terms shall have the same meaning as in Title II of the Uranium Mill Tailings Rediation Control Act of 1978, subparts A and B of this part, or parts 190, 260, 261, and 264 of this chapter. For the purposes of this subpart, the terms ''waste,'' ''hazardous waste,'' and related terms, as used in parts 260, 261, and 264 of this chapter shall apply to byproduct material.

(b) *Uranium byproduct material* means the tailings or wastes produced by the extraction or concentration of uranium from any ore processed primarily for its source material content. Ore bodies depleted by uranium solution extraction operations and which remain underground do not constitute ''byproduct material'' for the purpose of this subpart.

(c) *Control* means any action to stabilize, inhibit future misuse of, or reduce emissions or effluents from uranium byproduct materials.

(d) *Licensed site* means the area contained within the boundary of a location under the control of persons generating or storing uranium byproduct materials under a license issued pursuant to section 84 of the Act. For purposes of this subpart, ''licensed site'' is equivalent to ''regulated unit'' in subpart F of part 264 of this chapter.

(e) *Disposal site* means a site selected pursuant to section 83 of the Act.

(f) *Disposal area* means the region within the perimeter of an impoundment or pile containing uranium by product materials to which the post-closure requirements of § 192.32(b)(1) of this subpart apply.

(g) *Regulatory agency* means the U.S. Nuclear Regulatory Commission.

(h) *Closure period* means the period of time beginning with the cessation, with respect to a waste impoundment, of uranium ore processing operations and ending with completion of requirements specified under a closure plan.

(i) *Closure plan* means the plan required under § 264.112 of this chapter.

(j) *Existing portion* means that land surface area of an existing surface impoundment on which significant quantities of uranium byproduct materials have been placed prior to promulgation of this standard.

(k) *As expeditiously as practicable considering technological feasibility* means as quickly as possible considering: the physical characteristics of the tailings and the site; the limits of available technology; the need for consistency with mandatory requirements of other regulatory programs; and factors beyond the control of the licensee. The phrase permits consideration of the cost of compliance only to the extent specifically provided for by use of the term ''available technology.''

(l) *Permanent Radon Barrier* means the final radon barrier constructed to achieve compliance with, including attainment of, the limit on releases of radon-222 in § 192.32(b)(1)(ii).

(m) *Available technology* means technologies and methods for emplacing a permanent radon barrier on uranium mill tailings piles or impoundments. This term shall not be construed to include extraordinary measures or techniques that would impose costs that are grossly excessive as measured by practice within the industry or one that is reasonably analogous, (such as, by way of illustration only, unreasonable overtime, staffing or transportation requirements, etc., considering normal practice in the industry; laser fusion, of soils, etc.), provided there is reasonable progress toward emplacement of a permanent radon barrier. To determine grossly excessive costs, the relevant baseline against which cost increases shall be compared is the cost estimate for tailings impoundment closure contained in the licensee's tailings closure plan, but costs beyond such estimates shall not automatically be considered grossly excessive.

(n) *Tailings Closure Plan (Radon)* means the Nuclear Regulatory Commission or Agreement State approved plan detailing activities to accomplish timely emplacement of a permanent radon barrier. A tailings closure plan

shall include a schedule for key radon closure milestone activities such as wind blown tailings retrieval and placement on the pile, interim stabilization (including dewatering or the removal of freestanding liquids and recontouring), and emplacement of a permanent radon barrier constructed to achieve compliance with the 20 pCi/$m^2$-s flux standard as expeditiously as practicable considering technological feasibility (including factors beyond the control of the licensee).

(o) *Factors beyond the control of the licensee* means factors proximately causing delay in meeting the schedule in the applicable license for timely emplacement of the permanent radon barrier notwithstanding the good faith efforts of the licensee to achieve compliance. These factors may include, but are not limited to, physical conditions at the site; inclement weather or climatic conditions; an act of God; an act of war; a judicial or administrative order or decision, or change to the statutory, regulatory, or other legal requirements applicable to the licensee's facility that would preclude or delay the performance of activities required for compliance; labor disturbances; any modifications, cessation or delay ordered by state, Federal or local agencies; delays beyond the time reasonably required in obtaining necessary governmental permits, licenses, approvals or consent for activities described in the tailings closure plan (radon) proposed by the licensee that result from agency failure to take final action after the licensee has made a good faith, timely effort to submit legally sufficient applications, responses to requests (including relevant data requested by the agencies), or other information, including approval of the tailings closure plan by NRC or the affected Agreement State; and an act or omission of any third party over whom the licensee has no control.

(p) *Operational* means that a uranium mill tailings pile or impoundment is being used for the continued placement of uranium byproduct material or is in standby status for such placement. A tailings pile or impoundment is operational from the day that uranium byproduct material is first placed in the pile or impoundment until the day final closure begins.

(q) *Milestone* means an enforceable date by which action, or the occurrence of an event, is required for purposes of achieving compliance with the 20 pCi/$m^2$−s flux standard.

[48 FR 45946, Oct. 7, 1983, as amended at 58 FR 60355, Nov. 15, 1993]

**§ 192.32 Standards.**

(a) *Standards for application during processing operations and prior to the end of the closure period.* (1) Surface impoundments (except for an existing portion) subject to this subpart must be designed, constructed, and installed in such manner as to conform to the requirements of § 264.221 of this chapter, except that at sites where the annual precipitation falling on the impoundment and any drainage area contributing surface runoff to the impoundment is less than the annual evaporation from the impoundment, the requirements of § 264.228(a)(2)(iii)(E) referenced in § 264.221 do not apply.

(2) Uranium byproduct materials shall be managed so as to conform to the ground water protection standard in § 264.92 of this chapter, except that for the purposes of this subpart:

(i) To the list of hazardous constituents referenced in § 264.93 of this chapter are added the chemical elements molybdenum and uranium,

(ii) To the concentration limits provided in Table 1 of § 264.94 of this chapter are added the radioactivity limits in Table A of this subpart,

(iii) Detection monitoring programs required under § 264.98 to establish the standards required under § 264.92 shall be completed within one (1) year of promulgation,

(iv) The regulatory agency may establish alternate concentration limits (to be satisfied at the point of compliance specified under § 264.95) under the criteria of § 264.94(b), provided that, after considering practicable corrective actions, these limits are as low as reasonably achievable, and that, in any case, the standards of § 264.94(a) are satisfied at all points at a greater distance than 500 meters from the edge of the disposal area and/or outside the site boundary, and

(v) The functions and responsibilities designated in Part 264 of this chapter as those of the ''Regional Administrator'' with respect to ''facility permits'' shall be carried out by the regulatory agency, except that exemptions of hazardous constituents under § 264.93 (b) and (c) of this chapter and alternate concentration limits established under § 264.94 (b) and (c) of this chapter (except as otherwise provided in § 192.32(a)(2)(iv)) shall not be effective until EPA has concurred therein.

(3)(i) Uranium mill tailings piles or impoundments that are nonoperational and subject to a license by the Nuclear Regulatory Commission or an Agreement State shall limit releases of radon-222 by emplacing a permanent radon barrier. This permanent radon barrier shall be constructed as expeditiously as practicable considering technological feasibility (including factors beyond the control of the licensee) after the pile or impoundment ceases to be operational. Such control shall be carried out in accordance with a written tailings closure plan (radon) to be incorporated by the Nuclear Regulatory Commission or Agreement State into individual site licenses.

(ii) The Nuclear Regulatory Commission or Agreement State may approve a licensee's request to extend the time for performance of milestones if, after providing an opportunity for public participation, the Nuclear Regulatory Commission or Agreement State finds that compliance with the 20 $pCi/m^2-s$ flux standard has been demonstrated using a method approved by the NRC, in the manner required in 192.32(a)(4)(i). Only under these circumstances and during the period of the extension must compliance with the 20 $pCi/m^2-s$ flux standard be demonstrated each year.

(iii) The Nuclear Regulatory Commission or Agreement State may extend the final compliance date for emplacement of the permanent radon barrier, or relevant milestone, based upon cost if the new date is established after a finding by the Nuclear Regulatory Commission or Agreement State, after providing an opportunity for public participation, that the licensee is making good faith efforts to emplace a permanent radon barrier; the delay is consistent with the definition of ''available technology'' in § 192.31(m); and the delay will not result in radon releases that are determined to result in significant incremental risk to the public health.

(iv) The Nuclear Regulatory Commission or Agreement State may, in response to a request from a licensee, authorize by license or license amendment a portion of the site to remain accessible during the closure process to accept uranium byproduct material as defined in section 11(e)(2) of the Atomic Energy Act, 42 U.S.C. 2014(e)(2), or to accept materials similar to the physical, chemical and radiological characteristics of the in situ uranium mill tailings and associated wastes, from other sources. No such authorization may be used as a means for delaying or otherwise impeding emplacement of the permanent radon barrier over the remainder of the pile or impoundment in a manner that will achieve compliance with the 20 $pCi/m^2-s$ flux standard, averaged over the entire pile or impoundment.

(v) The Nuclear Regulatory Commission or Agreement State may, in response to a request from a licensee, authorize by license or license amendment a portion of a pile or impoundment to remain accessible after emplacement of a permanent radon barrier to accept uranium byproduct material as defined in section 11(e)(2) of the Atomic Energy Act, 42 U.S.C. 2014(e)(2), if compliance with the 20 $pCi/m^2-s$ flux standard of § 192.32(b)(1)(ii) is demonstrated by the licensee's monitoring conducted in a manner consistent with § 192.32(a)(4)(i). Such authorization may be provided only if the Nuclear Regulatory Commission or Agreement State makes a finding, constituting final agency action and after providing an opportunity for public participation, that the site will continue to achieve the 20 pCi/m2−s flux standard when averaged over the entire impoundment.

(4)(i) Upon emplacement of the permanent radon barrier pursuant to 40 CFR 192.32(a)(3), the licensee shall conduct appropriate monitoring and analysis of the radon-222 releases to demonstrate that the design of the permanent radon barrier is effective in limiting releases of radon-222 to a level not

exceeding 20 pCi/m$^2$−s as required by 40 CFR 192.32(b)(1)(ii). This monitoring shall be conducted using the procedures described in 40 CFR part 61, Appendix B, Method 115, or any other measurement method proposed by a licensee that the Nuclear Regulatory Commission or Agreement State approves as being at least as effective as EPA Method 115 in demonstrating the effectiveness of the permanent radon barrier in achieving compliance with the 20 pCi/m$^2$−s flux standard.

(ii) When phased emplacement of the permanent radon barrier is included in the applicable tailings closure plan (radon), then radon flux monitoring required under § 192.32(a)(4)(i) shall be conducted, however the licensee shall be allowed to conduct such monitoring for each portion of the pile or impoundment on which the radon barrier has been emplaced by conducting flux monitoring on the closed portion.

(5) Uranium byproduct materials shall be managed so as to conform to the provisions of:

(i) Part 190 of this chapter, ''Environmental Radiation Protection Standards for Nuclear Power Operations'' and

(ii) Part 440 of this chapter, ''Ore Mining and Dressing Point Source Category: Effluent Limitations Guidelines and New Source Performance Standards, Subpart C, Uranium, Radium, and Vanadium Ores Subcategory.''

(6) The regulatory agency, in conformity with Federal Radiation Protection Guidance (FR, May 18, 1960, pgs. 4402–4403), shall make every effort to maintain radiation doses from radon emissions from surface impoundments of uranium byproduct materials as far below the Federal Radiation Protection Guides as is practicable at each licensed site.

(b) *Standards for application after the closure period.* At the end of the closure period:

(1) Disposal areas shall each comply with the closure performance standard in § 264.111 of this chapter with respect to nonradiological hazards and shall be designed[1] to provide reasonable assurance of control of radiological hazards to

(i) Be effective for one thousand years, to the extent reasonably achievable, and, in any case, for at least 200 years, and,

(ii) Limit releases of radon-222 from uranium byproduct materials to the atmosphere so as to not exceed an average[2] release rate of 20 picocuries per square meter per second (pCi/m2s).

(2) The requirements of § 192.32(b)(1) shall not apply to any portion of a licensed and/or disposal site which contains a concentration of radium-226 in land, averaged over areas of 100 square meters, which, as a result of uranium byproduct material, does not exceed the background level by more than:

(i) 5 picocuries per gram (pCi/g), averaged over the first 15 centimeters (cm) below the surface, and

(ii) 15 pCi/g, averaged over 15 cm thick layers more than 15 cm below the surface.

[48 FR 45946, Oct. 7, 1983, as amended at 58 FR 60355–60356, Nov. 15, 1993]

### § 192.33 Corrective action programs.

If the ground water standards established under provisions of § 192.32(a)(2) are exceeded at any licensed site, a corrective action program as specified in § 264.100 of this chapter shall be put into operation as soon as is practicable, and in no event later than eighteen (18) months after a finding of exceedance.

### § 192.34 Effective date.

Subpart D shall be effective December 6, 1983.

TABLE A TO SUBPART D

| | pCi/liter |
|---|---|
| Combined radium-226 and radium-228 ..... | 5 |

[1] The standard applies to design with a monitoring requirement as specified in §192.32(a)(4).

[2] This average shall apply to the entire surface of each disposal area over periods of at least one year, but short compared to 100 years. Radon will come from both uranium byproduct materials and from covering materials. Radon emissions from covering materials should be estimated as part of developing a closure plan for each site. The standard, however, applies only to emissions from uranium byproduct materials to the atmosphere.

TABLE A TO SUBPART D—Continued

| | pCi/liter |
|---|---|
| Gross alpha-particle activity (excluding radon and uranium) | 15 |

## Subpart E—Standards for Management of Thorium Byproduct Materials Pursuant to Section 84 of the Atomic Energy Act of 1954, as Amended

SOURCE: 48 FR 45947, Oct. 7, 1983, unless otherwise noted.

### § 192.40 Applicability.

This subpart applies to the management of thorium byproduct materials under section 84 of the Atomic Energy Act of 1954, as amended, during and following processing of thorium ores, and to restoration of disposal sites following any use of such sites under section 83(b)(1)(B) of the Act.

### § 192.41 Provisions.

Except as otherwise noted in § 192.41(e), the provisions of subpart D of this part, including §§ 192.31, 192.32, and 192.33, shall apply to thorium byproduct material and:

(a) Provisions applicable to the element uranium shall also apply to the element thorium;

(b) Provisions applicable to radon-222 shall also apply to radon-220; and

(c) Provisions applicable to radium-226 shall also apply to radium-228.

(d) Operations covered under § 192.32(a) shall be conducted in such a manner as to provide reasonable assurance that the annual dose equivalent does not exceed 25 millirems to the whole body, 75 millirems to the thyroid, and 25 millirems to any other organ of any member of the public as a result of exposures to the planned discharge of radioactive materials, radon-220 and its daughters excepted, to the general environment.

(e) The provisions of § 192.32(a) (3) and (4) do not apply to the management of thorium byproduct material.

[48 FR 45946, Oct. 7, 1983, as amended at 58 FR 60356, Nov. 15, 1993]

### § 192.42 Substitute provisions.

The regulatory agency may, with the concurrence of EPA, substitute for any provisions of § 192.41 of this subpart alternative provisions it deems more practical that will provide at least an equivalent level of protection for human health and the environment.

### § 192.43 Effective date.

Subpart E shall be effective December 6, 1983.

APPENDIX I TO PART 192—LISTED CONSTITUENTS

Acetonitrile
Acetophenone (Ethanone, 1-phenyl)
2-Acetylaminofluorene (Acetamide, N-9H-fluoren-2-yl-)
Acetyl chloride
1-Acetyl-2-thiourea (Acetamide, N-(aminothioxymethyl)-)
Acrolein (2-Propenal)
Acrylamide (2-Propenamide)
Acrylonitrile (2-Propenenitrile)
Aflatoxins
Aldicarb (Propenal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime
Aldrin (1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro(1α,4α,4aβ,5α,8α,8αβ)-)
Allyl alcohol (2-Propen-1-ol)
Allyl chloride (1-Propane,3-chloro)
Aluminum phosphide
4-Aminobiphenyl ([1,1'-Biphenyl]-4-amine)
5-(Aminomethyl)-3-isoxazolol (3(2H)-Isoxazolone,5-(aminomethyl)-)
4-Aminopyridine (4-Pyridineamine)
Amitrole (lH-1,2,4-Triazol-3-amine)
Ammonium vanadate (Vanadic acid, ammonium salt)
Aniline (Benzenamine)
Antimony and compounds, N.O.S.[1]

Aramite (Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester)
Arsenic and compounds, N.O.S.
Arsenic acid (Arsenic acid $H_3$ $AsO_4$)
Arsenic pentoxide (Arsenic oxide $As_2$ $O_5$)
Auramine (Benzamine, 4,4'-carbonimidoylbis[N,N-dimethyl-])
Azaserine (L-Serine, diazoacetate (ester))
Barium and compounds, N.O.S.
Barium cyanide
Benz[c]acridine (3,4-Benzacridine)
Benz[a]anthracene (1,2-Benzanthracene)
Benzal chloride (Benzene, dichloromethyl-)
Benzene (Cyclohexatriene)

[1] The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

Benzenearsonic acid (Arsenic acid, phenyl-)
Benzidine ([1,1'-Biphenyl]-4,4'-diamine)
Benzo[b]fluoranthene (Benz[e]acephananthrylene)
Benzo[j]fluoranthene
Benzo[k]fluoranthene
Benzo[a]pyrene
p-Benzoquinone (2,5-Cyclohexadiene-1,4-dione)
Benzotrichloride (Benzene, (trichloromethyl)-)
Benzyl chloride (Benzene, (chloromethyl)-)
Beryllium and compounds, N.O.S.
Bromoacetone (2-Propanone, 1-bromo-)
Bromoform (Methane, tribromo-)
4-Bromophenyl phenyl ether (Benzene, 1-bromo-4-phenoxy-)
Brucine (Strychnidin-10-one, 2,3-dimethoxy-)
Butyl benzyl phthalate (1,2-Benzenedicarbozylic acid, butyl phenylmethyl ester)
Cacodylic acid (Arsinic acid, dimethyl)
Cadmium and compounds, N.O.S.
Calcium chromate (Chromic acid $H_2$ $CrO_4$, calcium salt)
Calcium cyanide ($Ca(CN)_2$)
Carbon disulfide
Carbon oxyfluoride (Carbonic difluoride)
Carbon tetrachloride (Methane, tetrachloro-)
Chloral (Acetaldehyde, trichloro-)
Chlorambucil (Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-)
Chlordane (4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-)
Chlorinated benzenes, N.O.S.
Chlorinated ethane, N.O.S.
Chlorinated fluorocarbons, N.O.S.
Chlorinated naphthalene, N.O.S.
Chlorinated phenol, N.O.S.
Chlornaphazin (Naphthalenamine, N,N'-bis(2-chlorethyl)-)
Chloroacetaldehyde (Acetaldehyde, chloro-)
Chloroalkyl ethers, N.O.S.
p-Chloroaniline (Benzenamine, 4-chloro-)
Chlorobenzene (Benzene, chloro-)
Chlorobenzilate (Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester)
p-Chloro-m-cresol (Phenol, 4-chloro-3-methyl)
2-Chloroethyl vinyl ether (Ethene, (2-chloroethoxy)-)
Chloroform (Methane, trichloro-)
Chloromethyl methyl ether (Methane, chloromethoxy-)
β-Chloronapthalene (Naphthalene, 2-chloro-)
o-Chlorophenol (Phenol, 2-chloro-)
1-(o-Chlorophenyl)thiourea (Thiourea, (2-chlorophenyl-))
3-Chloropropionitrile (Propanenitrile, 3-chloro-)
Chromium and compounds, N.O.S.
Chrysene
Citrus red No. 2 (2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-)
Coal tar creosote
Copper cyanide (CuCN)
Creosote
Cresol (Chresylic acid) (Phenol, methyl-)
Crotonaldehyde (2-Butenal)
Cyanides (soluble salts and complexes), N.O.S.
Cyanogen (Ethanedinitrile)
Cyanogen bromide ((CN)Br)
Cyanogen chloride ((CN)Cl)
Cycasin (beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-cyclohexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2-Oxazaphosphorin-2-amine,N,N-bis(2-chloroethyl)
tetrahydro-,2-oxide)
2,4-D and salts and esters (Acetic acid, (2,4-dichlorophenoxy)-)
Daunomycin (5,12-Naphthacenedione,8-acetyl-10-[(3-amino-2,3,6-trideoxy-α-Llyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-,(8S-cis))
DDD (Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-)
DDE (Benzene, 1,1-(dichloroethylidene)bis[4-chloro-)
DDT (Benzene, 1,1'-(2,2,2-trichloroethlyidene)bis[4-chloro-)
Diallate (Carbomothioic acid, bis(1-methylethyl)-,S-(2,3-dichloro-2-propenyl) ester)
Dibenz[a,h]acridine
Dibenz[a,j]acridine
Dibenz[a,h]anthracene
7H-Dibenzo[c,g]carbazole
Dibenzo[a,e]pyrene (Naphtho[1,2,4,5-def)crysene)
Dibenzo[a,h]pyrene (Dibenzo[b,def]crysene)
Dibenzo[a,i]pyrene (Benzo[rst]pentaphene)
1,2-Dibromo-3-chloropropane (Propane, 1,2-dibromo-3-chloro-)
Dibutylphthalate (1,2-Benzenedicarboxylic acid, dibutyl ester)
o-Dichlorobenzene (Benzene, 1,2-dichloro-)
m-Dichlorobenzene (Benzene, 1,3-dichloro-)
p-Dichlorobenzene (Benzene, 1,4-dichloro-)
Dichlorobenzene, N.O.S. (Benzene; dichloro-, N.O.S.)
3,3'-Dichlorobenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-)
1,4-Dichloro-2-butene (2-Butene, 1,4-dichloro-)
Dichlorodifluoromethane (Methane, dichlorodifluoro-)
Dichloroethylene, N.O.S.
1,1-Dichloroethylene (Ethene, 1,1-dichloro-)
1,2-Dichloroethylene (Ethene, 1,2-dichloro-,(E)-)
Dichloroethyl ether (Ethane, 1,1'-oxybis[2-chloro-)
Dichloroisopropyl ether (Propane, 2,2'-oxybis[2-chloro-)
Dichloromethoxy ethane (Ethane, 1,1'-[methylenebis(oxy)bis[2-chloro-)

Dichloromethyl ether (Methane, oxybis[chloro-)
2,4-Dichlorophenol (Phenol, 2,4-dichloro-)
2,6-Dichlorophenol (Phenol, 2,6-dichloro-)
Dichlorophenylarsine (Arsinous dichloride, phenyl-)
Dichloropropane, N.O.S. (Propane, dichloro-,)
Dichloropropanol, N.O.S. (Propanol, dichloro-,)
Dichloropropene; N.O.S. (1-Propane, dichloro-,)
1,3-Dichloropropene (1-Propene, 1,3-dichloro-)
Dieldrin (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-,(1aα,2β,2aα,3β,6β,6aα,7β,7aα)-)
1,2:3,4-Diepoxybutane (2,2'-Bioxirane)
Diethylarsine (Arsine, diethyl-)
1,4 Diethylene oxide (1,4-Dioxane)
Diethylhexyl phthalate (1,2-Benzenedicarboxlyic acid, bis(2-ethylhexl) ester)
N,N-Diethylhydrazine (Hydrazine, 1,2-diethyl)
O,O-Diethyl S-methyl dithiophosphate (Phosphorodithioic acid, O,O-diethyl S-methyl ester)
Diethyl-p-nitrophenyl phosphate (Phosphoric acid, diethyl 4-nitrophenyl ester)
Diethyl phthalate (1,2-Benzenedicarboxylic acid, diethyl ester)
O,O-Diethyl O-pyrazinyl phosphorothioate (Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester)
Diethylstilbesterol (Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-,(E)-)
Dihydrosafrole (1,3-Benxodioxole, 5-propyl-)
Diisopropylfluorophosphate (DFP) (Phosphorofluoridic acid, bis(1-methyl ethyl) ester)
Dimethoate (Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino) 2-oxoethyl] ester)
3,3'-Dimethoxybenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-)
p-Dimethylaminoazobenzene (Benzenamine, N,N-dimethyl-4-(phenylazo)-)
7,12-Dimethylbenz[a]anthracene (Benz[a]anthracene, 7,12-dimethyl-)
3,3'-Dimethylbenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-)
Dimethylcarbamoyl chloride (carbamic chloride, dimethyl-)
1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl-)
1,2-Dimethylhydrazine (Hydrazine, 1,2-dimethyl-)
α,α-Dimethylphenethylamine (Benzeneethanamine, α,α-dimethyl-)
2,4-Dimethylphenol (Phenol, 2,4-dimethyl-)
Dimethylphthalate (1,2-Benzenedicarboxylic acid, dimethyl ester)
Dimethyl sulfate (Sulfuric acid, dimethyl ester)
Dinitrobenzene, N.O.S. (Benzene, dinitro-)
4,6-Dinitro-o-cresol and salts (Phenol, 2-methyl-4,6-dinitro-)
2,4-Dinitrophenol (Phenol, 2,4-dinitro-)
2,4-Dinitrotoluene (Benzene, 1-methyl-2,4-dinitro-)
2,6-Dinitrotoluene (Benzene, 2-methyl-1,3-dinitro-)
Dinoseb (Phenol, 2-(1-methylpropyl)-4,6-dinitro-)
Di-n-octyl phthalate (1,2-Benzenedicarboxylic acid, dioctyl ester)
1,4-Dioxane (1,4-Diethyleneoxide)
Diphenylamine (Benzenamine, N-phenyl-)
1,2-Diphenylhydrazine (Hydrazine, 1,2-diphenyl-)
Di-n-propylnitrosamine (1-Propanamine,N-nitroso-N-propyl-)
Disulfoton (Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester)
Dithiobiuret (Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$)
Endosulfan (6,9,Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9ahexahydro,3-oxide)
Endothall (7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid)
Endrin and metabolites (2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro1a,2,2a,3,6,6a,7,7a-octa-hydro,(1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-)
Epichlorohydrin (Oxirane, (chloromethyl)-)
Epinephrine (1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]-,(R)-,)
Ethyl carbamate (urethane) (Carbamic acid, ethyl ester)
Ethyl cyanide (propanenitrile)
Ethylenebisdithiocarbamic acid, salts and esters (Carbamodithioic acid, 1,2-Ethanediylbis-)
Ethylene dibromide (1,2-Dibromoethane)
Ethylene dichloride (1,2-Dichloroethane)
Ethylene glycol monoethyl ether (Ethanol, 2-ethoxy-)
Ethyleneimine (Aziridine)
Ethylene oxide (Oxirane)
Ethylenethiourea (2-Imidazolidinethione)
Ethylidene dichloride (Ethane, 1,1-Dichloro-)
Ethyl methacrylate (2-Propenoic acid, 2-methyl-, ethyl ester)
Ethylmethane sulfonate (Methanesulfonic acid, ethyl ester)
Famphur (Phosphorothioic acid, O-[4-[(dimethylamino)sulphonyl]phenyl] O,O-dimethyl ester)
Fluoranthene
Fluorine
Fluoroacetamide (Acetamide, 2-fluoro-)
Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)
Formaldehyde (Methylene oxide)
Formic acid (Methanoic acid)
Glycidylaldehyde (Oxiranecarboxyaldehyde)
Halomethane, N.O.S.
Heptachlor (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-)

Heptachlor epoxide (α, β, and γ isomers) (2,5-Methano-2H-indeno[1,2-b]-oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-,(1aα,1bβ,2α,5α,5aβ,6β,6aα)-)
Hexachlorobenzene (Benzene, hexachloro-)
Hexachlorobutadiene (1,3-Butadiene, 1,1,2,3,4,4-hexachloro-)
Hexachlorocyclopentadiene (1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-)
Hexachlorodibenzofurans
Heptachlorodibenzo-p-dioxins
Hexachloroethane (Ethane, hexachloro-)
Hexachlorophene (phenol, 2,2'-Methylenebis[3,4,6-trichloro-)
Hexachloropropene (1-Propene, 1,1,2,3,3,3-hexachloro-)
Hexaethyl tetraphosphate (Tetraphosphoric acid, hexaethyl ester)
Hydrazine
Hydrocyanic acid
Hydrofluoric acid
Hydrogen sulfide ($H_2$ S)
Indeno(1,2,3-cd)pyrene
Isobutyl alcohol (1-Propanol, 2-methyl-)
Isodrin (1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro, (1α,4α,4aβ,5β,8β,8aβ)-)
Isosafrole (1,3-Benzodioxole, 5-(1-propenyl)-)
Kepone (1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-)
Lasiocarpine (2-Butenoic acid, 2-methyl-,7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-l-yl ester)
Lead and compounds, N.O.S.
Lead acetate (Acetic acid, lead(2+) salt)
Lead phosphate (Phosphoric acid, lead(2+) salt(2:3))
Lead subacetate (Lead, bis(acetato-O)tetrahydroxytri-)
Lindane (Clohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)-)
Maleic anhydride (2,5-Furandione)
Maleic hydrazide (3,6-Pyridazinedione, 1,2-dihydro-)
Malononitrile (Propanedinitrile)
Melphalan (L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]-)
Mercury and compounds, N.O.S.
Mercury fulminate (Fulminic acid, mercury(2+) salt)
Methacrylonitrile (2-Propenenitrile, 2-methyl-)
Methapyrilene (1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-)
Metholmyl (Ethamidothioic acid, N-[[(methylamino)carbonyl]oxy]thio-, methyl ester)
Methoxychlor (Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-)
Methyl bromide (Methane, bromo-)
Methyl chloride (Methane, chloro-)
Methyl chlorocarbonate (Carbonchloridic acid, methyl ester)
Methyl chloroform (Ethane, 1,1,1-trichloro-)
3-Methylcholanthrene (Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-)
4,4'-Methylenebis(2-chloroaniline) (Benzenamine, 4,4'-methylenebis(2-chloro-)
Methylene bromide (Methane, dibromo-)
Methylene chloride (Methane, dichloro-)
Methyl ethyl ketone (MEK) (2-Butanone)
Methyl ethyl ketone peroxide (2-Butanone, peroxide)
Methyl hydrazine (Hydrazine, methyl-)
Methyl iodide (Methane, iodo-)
Methyl isocyanate (Methane, isocyanato-)
2-Methyllactonitrile (Propanenitrile, 2-hydroxy-2-methyl-)
Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)
Methyl methanesulfonate (Methanesulfonic acid, methyl ester)
Methyl parathion (Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester)
Methylthiouracil (4(1H)Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-)
Mitomycin C (Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,6-amino-8-[[(aminocarbonyl) oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methy-, [1aS-(1aα,8β,8aα,8bα)]-)
MNNG (Guanidine, N-methyl-N'-nitro-N-nitroso-)
Mustard gas (Ethane, 1,1'-thiobis[2-chloro-)
Naphthalene
1,4-Naphthoquinone (1,4-Naphthalenedione)
α-Naphthalenamine (1-Naphthylamine)
β-Naphthalenamine (2-Naphthylamine)
α-Naphthylthiourea (Thiourea, 1-naphthalenyl-)
Nickel and compounds, N.O.S.
Nickel carbonyl ($Ni(CO)_4$ (T-4)-)
Nickel cyanide ($Ni(CN)_2$)
Nicotine and salts (Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-)
Nitric oxide (Nitrogen oxide NO)
p-Nitroaniline (Benzenamine, 4-nitro-)
Nitrobenzene (Benzene, nitro-)
Nitrogen dioxide (Nitrogen oxide $NO_2$)
Nitrogen mustard, and hydrochloride salt (Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-)
Nitrogen mustard N-oxide and hydrochloride salt (Ethanamine, 2chloro-N-(2-chloroethyl)N-methyl-, N-oxide)
Nitroglycerin (1,2,3-Propanetriol, trinitrate)
p-Nitrophenol (Phenol, 4-nitro-)
2-Nitropropane (Propane, 2-nitro-)
Nitrosamines, N.O.S.
N-Nitrosodi-n-butylamine (l-Butanamine, N-butyl-N-nitroso-)
N-Nitrosodiethanolamine (Ethanol, 2,2'-(nitrosoimino)bis-)
N-Nitrosodiethylamine (Ethanamine, N-ethyl-N-nitroso-1)
N-Nitrosodimethylamine (Methanamine, N-methyl-N-nitroso-)
N-Nitroso-N-ethylurea (Urea, N-ethyl-N-nitroso-)

N-Nitrosomethylethylamine (Ethanamine, N-methyl-N-nitroso-)
N-Nitroso-N-methylurea (Urea, N-methyl-N-nitroso-)
N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl ester)
N-Nitrosomethylvinylamine (Vinylamine, N-methyl-N-nitroso-)
N-Nitrosomorpholine (Morpholine, 4-nitroso-)
N-Nitrosonornicotine (Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-)
N-Nitrosopiperidine (Piperidine, 1-nitroso-)
Nitrosopyrrolidine (Pyrrolidine, 1-nitroso-)
N-Nitrososarcosine (Glycine, N-methyl-N-nitroso-)
5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)
Octamethylpyrophosphoramide (Diphosphoramide, octamethyl-)
Osmium tetroxide (Osmium oxide $OsO_4$, (T-4)-)
Paraldehyde (1,3,5-Trioxane, 2,4,6-tri methyl-)
Parathion (Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester)
Pentachlorobenzene (Benzene, pentachloro-)
Pentachlorodibenzo-p-dioxins
Pentachlorodibenzofurans
Pentachloroethane (Ethane, pentachloro-)
Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-)
Pentachlorophenol (Phenol, pentachloro-)
Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)
Phenol
Phenylenediamine (Benzenediamine)
Phenylmercury acetate (Mercury, (acetato-O)phenyl-)
Phenylthiourea (Thiourea, phenyl-)
Phosgene (Carbonic dichloride)
Phosphine
Phorate (Phosphorodithioic acid, O,O-diethyl S-[(ethylthiomethyl] ester)
Phthalic acid esters, N.O.S.
Phthalic anhydride (1,3-isobenzofurandione)
2-Picoline (Pyridine, 2-methyl-)
Polychlorinated biphenyls, N.O.S.
Potassium cyanide (K(CN))
Potassium silver cyanide (Argentate(l-), bis(cyano-C)-, potassium)
Pronamide (Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-)
1,3-Propane sultone (1,2-Oxathiolane, 2,2-dioxide)
n-Propylamine (1-Propanamine)
Propargyl alcohol (2-Propyn-1-ol)
Propylene dichloride (Propane, 1,2-dichloro-)
1,2-Propylenimine (Aziridine, 2-methyl-)
Propylthiouracil (4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-)
Pyridine
Reserpinen (Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-smethyl ester, (3β,16 β,17α,18β,20α)-)
Resorcinol (1,3-Benzenediol)
Saccharin and salts (1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide)
Safrole (1,3-Benzodioxole, 5-(2-propenyl)-)
Selenium and compounds, N.O.S.
Selenium dioxide (Selenious acid)
Selenium sulfide ($SeS_2$)
Selenourea
Silver and compounds, N.O.S.
Silver cyanide (Silver cyanide Ag(CN))
Silvex (Propanoic acid, 2-(2,4,5-trichlorophen oxy)-)
Sodium cyanide (Sodium cyanide Na(CN))
Streptozotocin (D-Glucose, 2-deoxy-2-[[methylnitrosoamino)carbonyl]amino]-)
Strychnine and salts (Strychnidin-10-one)
TCDD (Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-)
1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro-)
Tetrachlorodibenzo-p-dioxins
Tetrachlorodibenxofurans
Tetrachloroethane, N.O.S. (Ethane, tetrachloro-, N.O.S.)
1,1,1,2-Tetrachloroethane (Ethane, 1,1,1,2-tetrachloro-)
1,1,2,2-Tetrachloroethane (Ethane, 1,1,2,2-tetrachloro-)
Tetrachloroethylene (Ethene, tetrachloro-)
2,3,4,6-Tetrachlorophenol (Phenol, 2,3,4,6-tetrachloro-)
Tetraethyldithiopyrophosphate (Thiodiphosphoric acid, tetraethyl ester)
Tetraethyl lead (Plumbane, tetraethyl-)
Tetraethyl pyrophosphate (Diphosphoric acid, tetraethyl ester)
Tetranitromethane (Methane, tetranitro-)
Thallium and compounds, N.O.S.
Thallic oxide (Thallium oxide $Tl_2 O_3$)
Thallium (I) acetate (Acetic acid, thallium (1+) salt)
Thallium (I) carbonate (Carbonic acid, dithallium (1+) salt)
Thallium (I) chloride (Thallium chloride TlCl)
Thallium (I) nitrate (Nitric acid, thallium (1+) salt)
Thallium selenite (Selenius acid, dithallium (1+) salt)
Thallium (I) sulfate (Sulfuric acid, thallium (1+) salt)
Thioacetamide (Ethanethioamide)
3,Thiofanox (2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime)
Thiomethanol (Methanethiol)
Thiophenol (Benzenethiol)
Thiosemicarbazide (Hydrazinecarbothioamide)
Thiourea
Thiram (Thioperoxydicarbonic diamide [($H_2$ N)C(S)]$2S_2$, tetramethyl-)
Toluene (Benzene, methyl-)
Toluenediamine (Benzenediamine, ar-methyl-)
Toluene-2,4-diamine (1,3-Benzenediamine, 4-methyl-)

Toluene-2,6-diamine (1,3-Benzenediamine, 2-methyl-)
Toluene-3,4-diamine (1,2-Benzenediamine, 4-methyl-)
Toluene diisocyanate (Benzene, 1,3-diisocyanatomethyl-)
o-Toluidine (Benzenamine, 2-methyl-)
o-Toluidine hydrochloride (Benzenamine, 2-methyl-, hydrochloride)
p-Toluidine (Benzenamine, 4-methyl-)
Toxaphene
1,2,4-Trichlorobenzene (Benzene, 1,2,4-trichloro-)
1,1,2-Trichloroethane (Ethane, 1,1,2-trichloro-)
Trichloroethylene (Ethene,trichloro-)
Trichloromethanethiol (Methanethiol, trichloro-)
Trichloromonofluoromethane (Methane, trichlorofluoro-)
2,4,5-Trichlorophenol (Phenol, 2,4,5-trichloro-)
2,4,6-Trichlorophenol (Phenol, 2,4,6-trichloro-)
2,4,5-T (Acetic acid, 2,4,5- trichloro-phenoxy-)
Trichloropropane, N.O.S.
1,2,3-Trichloropropane (Propane, 1,2,3-trichloro-)
O,O,O-Triethyl phosphorothioate (Phosphorothioic acid, O,O,O-triethyl ester)
Trinitrobenzene (Benzene, 1,3,5-trinitro-)
Tris(1-aziridinyl)phosphine sulfide (Aziridine, 1,1',1''phosphinothioylidyne-tris-))
Tris(2,3-dibromopropyl) phosphate (1-Propanol, 2,3-dibromo-, phosphate (3:1))
Trypan blue (2,7-Naphthalendisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis(5-amino-4-hydroxy-, tetrasodium salt)
Uracil mustard (2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-)
Vanadium pentoxide (Vanadium oxide $V_2 O_5$)
Vinyl chloride (Ethene, chloro-)
Wayfarin (2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenlybutyl)-)
Zinc cyanide ($Zn(CN)_2$)
Zinc phosphide ($Zn_3 P_2$)

[60 FR 2868, Jan. 11, 1995]

# PART 194—CRITERIA FOR THE CERTIFICATION AND RE-CERTIFICATION OF THE WASTE ISOLATION PILOT PLANT'S COMPLIANCE WITH THE 40 CFR PART 191 DISPOSAL REGULATIONS

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Appendix A to part 194—CERTIFICATION OF THE WASTE ISOLATION PILOT PLANT'S COMPLIANCE WITH THE 40 CFR PART 191 DISPOSAL REGULATIONS AND THE 40 CFR PART 194 COMPLIANCE CRITERIA

AUTHORITY: Pub. L. 102–579, 106 Stat. 4777, as amended by Pub. L. 104–201,110 Stat. 2422; Reorganization Plan No. 3 of 1970, 35 FR 15623, Oct. 6, 1970, 5 U.S.C. app. 1; Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011–2296 and 10101–10270.

SOURCE: 61 FR 5235, Feb. 9, 1996, unless otherwise noted.

## Subpart A—General Provisions

### §194.1 Purpose, scope, and applicability.

This part specifies criteria for the certification or any re-certification, or subsequent actions relating to the terms or conditions of certification of the Department of Energy's Waste Isolation Pilot Plant's compliance with the disposal regulations found at part 191 of this chapter and pursuant to section 8(d)(1) and section 8(f), respectively, of the WIPP LWA. The compliance certification application submitted pursuant to section 8(d)(1) of the WIPP LWA and any compliance re-certification application submitted pursuant to section 8(f) of the WIPP LWA shall comply with the requirements of this part.

### §194.2 Definitions.

Unless otherwise indicated in this part, all terms have the same meaning as in part 191 of this chapter.

*Administrator's authorized representative* means the director in charge of radiation programs at the Agency.

*Certification* means any action taken by the Administrator pursuant to section 8(d)(1) of the WIPP LWA.

*Compliance application(s)* means the compliance certification application submitted to the Administrator pursuant to section 8(d)(1) of the WIPP LWA or any compliance re-certification applications submitted to the Administrator pursuant to section 8(f) of the WIPP LWA.

*Compliance assessment(s)* means the analysis conducted to determine compliance with §191.15, and part 191, subpart C of this chapter.

*Delaware Basin* means those surface and subsurface features which lie inside the boundary formed to the north, east and west of the disposal system by the innermost edge of the Capitan Reef, and formed, to the south, by a straight line drawn from the southeastern point of the Davis Mountains to the most southwestern point of the Glass Mountains.

*Deep drilling* means those drilling events in the Delaware Basin that reach or exceed a depth of 2,150 feet below the surface relative to where such drilling occurred.

*Department* means the United States Department of Energy.

*Disposal regulations* means part 191, subparts B and C of this chapter.

*Management systems review* means the qualitative assessment of a data collection operation or organization(s) to establish whether the prevailing quality management structure, policies, practices, and procedures are adequate to ensure that the type and quality of data needed are obtained.

*Modification* means action(s) taken by the Administrator that alters the terms or conditions of certification pursuant to section 8(d)(1) of the WIPP LWA. Modification of any certification shall comply with this part and part 191 of this chapter.

*Population of CCDFs* means all possible complementary, cumulative distribution functions (CCDFs) that can be generated from all disposal system parameter values used in performance assessments.

*Population of estimates* means all possible estimates of radiation doses and radionuclide concentrations that can be generated from all disposal system parameter values used in compliance assessments.

*Quality assurance* means those planned and systematic actions necessary to provide adequate confidence that the disposal system will comply with the disposal regulations set forth in part 191 of this chapter. Quality assurance includes quality control, which

comprises those actions related to the physical characteristics of a material, structure, component, or system that provide a means to control the quality of the material, structure, component, or system to predetermined requirements.

*Re-certification* means any action taken by the Administrator pursuant to section 8(f) of the WIPP LWA.

*Regulatory time frame* means the time period beginning at disposal and ending 10,000 years after disposal.

*Revocation* means any action taken by the Administrator to terminate the certification pursuant to section 8(d)(1) of the WIPP LWA.

*Secretary* means the Secretary of Energy.

*Shallow drilling* means those drilling events in the Delaware Basin that do not reach a depth of 2,150 feet below the surface relative to where such drilling occurred.

*Suspension* means any action taken by the Administrator to withdraw, for a limited period of time, the certification pursuant to section 8(d)(1) of the WIPP LWA.

*Waste* means the radioactive waste, radioactive material and coincidental material subject to the requirements of part 191 of this chapter.

*Waste characteristic* means a property of the waste that has an impact on the containment of waste in the disposal system.

*Waste component* means an ingredient of the total inventory of the waste that influences a waste characteristic.

*WIPP* means the Waste Isolation Pilot Plant, as authorized pursuant to section 213 of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Pub.L. 96–164; 93 Stat. 1259, 1265).

*WIPP LWA* means the Waste Isolation Pilot Plant Land Withdrawal Act of 1992 (Pub.L. 102–579, 106 Stat. 4777).

[61 FR 5235, Feb. 9, 1996, as amended at 63 FR 27404, May 18, 1998]

### § 194.3 Communications.

(a) Compliance application(s) shall be:

(1) Addressed to the Administrator; and

(2) Signed by the Secretary.

(b) Communications and reports concerning the criteria in this part shall be:

(1) Addressed to the Administrator or the Administrator's authorized representative; and

(2) Signed by the Secretary or the Secretary's authorized representative.

### § 194.4 Conditions of compliance certification.

(a) Any certification of compliance issued pursuant to section 8(d)(1) of the WIPP LWA may include such conditions as the Administrator finds necessary to support such certification.

(b) Whether stated therein or not, the following conditions shall apply in any such certification:

(1) The certification shall be subject to modification, suspension or revocation by the Administrator. Any suspension of the certification shall be done at the discretion of the Administrator. Any modification or revocation of the certification shall be done by rule pursuant to 5 U.S.C. 553. If the Administrator revokes the certification, the Department shall retrieve, as soon as practicable and to the extent practicable, any waste emplaced in the disposal system.

(2) Any time after the Administrator issues a certification, the Administrator or the Administrator's authorized representative may submit a written request to the Department for information to enable the Administrator to determine whether the certification should be modified, suspended or revoked. Unless otherwise specified by the Administrator or the Administrator's authorized representative, the Department shall submit such information to the Administrator or the Administrator's authorized representative within 30 calendar days of receipt of the request.

(3) Any time after the Administrator issues a certification, the Department shall report any planned or unplanned changes in activities or conditions pertaining to the disposal system that differ significantly from the most recent compliance application.

(i) The Department shall inform the Administrator, in writing, prior to making such a planned change in activity or disposal system condition.

(ii) In the event of an unplanned change in activity or condition, the Department shall immediately cease emplacement of waste in the disposal system if the Department determines that one or more of the following conditions is true:

(A) The containment requirements established pursuant to §191.13 of this chapter have been or are expected to be exceeded;

(B) Releases from already-emplaced waste lead to committed effective doses that are or are expected to be in excess of those established pursuant to §191.15 of this chapter. For purposes of this paragraph (b)(3)(ii)(B), emissions from operations covered pursuant to part 191, subpart A of this chapter are not included; or

(C) Releases have caused or are expected to cause concentrations of radionuclides or estimated doses due to radionuclides in underground sources of drinking water in the accessible environment to exceed the limits established pursuant to part 191, subpart C of this chapter.

(iii) If the Department determines that a condition described in paragraph (b)(3)(ii) of this section has occurred or is expected to occur, the Department shall notify the Administrator, in writing, within 24 hours of the determination. Such notification shall, to the extent practicable, include the following information:

(A) Identification of the location and environmental media of the release or the expected release;

(B) Identification of the type and quantity of waste (in activity in curies of each radionuclide) released or expected to be released;

(C) Time and date of the release or the estimated time of the expected release;

(D) Assessment of the hazard posed by the release or the expected release; and

(E) Additional information requested by the Administrator or the Administrator's authorized representative.

(iv) The Department may resume emplacement of waste in the disposal system upon written notification that the suspension has been lifted by the Administrator.

(v) If the Department discovers a condition or activity that differs significantly from what is indicated in the most recent compliance application, but does not involve conditions or activities listed in paragraph (b)(3)(ii) of this section, then the difference shall be reported, in writing, to the Administrator within 10 calendar days of its discovery.

(vi) Following receipt of notification, the Administrator will notify the Secretary in writing whether any condition or activity reported pursuant to paragraph (b)(3) this section:

(A) Does not comply with the terms of the certification; and, if it does not comply,

(B) Whether the compliance certification must be modified, suspended or revoked. The Administrator or the Administrator's authorized representative may request additional information before determining whether modification, suspension or revocation of the compliance certification is required.

(4) Not later than six months after the Administrator issues a certification, and at least annually thereafter, the Department shall report to the Administrator, in writing, any changes in conditions or activities pertaining to the disposal system that were not required to be reported by paragraph (b)(3) of this section and that differ from information contained in the most recent compliance application.

### §194.5 Publications incorporated by reference.

(a) The following publications are incorporated into this part by reference:

(1) U.S. Nuclear Regulatory Commission, NUREG–1297 ''Peer Review for High-Level Nuclear Waste Repositories,'' published February 1988; incorporation by reference (IBR) approved for §§ 194.22, 194.23 and 194.27.

(2) American Society of Mechanical Engineers (ASME) Nuclear Quality Assurance (NQA) Standard, NQA–1–1989 edition, ''Quality Assurance Program Requirements for Nuclear Facilities;'' IBR approved for §194.22.

(3) ASME NQA–2a–1990 addenda, part 2.7, to ASME NQA–2–1989 edition ''Quality Assurance Requirements for Nuclear Facility Applications;'' IBR approved for § 194.22 and § 194.23.

(4) ASME NQA–3–1989 edition, ''Quality Assurance Program Requirements for the Collection of Scientific and Technical Information for Site Characterization of High-Level Nuclear Waste Repositories'' (excluding section 2.1 (b) and (c)); IBR approved for § 194.22.

(b) The publications listed in paragraph (a) of this section were approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected or obtained from the Air Docket, Docket No. A–92–56, room M1500 (LE131), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, or copies may be inspected at the Office of the Federal Register, 800 N. Capitol Street NW, 7th floor, Suite 700, Washington, DC, or copies may be obtained from the following addresses:

(1) For ASME standards, contact American Society of Mechanical Engineers, 22 Law Drive, P.O. Box 2900, Fairfield, NJ 07007–2900, phone 1–800–843–2763.

(2) For Nuclear Regulatory Commission documents, contact Division of Information Support Services, Distribution Service, U.S. Nuclear Regulatory Commission, Washington, DC 20555, or contact National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, phone 703–487–4650.

### § 194.6 Alternative provisions.

The Administrator may, by rule pursuant to 5 U.S.C. 553, substitute for any of the provisions of this part alternative provisions chosen after:

(a) The alternative provisions have been proposed for public comment in the FEDERAL REGISTER together with information describing how the alternative provisions comport with the disposal regulations, the reasons why the existing provisions of this part appear inappropriate, and the costs, risks and benefits of compliance in accordance with the alternative provisions;

(b) A public comment period of at least 120 days has been completed and public hearings have been held in New Mexico;

(c) The public comments received have been fully considered; and

(d) A notice of final rulemaking is published in the FEDERAL REGISTER.

### § 194.7 Effective date.

The criteria in this part shall be effective on April 9, 1996. The incorporation by reference of certain publications listed in the criteria is approved by the Director of the Federal Register as of April 9, 1996.

### § 194.8 Approval process for waste shipment from waste generator sites for disposal at the WIPP.

(a) *Quality Assurance Programs at Waste Generator Sites.* The Agency will determine compliance with requirements for site-specific quality assurance programs as set forth below:

(1) Upon submission by the Department of a site-specific quality assurance program plan the Agency will evaluate the plan to determine whether it establishes the applicable Nuclear Quality Assurance (NQA) requirements of § 194.22(a)(1) for the items and activities of §§ 194.22(a)(2)(i), 194.24(c)(3) and 194.24(c)(5). The program plan and other documentation submitted by the Department will be placed in the dockets described in § 194.67.

(2) The Agency will conduct a quality assurance audit or an inspection of a Department quality assurance audit at the relevant site for the purpose of verifying proper execution of the site-specific quality assurance program plan. The Agency will publish a notice in the FEDERAL REGISTER announcing a scheduled inspection or audit. In that or another notice, the Agency will also solicit public comment on the quality assurance program plan and appropriate Department documentation described in paragraph (a)(1) of this section. A public comment period of at least 30 days will be allowed.

(3) The Agency's written decision regarding compliance with the requisite quality assurance requirements at a waste generator site will be conveyed in a letter from the Administrator's authorized representative to the Department. No such compliance determination shall be granted until after

the end of the public comment period described in paragraph (a)(2) of this section. A copy of the Agency's compliance determination letter will be placed in the public dockets in accordance with § 194.67. The results of any inspections or audits conducted by the Agency to evaluate the quality assurance programs described in paragraph (a)(1) of this section will also be placed in the dockets described in § 194.67.

(4) Subsequent to any positive determination of compliance as described in paragraph (a)(3) of this section, the Agency intends to conduct inspections, in accordance with §§ 194.21 and 194.22(e), to confirm the continued compliance of the programs approved under paragraphs (a)(2) and (a)(3) of this section. The results of such inspections will be made available to the public through the Agency's public dockets, as described in § 194.67.

(b) *Waste Characterization Programs at Waste Generator Sites.* The Agency will determine compliance with the requirements for use of process knowledge and a system of controls at waste generator sites as set forth below:

(1) For each waste stream or group of waste streams at a site, the Department must:

(i) Provide information on how process knowledge will be used for waste characterization of the waste stream(s) proposed for disposal at the WIPP; and

(ii) Implement a system of controls at the site, in accordance with § 194.24(c)(4), to confirm that the total amount of each waste component that will be emplaced in the disposal system will not exceed the upper limiting value or fall below the lower limiting value described in the introductory text of paragraph (c) of § 194.24. The implementation of such a system of controls shall include a demonstration that the site has procedures in place for adding data to the WIPP Waste Information System (''WWIS''), and that such information can be transmitted from that site to the WWIS database; and a demonstration that measurement techniques and control methods can be implemented in accordance with § 194.24(c)(4) for the waste stream(s) proposed for disposal at the WIPP.

(2) The Agency will conduct an audit or an inspection of a Department audit for the purpose of evaluating the use of process knowledge and the implementation of a system of controls for each waste stream or group of waste streams at a waste generator site. The Agency will announce a scheduled inspection or audit by the Agency with a notice in the FEDERAL REGISTER. In that or another notice, the Agency will also solicit public comment on the relevant waste characterization program plans and Department documentation, which will be placed in the dockets described in § 194.67. A public comment period of at least 30 days will be allowed.

(3) The Agency's written decision regarding compliance with the requirements for waste characterization programs described in paragraph (b)(1) of this section for one or more waste streams from a waste generator site will be conveyed in a letter from the Administrator's authorized representative to the Department. No such compliance determination shall be granted until after the end of the public comment period described in paragraph (b)(2) of this section. A copy of the Agency's compliance determination letter will be placed in the public dockets in accordance with § 194.67. The results of any inspections or audits conducted by the Agency to evaluate the plans described in paragraph (b)(1) of this section will also be placed in the dockets described in § 194.67.

(4) Subsequent to any positive determination of compliance as described in paragraph (b)(3) of this section, the Agency intends to conduct inspections, in accordance with §§ 194.21 and 194.24(h), to confirm the continued compliance of the programs approved under paragraphs (b)(2) and (b)(3) of this section. The results of such inspections will be made available to the public through the Agency's public dockets, as described in § 194.67.

[63 FR 27404, May 18, 1998]

## Subpart B—Compliance Certification and Re-certification Applications

### § 194.11 Completeness and accuracy of compliance applications.

Information provided to the Administrator in support of any compliance application shall be complete and accurate. The Administrator's evaluation for certification pursuant to section 8(d)(1)(B) of the WIPP LWA and evaluation for recertification pursuant to section 8(f)(2) of the WIPP LWA shall not begin until the Administrator has notified the Secretary, in writing, that a complete application in accordance with this part has been received.

### § 194.12 Submission of compliance applications.

Unless otherwise specified by the Administrator or the Administrator's authorized representative, 30 copies of any compliance application, any accompanying materials, and any amendments thereto shall be submitted in a printed form to the Administrator.

### § 194.13 Submission of reference materials.

Information may be included by reference into compliance application(s), provided that the references are clear and specific and that, unless otherwise specified by the Administrator or the Administrator's authorized representative, 10 copies of the referenced information are submitted to the Administrator. Referenced materials which are widely available in standard textbooks or reference books need not be submitted.

### § 194.14 Content of compliance certification application.

Any compliance application shall include:

(a) A current description of the natural and engineered features that may affect the performance of the disposal system. The description of the disposal system shall include, at a minimum, the following information:

(1) The location of the disposal system and the controlled area;

(2) A description of the geology, geophysics, hydrogeology, hydrology, and geochemistry of the disposal system and its vicinity and how these conditions are expected to change and interact over the regulatory time frame. Such description shall include, at a minimum:

(i) Existing fluids and fluid hydraulic potential, including brine pockets, in and near the disposal system; and

(ii) Existing higher permeability anhydrite interbeds located at or near the horizon of the waste.

(3) The presence and characteristics of potential pathways for transport of waste from the disposal system to the accessible environment including, but not limited to: Existing boreholes, solution features, breccia pipes, and other potentially permeable features, such as interbeds.

(4) The projected geophysical, hydrogeologic and geochemical conditions of the disposal system due to the presence of waste including, but not limited to, the effects of production of heat or gases from the waste.

(b) A description of the design of the disposal system including:

(1) Information on materials of construction including, but not limited to: Geologic media, structural materials, engineered barriers, general arrangement, and approximate dimensions; and

(2) Computer codes and standards that have been applied to the design and construction of the disposal system.

(c) Results of assessments conducted pursuant to this part.

(d) A description of input parameters associated with assessments conducted pursuant to this part and the basis for selecting those input parameters.

(e) Documentation of measures taken to meet the assurance requirements of this part.

(f) A description of waste acceptance criteria and actions taken to assure adherence to such criteria.

(g) A description of background radiation in air, soil and water in the vicinity of the disposal system and the procedures employed to determine such radiation.

(h) One or more topographic map(s) of the vicinity of the disposal system. The contour interval shall be sufficient to show clearly the pattern of surface

water flow in the vicinity of the disposal system. The map(s) shall include standard map notations and symbols, and, in addition, shall show boundaries of the controlled area and the location of any active, inactive, and abandoned injection and withdrawal wells in the controlled area and in the vicinity of the disposal system.

(i) A description of past and current climatologic and meteorologic conditions in the vicinity of the disposal system and how these conditions are expected to change over the regulatory time frame.

(j) The information required elsewhere in this part or any additional information, analyses, tests, or records determined by the Administrator or the Administrator's authorized representative to be necessary for determining compliance with this part.

### §194.15 Content of compliance re-certification application(s).

(a) In submitting documentation of continued compliance pursuant to section 8(f) of the WIPP LWA, the previous compliance application shall be updated to provide sufficient information for the Administrator to determine whether or not the WIPP continues to be in compliance with the disposal regulations. Updated documentation shall include:

(1) All additional geologic, geophysical, geochemical, hydrologic, and meteorologic information;

(2) All additional monitoring data, analyses and results;

(3) All additional analyses and results of laboratory experiments conducted by the Department or its contractors as part of the WIPP program;

(4) An identification of any activities or assumptions that deviate from the most recent compliance application;

(5) A description of all waste emplaced in the disposal system since the most recent compliance certification or re-certification application. Such description shall consist of a description of the waste characteristics and waste components identified in §§194.24(b)(1) and 194.24(b)(2);

(6) Any significant information not previously included in a compliance certification or re-certification application related to whether the disposal system continues to be in compliance with the disposal regulations; and

(7) Any additional information requested by the Administrator or the Administrator's authorized representative.

(b) To the extent that information required for a re-certification of compliance remains valid and has been submitted in previous certification or re-certification application(s), such information need not be duplicated in subsequent applications; such information may be summarized and referenced.

## Subpart C—Compliance Certification and Re-certification

GENERAL REQUIREMENTS

### §194.21 Inspections.

(a) The Administrator or the Administrator's authorized representative(s) shall, at any time:

(1) Be afforded unfettered and unannounced access to inspect any area of the WIPP, and any locations performing activities that provide information relevant to compliance application(s), to which the Department has rights of access. Such access shall be equivalent to access afforded Department employees upon presentation of credentials and other required documents.

(2) Be allowed to obtain samples, including split samples, and to monitor and measure aspects of the disposal system and the waste proposed for disposal in the disposal system.

(b) Records (including data and other information in any form) kept by the Department pertaining to the WIPP shall be made available to the Administrator or the Administrator's authorized representative upon request. If requested records are not immediately available, they shall be delivered within 30 calendar days of the request.

(c) The Department shall, upon request by the Administrator or the Administrator's authorized representative, provide permanent, private office space that is accessible to the disposal system. The office space shall be for the exclusive use of the Administrator or the Administrator's authorized representative(s).

(d) The Administrator or the Administrator's authorized representative(s)

shall comply with applicable access control measures for security, radiological protection, and personal safety when conducting activities pursuant to this section.

**§ 194.22 Quality assurance.**

(a)(1) As soon as practicable after April 9, 1996, the Department shall adhere to a quality assurance program that implements the requirements of ASME NQA–1–1989 edition, ASME NQA–2a-1990 addenda, part 2.7, to ASME NQA–2–1989 edition, and ASME NQA–3–1989 edition (excluding Section 2.1 (b) and (c), and Section 17.1). (Incorporation by reference as specified in § 194.5.)

(2) Any compliance application shall include information which demonstrates that the quality assurance program required pursuant to paragraph (a)(1) of this section has been established and executed for:

(i) Waste characterization activities and assumptions;

(ii) Environmental monitoring, monitoring of the performance of the disposal system, and sampling and analysis activities;

(iii) Field measurements of geologic factors, ground water, meteorologic, and topographic characteristics;

(iv) Computations, computer codes, models and methods used to demonstrate compliance with the disposal regulations in accordance with the provisions of this part;

(v) Procedures for implementation of expert judgment elicitation used to support applications for certification or re-certification of compliance;

(vi) Design of the disposal system and actions taken to ensure compliance with design specifications;

(vii) The collection of data and information used to support compliance application(s); and

(viii) Other systems, structures, components, and activities important to the containment of waste in the disposal system.

(b) Any compliance application shall include information which demonstrates that data and information collected prior to the implementation of the quality assurance program required pursuant to paragraph (a)(1) of this section have been qualified in accordance with an alternate methodology, approved by the Administrator or the Administrator's authorized representative, that employs one or more of the following methods: Peer review, conducted in a manner that is compatible with NUREG–1297, ''Peer Review for High-Level Nuclear Waste Repositories,'' published February 1988 (incorporation by reference as specified in § 194.5); corroborating data; confirmatory testing; or a quality assurance program that is equivalent in effect to ASME NQA–1–1989 edition, ASME NQA–2a–1990 addenda, part 2.7, to ASME NQA–2–1989 edition, and ASME NQA–3–1989 edition (excluding Section 2.1 (b) and (c) and Section 17.1). (Incorporation by reference as specified in § 194.5.)

(c) Any compliance application shall provide, to the extent practicable, information which describes how all data used to support the compliance application have been assessed for their quality characteristics, including:

(1) Data accuracy, i.e., the degree to which data agree with an accepted reference or true value;

(2) Data precision, i.e., a measure of the mutual agreement between comparable data gathered or developed under similar conditions expressed in terms of a standard deviation;

(3) Data representativeness, i.e., the degree to which data accurately and precisely represent a characteristic of a population, a parameter, variations at a sampling point, or environmental conditions;

(4) Data completeness, i.e., a measure of the amount of valid data obtained compared to the amount that was expected; and

(5) Data comparability, i.e., a measure of the confidence with which one data set can be compared to another.

(d) Any compliance application shall provide information which demonstrates how all data are qualified for use in the demonstration of compliance.

(e) The Administrator will verify appropriate execution of quality assurance programs through inspections, record reviews and record keeping requirements, which may include, but may not be limited to, surveillance, audits and management systems reviews.

**§194.23 Models and computer codes.**

(a) Any compliance application shall include:

(1) A description of the conceptual models and scenario construction used to support any compliance application.

(2) A description of plausible, alternative conceptual model(s) seriously considered but not used to support such application, and an explanation of the reason(s) why such model(s) was not deemed to accurately portray performance of the disposal system.

(3) Documentation that:

(i) Conceptual models and scenarios reasonably represent possible future states of the disposal system;

(ii) Mathematical models incorporate equations and boundary conditions which reasonably represent the mathematical formulation of the conceptual models;

(iii) Numerical models provide numerical schemes which enable the mathematical models to obtain stable solutions;

(iv) Computer models accurately implement the numerical models; i.e., computer codes are free of coding errors and produce stable solutions;

(v) Conceptual models have undergone peer review according to §194.27.

(b) Computer codes used to support any compliance application shall be documented in a manner that complies with the requirements of ASME NQA–2a–1990 addenda, part 2.7, to ASME NQA–2–1989 edition. (Incorporation by reference as specified in §194.5.)

(c) Documentation of all models and computer codes included as part of any compliance application performance assessment calculation shall be provided. Such documentation shall include, but shall not be limited to:

(1) Descriptions of the theoretical backgrounds of each model and the method of analysis or assessment;

(2) General descriptions of the models; discussions of the limits of applicability of each model; detailed instructions for executing the computer codes, including hardware and software requirements, input and output formats with explanations of each input and output variable and parameter (e.g., parameter name and units); listings of input and output files from a sample computer run; and reports on code verification, benchmarking, validation, and quality assurance procedures;

(3) Detailed descriptions of the structure of computer codes and complete listings of the source codes;

(4) Detailed descriptions of data collection procedures, sources of data, data reduction and analysis, and code input parameter development;

(5) Any necessary licenses; and

(6) An explanation of the manner in which models and computer codes incorporate the effects of parameter correlation.

(d) The Administrator or the Administrator's authorized representative may verify the results of computer simulations used to support any compliance application by performing independent simulations. Data files, source codes, executable versions of computer software for each model, other material or information needed to permit the Administrator or the Administrator's authorized representative to perform independent simulations, and access to necessary hardware to perform such simulations, shall be provided within 30 calendar days of a request by the Administrator or the Administrator's authorized representative.

**§194.24 Waste characterization.**

(a) Any compliance application shall describe the chemical, radiological and physical composition of all existing waste proposed for disposal in the disposal system. To the extent practicable, any compliance application shall also describe the chemical, radiological and physical composition of to-be-generated waste proposed for disposal in the disposal system. These descriptions shall include a list of waste components and their approximate quantities in the waste. This list may be derived from process knowledge, current non-destructive examination/assay, or other information and methods.

(b) The Department shall submit in the compliance certification application the results of an analysis which substantiates:

(1) That all waste characteristics influencing containment of waste in the disposal system have been identified

and assessed for their impact on disposal system performance. The characteristics to be analyzed shall include, but shall not be limited to: Solubility; formation of colloidal suspensions containing radionuclides; production of gas from the waste; shear strength; compactability; and other waste-related inputs into the computer models that are used in the performance assessment.

(2) That all waste components influencing the waste characteristics identified in paragraph (b)(1) of this section have been identified and assessed for their impact on disposal system performance. The components to be analyzed shall include, but shall not be limited to: metals; cellulosics; chelating agents; water and other liquids; and activity in curies of each isotope of the radionuclides present.

(3) Any decision to exclude consideration of any waste characteristic or waste component because such characteristic or component is not expected to significantly influence the containment of the waste in the disposal system.

(c) For each waste component identified and assessed pursuant to paragraph (b) of this section, the Department shall specify the limiting value (expressed as an upper or lower limit of mass, volume, curies, concentration, etc.), and the associated uncertainty (i.e., margin of error) for each limiting value, of the total inventory of such waste proposed for disposal in the disposal system. Any compliance application shall:

(1) Demonstrate that, for the total inventory of waste proposed for disposal in the disposal system, WIPP complies with the numeric requirements of § 194.34 and § 194.55 for the upper or lower limits (including the associated uncertainties), as appropriate, for each waste component identified in paragraph (b)(2) of this section, and for the plausible combinations of upper and lower limits of such waste components that would result in the greatest estimated release.

(2) Identify and describe the method(s) used to quantify the limits of waste components identified in paragraph (b)(2) of this section.

(3) Provide information which demonstrates that the use of process knowledge to quantify components in waste for disposal conforms with the quality assurance requirements found in § 194.22.

(4) Provide information which demonstrates that a system of controls has been and will continue to be implemented to confirm that the total amount of each waste component that will be emplaced in the disposal system will not exceed the upper limiting value or fall below the lower limiting value described in the introductory text of paragraph (c) of this section. The system of controls shall include, but shall not be limited to: Measurement; sampling; chain of custody records; record keeping systems; waste loading schemes used; and other documentation.

(5) Identify and describe such controls delineated in paragraph (c)(4) of this section and confirm that they are applied in accordance with the quality assurance requirements found in § 194.22.

(d) The Department shall include a waste loading scheme in any compliance application, or else performance assessments conducted pursuant to § 194.32 and compliance assessments conducted pursuant to § 194.54 shall assume random placement of waste in the disposal system.

(e) Waste may be emplaced in the disposal system only if the emplaced components of such waste will not cause:

(1) The total quantity of waste in the disposal system to exceed the upper limiting value, including the associated uncertainty, described in the introductory text to paragraph (c) of this section; or

(2) The total quantity of waste that will have been emplaced in the disposal system, prior to closure, to fall below the lower limiting value, including the associated uncertainty, described in the introductory text to paragraph (c) of this section.

(f) Waste emplacement shall conform to the assumed waste loading conditions, if any, used in performance assessments conducted pursuant to § 194.32 and compliance assessments conducted pursuant to § 194.54.

(g) The Department shall demonstrate in any compliance application that the total inventory of waste emplaced in the disposal system complies with the limitations on transuranic waste disposal described in the WIPP LWA.

(h) The Administrator will use inspections and records reviews, such as audits, to verify compliance with this section.

**§194.25 Future state assumptions.**

(a) Unless otherwise specified in this part or in the disposal regulations, performance assessments and compliance assessments conducted pursuant the provisions of this part to demonstrate compliance with §191.13, §191.15 and part 191, subpart C shall assume that characteristics of the future remain what they are at the time the compliance application is prepared, provided that such characteristics are not related to hydrogeologic, geologic or climatic conditions.

(b) In considering future states pursuant to this section, the Department shall document in any compliance application, to the extent practicable, effects of potential future hydrogeologic, geologic and climatic conditions on the disposal system over the regulatory time frame. Such documentation shall be part of the activities undertaken pursuant to §194.14, Content of compliance certification application; §194.32, Scope of performance assessments; and §194.54, Scope of compliance assessments.

(1) In considering the effects of hydrogeologic conditions on the disposal system, the Department shall document in any compliance application, to the extent practicable, the effects of potential changes to hydrogeologic conditions.

(2) In considering the effects of geologic conditions on the disposal system, the Department shall document in any compliance application, to the extent practicable, the effects of potential changes to geologic conditions, including, but not limited to: Dissolution; near surface geomorphic features and processes; and related subsidence in the geologic units of the disposal system.

(3) In considering the effects of climatic conditions on the disposal system, the Department shall document in any compliance application, to the extent practicable, the effects of potential changes to future climate cycles of increased precipitation (as compared to present conditions).

**§194.26 Expert judgment.**

(a) Expert judgment, by an individual expert or panel of experts, may be used to support any compliance application, provided that expert judgment does not substitute for information that could reasonably be obtained through data collection or experimentation.

(b) Any compliance application shall:

(1) Identify any expert judgments used to support the application and shall identify experts (by name and employer) involved in any expert judgment elicitation processes used to support the application.

(2) Describe the process of eliciting expert judgment, and document the results of expert judgment elicitation processes and the reasoning behind those results. Documentation of interviews used to elicit judgments from experts, the questions or issues presented for elicitation of expert judgment, background information provided to experts, and deliberations and formal interactions among experts shall be provided. The opinions of all experts involved in each elicitation process shall be provided whether the opinions are used to support compliance applications or not.

(3) Provide documentation that the following restrictions and guidelines have been applied to any selection of individuals used to elicit expert judgments:

(i) Individuals who are members of the team of investigators requesting the judgment or the team of investigators who will use the judgment were not selected; and

(ii) Individuals who maintain, at any organizational level, a supervisory role or who are supervised by those who will utilize the judgment were not selected.

(4) Provide information which demonstrates that:

(i) The expertise of any individual involved in expert judgment elicitation

comports with the level of knowledge required by the questions or issues presented to that individual; and

(ii) The expertise of any expert panel, as a whole, involved in expert judgment elicitation comports with the level and variety of knowledge required by the questions or issues presented to that panel.

(5) Explain the relationship among the information and issues presented to experts prior to the elicitation process, the elicited judgment of any expert panel or individual, and the purpose for which the expert judgment is being used in compliance applications(s).

(6) Provide documentation that the initial purpose for which expert judgment was intended, as presented to the expert panel, is consistent with the purpose for which this judgment was used in compliance application(s).

(7) Provide documentation that the following restrictions and guidelines have been applied in eliciting expert judgment:

(i) At least five individuals shall be used in any expert elicitation process, unless there is a lack or unavailability of experts and a documented rationale is provided that explains why fewer than five individuals were selected.

(ii) At least two-thirds of the experts involved in an elicitation shall consist of individuals who are not employed directly by the Department or by the Department's contractors, unless the Department can demonstrate and document that there is a lack or unavailability of qualified independent experts. If so demonstrated, at least one-third of the experts involved in an elicitation shall consist of individuals who are not employed directly by the Department or by the Department's contractors.

(c) The public shall be afforded a reasonable opportunity to present its scientific and technical views to expert panels as input to any expert elicitation process.

### § 194.27 Peer review.

(a) Any compliance application shall include documentation of peer review that has been conducted, in a manner required by this section, for:

(1) Conceptual models selected and developed by the Department;

(2) Waste characterization analyses as required in § 194.24(b); and

(3) Engineered barrier evaluation as required in § 194.44.

(b) Peer review processes required in paragraph (a) of this section, and conducted subsequent to the promulgation of this part, shall be conducted in a manner that is compatible with NUREG–1297, ''Peer Review for High-Level Nuclear Waste Repositories,'' published February 1988. (Incorporation by reference as specified in § 194.5.)

(c) Any compliance application shall:

(1) Include information that demonstrates that peer review processes required in paragraph (a) of this section, and conducted prior to the implementation of the promulgation of this part, were conducted in accordance with an alternate process substantially equivalent in effect to NUREG–1297 and approved by the Administrator or the Administrator's authorized representative; and

(2) Document any peer review processes conducted in addition to those required pursuant to paragraph (a) of this section. Such documentation shall include formal requests, from the Department to outside review groups or individuals, to review or comment on any information used to support compliance applications, and the responses from such groups or individuals.

## CONTAINMENT REQUIREMENTS

### § 194.31 Application of release limits.

The release limits shall be calculated according to part 191, appendix A of this chapter, using the total activity, in curies, that will exist in the disposal system at the time of disposal.

### § 194.32 Scope of performance assessments.

(a) Performance assessments shall consider natural processes and events, mining, deep drilling, and shallow drilling that may affect the disposal system during the regulatory time frame.

(b) Assessments of mining effects may be limited to changes in the hydraulic conductivity of the hydrogeologic units of the disposal system from excavation mining for natural resources. Mining shall be assumed

to occur with a one in 100 probability in each century of the regulatory time frame. Performance assessments shall assume that mineral deposits of those resources, similar in quality and type to those resources currently extracted from the Delaware Basin, will be completely removed from the controlled area during the century in which such mining is randomly calculated to occur. Complete removal of such mineral resources shall be assumed to occur only once during the regulatory time frame.

(c) Performance assessments shall include an analysis of the effects on the disposal system of any activities that occur in the vicinity of the disposal system prior to disposal and are expected to occur in the vicinity of the disposal system soon after disposal. Such activities shall include, but shall not be limited to, existing boreholes and the development of any existing leases that can be reasonably expected to be developed in the near future, including boreholes and leases that may be used for fluid injection activities.

(d) Performance assessments need not consider processes and events that have less than one chance in 10,000 of occurring over 10,000 years.

(e) Any compliance application(s) shall include information which:

(1) Identifies all potential processes, events or sequences and combinations of processes and events that may occur during the regulatory time frame and may affect the disposal system;

(2) Identifies the processes, events or sequences and combinations of processes and events included in performance assessments; and

(3) Documents why any processes, events or sequences and combinations of processes and events identified pursuant to paragraph (e)(1) of this section were not included in performance assessment results provided in any compliance application.

### § 194.33 Consideration of drilling events in performance assessments.

(a) Performance assessments shall examine deep drilling and shallow drilling that may potentially affect the disposal system during the regulatory time frame.

(b) The following assumptions and process shall be used in assessing the likelihood and consequences of drilling events, and the results of such process shall be documented in any compliance application:

(1) Inadvertent and intermittent intrusion by drilling for resources (other than those resources provided by the waste in the disposal system or engineered barriers designed to isolate such waste) is the most severe human intrusion scenario.

(2) In performance assessments, drilling events shall be assumed to occur in the Delaware Basin at random intervals in time and space during the regulatory time frame.

(3) The frequency of deep drilling shall be calculated in the following manner:

(i) Identify deep drilling that has occurred for each resource in the Delaware Basin over the past 100 years prior to the time at which a compliance application is prepared.

(ii) The total rate of deep drilling shall be the sum of the rates of deep drilling for each resource.

(4) The frequency of shallow drilling shall be calculated in the following manner:

(i) Identify shallow drilling that has occurred for each resource in the Delaware Basin over the past 100 years prior to the time at which a compliance application is prepared.

(ii) The total rate of shallow drilling shall be the sum of the rates of shallow drilling for each resource.

(iii) In considering the historical rate of all shallow drilling, the Department may, if justified, consider only the historical rate of shallow drilling for resources of similar type and quality to those in the controlled area.

(c) Performance assessments shall document that in analyzing the consequences of drilling events, the Department assumed that:

(1) Future drilling practices and technology will remain consistent with practices in the Delaware Basin at the time a compliance application is prepared. Such future drilling practices shall include, but shall not be limited to: The types and amounts of drilling fluids; borehole depths, diameters, and seals; and the fraction of such

boreholes that are sealed by humans; and

(2) Natural processes will degrade or otherwise affect the capability of boreholes to transmit fluids over the regulatory time frame.

(d) With respect to future drilling events, performance assessments need not analyze the effects of techniques used for resource recovery subsequent to the drilling of the borehole.

### § 194.34 Results of performance assessments.

(a) The results of performance assessments shall be assembled into ''complementary, cumulative distribution functions'' (CCDFs) that represent the probability of exceeding various levels of cumulative release caused by all significant processes and events.

(b) Probability distributions for uncertain disposal system parameter values used in performance assessments shall be developed and documented in any compliance application.

(c) Computational techniques, which draw random samples from across the entire range of the probability distributions developed pursuant to paragraph (b) of this section, shall be used in generating CCDFs and shall be documented in any compliance application.

(d) The number of CCDFs generated shall be large enough such that, at cumulative releases of 1 and 10, the maximum CCDF generated exceeds the 99th percentile of the population of CCDFs with at least a 0.95 probability. Values of cumulative release shall be calculated according to Note 6 of Table 1, appendix A of part 191 of this chapter.

(e) Any compliance application shall display the full range of CCDFs generated.

(f) Any compliance application shall provide information which demonstrates that there is at least a 95 percent level of statistical confidence that the mean of the population of CCDFs meets the containment requirements of § 191.13 of this chapter.

## ASSURANCE REQUIREMENTS

### § 194.41 Active institutional controls.

(a) Any compliance application shall include detailed descriptions of proposed active institutional controls, the controls' location, and the period of time the controls are proposed to remain active. Assumptions pertaining to active institutional controls and their effectiveness in terms of preventing or reducing radionuclide releases shall be supported by such descriptions.

(b) Performance assessments shall not consider any contributions from active institutional controls for more than 100 years after disposal.

### § 194.42 Monitoring.

(a) The Department shall conduct an analysis of the effects of disposal system parameters on the containment of waste in the disposal system and shall include the results of such analysis in any compliance application. The results of the analysis shall be used in developing plans for pre-closure and post-closure monitoring required pursuant to paragraphs (c) and (d) of this section. The disposal system parameters analyzed shall include, at a minimum:

(1) Properties of backfilled material, including porosity, permeability, and degree of compaction and reconsolidation;

(2) Stresses and extent of deformation of the surrounding roof, walls, and floor of the waste disposal room;

(3) Initiation or displacement of major brittle deformation features in the roof or surrounding rock;

(4) Ground water flow and other effects of human intrusion in the vicinity of the disposal system;

(5) Brine quantity, flux, composition, and spatial distribution;

(6) Gas quantity and composition; and

(7) Temperature distribution.

(b) For all disposal system parameters analyzed pursuant to paragraph (a) of this section, any compliance application shall document and substantiate the decision not to monitor a particular disposal system parameter because that parameter is considered to be insignificant to the containment of waste in the disposal system or to the verification of predictions about the future performance of the disposal system.

(c) Pre-closure monitoring. To the extent practicable, pre-closure monitoring shall be conducted of significant disposal system parameter(s) as identified by the analysis conducted pursuant to paragraph (a) of this section. A disposal system parameter shall be considered significant if it affects the system's ability to contain waste or the ability to verify predictions about the future performance of the disposal system. Such monitoring shall begin as soon as practicable; however, in no case shall waste be emplaced in the disposal system prior to the implementation of pre-closure monitoring. Pre-closure monitoring shall end at the time at which the shafts of the disposal system are backfilled and sealed.

(d) Post-closure monitoring. The disposal system shall, to the extent practicable, be monitored as soon as practicable after the shafts of the disposal system are backfilled and sealed to detect substantial and detrimental deviations from expected performance and shall end when the Department can demonstrate to the satisfaction of the Administrator that there are no significant concerns to be addressed by further monitoring. Post-closure monitoring shall be complementary to monitoring required pursuant to applicable federal hazardous waste regulations at parts 264, 265, 268, and 270 of this chapter and shall be conducted with techniques that do not jeopardize the containment of waste in the disposal system.

(e) Any compliance application shall include detailed pre-closure and post-closure monitoring plans for monitoring the performance of the disposal system. At a minimum, such plans shall:

(1) Identify the parameters that will be monitored and how baseline values will be determined;

(2) Indicate how each parameter will be used to evaluate any deviations from the expected performance of the disposal system; and

(3) Discuss the length of time over which each parameter will be monitored to detect deviations from expected performance.

**§194.43 Passive institutional controls.**

(a) Any compliance application shall include detailed descriptions of the measures that will be employed to preserve knowledge about the location, design, and contents of the disposal system. Such measures shall include:

(1) Identification of the controlled area by markers that have been designed and will be fabricated and emplaced to be as permanent as practicable;

(2) Placement of records in the archives and land record systems of local, State, and Federal governments, and international archives, that would likely be consulted by individuals in search of unexploited resources. Such records shall identify:

(i) The location of the controlled area and the disposal system;

(ii) The design of the disposal system;

(iii) The nature and hazard of the waste;

(iv) Geologic, geochemical, hydrologic, and other site data pertinent to the containment of waste in the disposal system, or the location of such information; and

(v) The results of tests, experiments, and other analyses relating to backfill of excavated areas, shaft sealing, waste interaction with the disposal system, and other tests, experiments, or analyses pertinent to the containment of waste in the disposal system, or the location of such information.

(3) Other passive institutional controls practicable to indicate the dangers of the waste and its location.

(b) Any compliance application shall include the period of time passive institutional controls are expected to endure and be understood.

(c) The Administrator may allow the Department to assume passive institutional control credit, in the form of reduced likelihood of human intrusion, if the Department demonstrates in the compliance application that such credit is justified because the passive institutional controls are expected to endure and be understood by potential intruders for the time period approved by the Administrator. Such credit, or a smaller credit as determined by the Administrator, cannot be used for more than several hundred years and may

decrease over time. In no case, however, shall passive institutional controls be assumed to eliminate the likelihood of human intrusion entirely.

### § 194.44 Engineered barriers.

(a) Disposal systems shall incorporate engineered barrier(s) designed to prevent or substantially delay the movement of water or radionuclides toward the accessible environment.

(b) In selecting any engineered barrier(s) for the disposal system, the Department shall evaluate the benefit and detriment of engineered barrier alternatives, including but not limited to: Cementation, shredding, supercompaction, incineration, vitrification, improved waste canisters, grout and bentonite backfill, melting of metals, alternative configurations of waste placements in the disposal system, and alternative disposal system dimensions. The results of this evaluation shall be included in any compliance application and shall be used to justify the selection and rejection of each engineered barrier evaluated.

(c)(1) In conducting the evaluation of engineered barrier alternatives, the following shall be considered, to the extent practicable:

(i) The ability of the engineered barrier to prevent or substantially delay the movement of water or waste toward the accessible environment;

(ii) The impact on worker exposure to radiation both during and after incorporation of engineered barriers;

(iii) The increased ease or difficulty of removing the waste from the disposal system;

(iv) The increased or reduced risk of transporting the waste to the disposal system;

(v) The increased or reduced uncertainty in compliance assessment;

(vi) Public comments requesting specific engineered barriers;

(vii) The increased or reduced total system costs;

(viii) The impact, if any, on other waste disposal programs from the incorporation of engineered barriers (e.g., the extent to which the incorporation of engineered barriers affects the volume of waste);

(ix) The effects on mitigating the consequences of human intrusion.

(2) If, after consideration of one or more of the factors in paragraph (c)(1) of this section, the Department concludes that an engineered barrier considered within the scope of the evaluation should be rejected without evaluating the remaining factors in paragraph (c)(1) of this section, then any compliance application shall provide a justification for this rejection explaining why the evaluation of the remaining factors would not alter the conclusion.

(d) In considering the ability of engineered barriers to prevent or substantially delay the movement of water or radionuclides toward the accessible environment, the benefit and detriment of engineered barriers for existing waste already packaged, existing waste not yet packaged, existing waste in need of re-packaging, and to-be-generated waste shall be considered separately and described.

(e) The evaluation described in paragraphs (b), (c) and (d) of this section shall consider engineered barriers alone and in combination.

### § 194.45 Consideration of the presence of resources.

Any compliance application shall include information that demonstrates that the favorable characteristics of the disposal system compensate for the presence of resources in the vicinity of the disposal system and the likelihood of the disposal system being disturbed as a result of the presence of those resources. If performance assessments predict that the disposal system meets the containment requirements of § 191.13 of this chapter, then the Agency will assume that the requirements of this section and § 191.14(e) of this chapter have been fulfilled.

### § 194.46 Removal of waste.

Any compliance application shall include documentation which demonstrates that removal of waste from the disposal system is feasible for a reasonable period of time after disposal. Such documentation shall include an analysis of the technological feasibility of mining the sealed disposal system, given technology levels at the time a compliance application is prepared.

INDIVIDUAL AND GROUND-WATER PROTECTION REQUIREMENTS

**§194.51 Consideration of protected individual.**

Compliance assessments that analyze compliance with §191.15 of this chapter shall assume that an individual resides at the single geographic point on the surface of the accessible environment where that individual would be expected to receive the highest dose from radionuclide releases from the disposal system.

**§194.52 Consideration of exposure pathways.**

In compliance assessments that analyze compliance with §191.15 of this chapter, all potential exposure pathways from the disposal system to individuals shall be considered. Compliance assessments with part 191, subpart C and §191.15 of this chapter shall assume that individuals consume 2 liters per day of drinking water from any underground source of drinking water in the accessible environment.

**§194.53 Consideration of underground sources of drinking water.**

In compliance assessments that analyze compliance with part 191, subpart C of this chapter, all underground sources of drinking water in the accessible environment that are expected to be affected by the disposal system over the regulatory time frame shall be considered. In determining whether underground sources of drinking water are expected to be affected by the disposal system, underground interconnections among bodies of surface water, ground water, and underground sources of drinking water shall be considered.

**§194.54 Scope of compliance assessments.**

(a) Any compliance application shall contain compliance assessments required pursuant to this part. Compliance assessments shall include information which:

(1) Identifies potential processes, events, or sequences of processes and events that may occur over the regulatory time frame;

(2) Identifies the processes, events, or sequences of processes and events included in compliance assessment results provided in any compliance application; and

(3) Documents why any processes, events, or sequences of processes and events identified pursuant to paragraph (a)(1) of this section were not included in compliance assessment results provided in any compliance application.

(b) Compliance assessments of undisturbed performance shall include the effects on the disposal system of:

(1) Existing boreholes in the vicinity of the disposal system, with attention to the pathways they provide for migration of radionuclides from the site; and

(2) Any activities that occur in the vicinity of the disposal system prior to or soon after disposal. Such activities shall include, but shall not be limited to: Existing boreholes and the development of any existing leases that can be reasonably expected to be developed in the near future, including boreholes and leases that may be used for fluid injection activities.

**§194.55 Results of compliance assessments.**

(a) Compliance assessments shall consider and document uncertainty in the performance of the disposal system.

(b) Probability distributions for uncertain disposal system parameter values used in compliance assessments shall be developed and documented in any compliance application.

(c) Computational techniques which draw random samples from across the entire range of values of each probability distribution developed pursuant to paragraph (b) of this section shall be used to generate a range of:

(1) Estimated committed effective doses received from all pathways pursuant to §194.51 and §194.52;

(2) Estimated radionuclide concentrations in USDWs pursuant to §194.53; and

(3) Estimated dose equivalent received from USDWs pursuant to §194.52 and §194.53.

(d) The number of estimates generated pursuant to paragraph (c) of this section shall be large enough such that the maximum estimates of doses and

concentrations generated exceed the 99th percentile of the population of estimates with at least a 0.95 probability.

(e) Any compliance application shall display:

(1) The full range of estimated radiation doses; and

(2) The full range of estimated radionuclide concentrations.

(f) Any compliance application shall document that there is at least a 95 percent level of statistical confidence that the mean and the median of the range of estimated radiation doses and the range of estimated radionuclide concentrations meet the requirements of § 191.15 and part 191, subpart C of this chapter, respectively.

## Subpart D—Public Participation

### § 194.61 Advance notice of proposed rulemaking for certification.

(a) Upon receipt of a compliance application submitted pursuant to section 8(d)(1) of the WIPP LWA and § 194.11, the Agency will publish in the FEDERAL REGISTER an Advance Notice of Proposed Rulemaking announcing that a compliance application has been received, soliciting comment on such application, and announcing the Agency's intent to conduct a rulemaking to certify whether the WIPP facility will comply with the disposal regulations.

(b) A copy of the compliance application will be made available for inspection in Agency dockets established pursuant to § 194.67.

(c) The notice will provide a public comment period of 120 days.

(d) A public hearing concerning the notice will be held if a written request is received by the Administrator or the Administrator's authorized representative within 30 calendar days of the date of publication pursuant to paragraph (a) of this section.

(e) Any comments received on the notice will be made available for inspection in the dockets established pursuant to § 194.67.

(f) Any comments received on the notice will be provided to the Department and the Department may submit to the Agency written responses to the comments.

### § 194.62 Notice of proposed rulemaking for certification.

(a) The Administrator will publish a Notice of Proposed Rulemaking in the FEDERAL REGISTER announcing the Administrator's proposed decision, pursuant to section 8(d)(1) of the WIPP LWA, whether to issue a certification that the WIPP facility will comply with the disposal regulations and soliciting comment on the proposal.

(b) The notice will provide a public comment period of at least 120 days.

(c) The notice will announce public hearings in New Mexico.

(d) Any comments received on the notice will be made available for inspection in the dockets established pursuant to § 194.67.

### § 194.63 Final rule for certification.

(a) The Administrator will publish a Final Rule in the FEDERAL REGISTER announcing the Administrator's decision, pursuant to section 8(d)(1) of the WIPP LWA, whether to issue a certification that the WIPP facility will comply with the disposal regulations.

(b) A document summarizing significant comments and issues arising from comments received on the Notice of Proposed Rulemaking, as well as the Administrator's response to such significant comments and issues, will be prepared and will be made available for inspection in the dockets established pursuant to § 194.67.

### § 194.64 Documentation of continued compliance.

(a) Upon receipt of documentation of continued compliance with the disposal regulations pursuant to section 8(f) of the WIPP LWA and § 194.11, the Administrator will publish a notice in the FEDERAL REGISTER announcing that such documentation has been received, soliciting comment on such documentation, and announcing the Administrator's intent to determine whether or not the WIPP facility continues to be in compliance with the disposal regulations.

(b) Copies of documentation of continued compliance received by the Administrator will be made available for inspection in the dockets established pursuant to § 194.67.

(c) The notice will provide a public comment period of at least 30 days after publication pursuant to paragraph (a) of this section.

(d) Any comments received on such notice will be made available for public inspection in the dockets established pursuant to § 194.67.

(e) Upon completion of review of the documentation of continued compliance with the disposal regulations, the Administrator will publish a notice in the FEDERAL REGISTER announcing the Administrator's decision whether or not to re-certify the WIPP facility.

**§ 194.65 Notice of proposed rulemaking for modification or revocation.**

(a) If the Administrator determines that any changes in activities or conditions pertaining to the disposal system depart significantly from the most recent compliance application, the Agency will publish a Notice of Proposed Rulemaking in the FEDERAL REGISTER announcing the Administrator's proposed decision on modification or revocation, and soliciting comment on the proposal.

(b) Any comments received on the notice will be made available for inspection in the dockets established pursuant to § 194.67.

**§ 194.66 Final rule for modification or revocation.**

(a) The Administrator will publish a Final Rule in the FEDERAL REGISTER announcing the Administrator's decision on modification or revocation.

(b) A document summarizing significant comments and issues arising from comments received on the Notice of Proposed Rulemaking as well as the Administrator's response to such significant comments and issues will be prepared and will be made available for inspection in the dockets established pursuant to § 194.67.

**§ 194.67 Dockets.**

The Agency will establish and maintain dockets in the State of New Mexico and Washington, DC. The dockets will consist of all relevant, significant information received from outside parties and all significant information considered by the Administrator in certifying whether the WIPP facility will comply with the disposal regulations, in certifying whether or not the WIPP facility continues to be in compliance with the disposal regulations, and in determining whether compliance certification should be modified, suspended or revoked.

## APPENDIX A TO PART 194—CERTIFICATION OF THE WASTE ISOLATION PILOT PLANT'S COMPLIANCE WITH THE 40 CFR PART 191 DISPOSAL REGULATIONS AND THE 40 CFR PART 194 Compliance Criteria

In accordance with the provisions of the WIPP Compliance Criteria of this part, the Agency finds that the Waste Isolation Pilot Plant (''WIPP'') will comply with the radioactive waste disposal regulations at part 191, subparts B and C, of this chapter. Therefore, pursuant to Section 8(d)(2) of the WIPP Land Withdrawal Act (''WIPP LWA''), as amended, the Administrator certifies that the WIPP facility will comply with the disposal regulations. In accordance with the Agency's authority under § 194.4(a), the certification of compliance is subject to the following conditions:

*Condition 1: § 194.14(b), Disposal system design, panel closure system.* The Department shall implement the panel seal design designated as Option D in Docket A–93–02, Item II–G–1 (October 29, 1996, Compliance Certification Application submitted to the Agency). The Option D design shall be implemented as described in Appendix PCS of Docket A–93–02, Item II–G–1, with the exception that the Department shall use Salado mass concrete (consistent with that proposed for the shaft seal system, and as described in Appendix SEAL of Docket A–93–02, Item II–G–1) instead of fresh water concrete.

*Condition 2: § 194.22: Quality Assurance.* The Secretary shall not allow any waste generator site other than the Los Alamos National Laboratory to ship waste for disposal at the WIPP until the Agency determines that the site has established and executed a quality assurance program, in accordance with §§ 194.22(a)(2)(i), 194.24(c)(3) and 194.24(c)(5) for waste characterization activities and assumptions. The Agency will determine compliance of site-specific quality assurance programs at waste generator sites using the process set forth in § 194.8.

*Condition 3: § 194.24: Waste Characterization.* The Secretary may allow shipment for disposal at the WIPP of legacy debris waste at the Los Alamos National Laboratory (''LANL'') that can be characterized using the systems and processes inspected by the Agency and documented in Docket A–93–02, Item II–I–70. The Secretary shall not allow

shipment of any waste from any additional LANL waste stream(s) or from any waste generator site other than LANL for disposal at the WIPP until the Agency has approved the processes for characterizing those waste streams for shipment using the process set forth in §194.8.

*Condition 4: §194.43, Passive institutional controls.*

(a) Not later than the final recertification application submitted prior to closure of the disposal system, the Department shall provide, to the Administrator or the Administrator's authorized representative:

(1) a schedule for implementing passive institutional controls that has been revised to show that markers will be fabricated and emplaced, and other measures will be implemented, as soon as possible following closure of the WIPP. Such schedule should describe how testing of any aspect of the conceptual design will be completed prior to or soon after closure, and what changes to the design of passive institutional controls may be expected to result from such testing.

(2) documentation showing that the granite pieces for the proposed monuments and information rooms described in Docket A–93–02, Item II–G–1, and supplementary information may be: quarried (cut and removed from the ground) without cracking due to tensile stresses from handling or isostatic rebound; engraved on the scale required by the design; transported to the site, given the weight and dimensions of the granite pieces and the capacity of existing rail cars and rail lines; loaded, unloaded, and erected without cracking based on the capacity of available equipment; and successfully joined.

(3) documentation showing that archives and record centers will accept the documents identified and will maintain them in the manner identified in Docket A–93–02, Item II–G–1.

(4) documentation showing that proposed recipients of WIPP information other than archives and record centers will accept the information and make use of it in the manner indicated by the Department in Docket A–93–02, Item II–G–1 and supplementary information.

(b) Upon receipt of the information required under paragraph (a) of this condition, the Agency will place such documentation in the public dockets identified in §194.67. The Agency will determine if a modification to the compliance certification in effect is necessary. Any such modification will be conducted in accordance with the requirements at §§194.65 and 194.66.

[63 FR 27405, May 18, 1998]

# PART 195—RADON PROFICIENCY PROGRAMS

## Subpart A—General Provisions

Sec.
§195.1 Purpose and applicability.
§195.2 Definitions.

## Subpart B—Fees

§195.20 Fee payments.
§195.30 Failure to remit fee.

AUTHORITY: 15 U.S.C. 2665.

SOURCE: 59 FR 13175, Mar. 18, 1994, unless otherwise noted.

## Subpart A—General Provisions

### §195.1 Purpose and applicability.

(a) *Purpose.* The purpose of this part is to establish and collect the fees from applicants and participants required by section 305 of the Toxic Substances Control Act, U.S.C. 2665 to defray the cost to EPA for operating the following programs: The National Radon Measurement Proficiency (RMP) Program, the individual proficiency component of the RMP Program, and the National Radon Contractor Proficiency (RCP) Program.

(b) *Applicability.* This part applies to all applicants and participants in the following EPA programs: The National Radon Measurement Proficiency Program, the individual proficiency component of the RMP Program, and the National Radon Contractor Proficiency Program.

### §195.2 Definitions.

Definitions in 15 U.S.C. 2602 and 2662 apply to this part unless otherwise specified in this section. In addition, the following definitions apply:

*Acceptance date* means the date on which EPA enters the application into the data system.

*Accepted application* refers to an application that has been entered into the data system.

*Applicant* means an individual or organization that submits an application to the RMP program, including the individual proficiency component of the RMP program, or the RCP program. An applicant to the RMP program must

submit a separate application for each location from which it provides radon measurement services. After the application is accepted by EPA, the applicant becomes a ''participant'' in the proficiency programs.

*Application* means the documents submitted to EPA by applicants to the RMP and RCP programs which request participation in a program.

*Device/measurement device* means a unit, component, or system designed to measure radon gas or radon decay products.

*EPA* means the U.S. Environmental Protection Agency.

*Individual proficiency/RMP exam* means the exam which evaluates individuals who provide radon measurement services in a residential environment.

*Listed participant* in an individual or organization who has met all the requirements for listing in the RMP and RCP programs.

*Measurement method* is a means of measuring radon gas or radon decay products encompassing similar measurement devices, sampling techniques, or analysis procedures.

*Organization* is any individual, sole proprietorship, partnership, business, company, corporation, college or university, government agency (includes Federal, State and local government entities), laboratory, or institution.

*Participant* is an individual or organization engaged in radon measurement and/or mitigation activities or in offering radon measurement and/or mitigation services to consumers and others, whose proficiency program application EPA has accepted.

*Primary measurement services (primary)* refers to radon measurement services using a specific device which services include the capability to read and/or analyze the results generated from the device.

*Radon Contractor Proficiency (RCP) program* refers to EPA's program to evaluate radon mitigation contractors and the contractor's ability to communicate information to the public.

*Radon Measurement Proficiency (RMP) program* refers to EPA's program to evaluate organizations and individuals offering measurement services to consumers. It provides a means for organizations to demonstrate their proficiency in measuring radon and its decay products in indoor air.

*Radon mitigation contractor* means a contractor who provides radon mitigation services to the public.

*Secondary radon measurement services (secondary)* refers to radon measurement services that do not include the reading or the ability to analyze the results of the measurement devices used. These services may include placement and retrieval of devices, reporting results, and/or consultation with consumers.

## Subpart B—Fees

### §195.20 Fee payments.

(a) *Fee Amounts.* Applicants to and participants in the RMP and RCP programs shall pay fees according to the following fee schedule:

(1) *Organizations Listed for or Seeking Listing for Primary Measurement Services in the RMP Program.* (i) In order to remain a listed participant, each organization that is listed for primary measurement services in the RMP program on the effective date of this section shall pay an annual fee of $390 for each device.

(ii) Each organization seeking listing for primary measurement services that submits an initial application after the effective date of this section shall pay an annual fee of $390 per device. This fee will be prorated quarterly, based on the acceptance date of an organization's application.

(iii) Organizations that have or are seeking a listing for secondary measurement services for their primary devices will not be required to pay the additional $50 fee applicable to secondary organizations.

(2) *Organizations Listed for or Seeking Listing for Secondary Measurement Services in the RMP Program.* (i) In order to remain a listed participant, each organization that is listed for secondary measurement services in the RMP program on the effective date of this section shall pay an annual fee of $50 for each business location listed.

(ii) Each organization seeking listing for secondary measurement services that submits an initial application after the effective date of this section

shall pay an annual fee of $50 for each business location listed. This fee will be prorated quarterly, based on the acceptance date of an organization's application.

(iii) Primary organizations that have or are seeking secondary listings for methods other than those for which they are listed as a primary, are subject to the fees.

(3) *Individual Proficiency Component of the RMP Program.* (i) In order to remain a listed participant, each individual listed in the RMP individual proficiency program on the effective date of this section shall pay an annual fee of $105.

(ii) Each individual who submits an initial application after the effective date of this section shall pay an annual fee of $105. This fee will be prorated quarterly, based on the acceptance date of an individual's application.

(iii) Individuals who have or are seeking listing status as an RMP primary or secondary organization are subject to the applicable fees under paragraphs (a)(1) and (2) of this section.

(4) *RCP Program.* (i)(A) In order to remain a listed participant, each individual listed in the RCP program on the effective date of this section shall pay an annual fee of $210.

(B) Each individual who is not a listed participant in the RCP program on the effective date of this section and submits an initial application after the effective date of this section shall pay an annual fee of $210. This fee will be prorated quarterly, based on the acceptance date of an individual's application.

(ii) An organization or individual who is not a listed participant in EPA's radon proficiency programs on the effective date of this section and/or whose proficiency program application has not yet been accepted by EPA becomes subject to the fees described above once its application has been accepted by EPA. Fees for such organizations or individuals will be prorated quarterly, based on the acceptance date of the application. To remain listed, each participant in the RMP or RCP programs, whether individual or organization, shall submit the appropriate annual fee to EPA each year.

(b) *Exemptions.* State and local governments are exempted from these fees under section 305(e)(2) of TSCA, 15 U.S.C. 2665.

(c) *Determination of Fees.* (1) Participants listed in the RMP and RCP programs on the effective date of this section will be sent, by EPA, a payment invoice with its fee calculation at least 30 days before the payment is due. Fees will be assessed based on the current information in EPA's proficiency data bases. Participants who intend to pay the invoiced fee amount must send their payment to EPA following the procedures in the invoice. Organizations or individuals who wish to notify EPA of any errors or corrections they wish to make to their listing status must do so by following the instructions on the payment invoice. Corrected payment invoices for both the RMP Program and the RCP Program shall be sent to: Radon Proficiency Programs User Fees, c/o Sanford Cohen and Associates, Inc. (SC&A), 1418 I–85 Parkway, Montgomery, Alabama, 36106. EPA will review the corrections noted on the payment invoice, adjust the payment invoice amount (as appropriate) and issue a new invoice. Participants must pay the amount in the corrected payment invoice within 30 days of the date listed on the corrected invoice.

(2) If the appropriate fee or a revised payment invoice for an individual or organization participating in the RMP or RCP program has not been received by EPA on or before the payment due date, EPA will send, by certified mail, notice that the individual or organization will be delisted from the proficiency program unless he/she pays the fee within 30 days of this second certified notification. If payment still has not been received by EPA after 30 days of the second certified notification, the organization's or individual's listing shall be removed from the proficiency program.

(3) New or initial applicants to the RMP or RCP programs will be assessed a fee at the time of their initial application. EPA will send a payment invoice to the new applicant upon acceptance of the initial application. The applicant will be given at least 30 days from the date on the payment invoice

to remit payment. The fee assessed will be prorated quarterly, based on the acceptance date of the application. If the appropriate fee has not been received by EPA by the payment due date, the application will be placed in an inactive file with no further action taken by EPA.

(d) *Payment Procedures.* Each remittance to EPA under this section shall be in United States currency and shall be paid by certified check, personal or business check, or money order made payable to the order of the ''U.S. ENVIRONMENTAL PROTECTION AGENCY'' and sent to: U.S. EPA, Washington Financial Management Center, Radon Proficiency Program User Fees (IRAA), P.O. Box 952491, St. Louis, Missouri, 63195–2491. The fee payment shall include the original copy of the EPA payment invoice. Collection of fees will begin in the calendar year beginning January 1, 1995. Specific guidance on how and when fees must be paid can be found in How to Pay Your Radon Proficiency Programs User Fees, U.S. EPA/Office of Radiation and Indoor Air. Copies of this document can be obtained by contacting the RIS at (334) 272–2797 or by FAX at (334) 260–9051.

(e) *Adjustment of Fees.* (1) EPA shall collect 100 percent of its operating costs associated with its radon proficiency programs by calendar year 1998. As necessary, EPA shall adjust the fees established by this subpart each year over the next four years to collect the following percentages of program costs:

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|
| 30% | 47.5% | 65% | 82.5% | 100% |

Actual fees for each fiscal year will be calculated based on program costs and participation rates. New fee schedules will be published in the FEDERAL REGISTER as a technical amendment final rule to this part to become effective 30 days or more after publication.

(2) EPA will use a three-step process to adjust the fees annually. First, EPA will estimate the costs of providing each of the proficiency programs for the upcoming year. EPA will account for future additional fixed costs (e.g., updating examinations) and increases/decreases in variable costs due to inflation and other factors. In order to calculate increases/decreases in costs due to inflation, EPA may use one of the three following indices: the Federal General Schedule (GS) pay scale, the Consumer Price Index (CPI), and/or a component of the CPI, such as services. Second, EPA will estimate the number of participants for each program. At a minimum, these participation rates will be based on past and current program participation rates. Third, EPA shall calculate the per capita costs that individuals and organizations should pay to enable it to recover its fixed and variable costs each year for each program. EPA shall also consider potential industry impacts as it adjusts to levels to ultimately achieve full cost recovery over the period of five years.

[60 FR 41816, Aug. 14, 1995]

### § 195.30 Failure to remit fee.

EPA will not process an application or continue a participant's listing in the National Radon Measurement Proficiency program, individual proficiency component of the RMP program, or the National Radon Contractor Proficiency program until the appropriate remittance provided in § 195.20(a) has been received by EPA. Failure by a currently EPA-listed organization or individual to remit the required fees in a timely manner will result in the loss of that organization's or individual's listing status as specified in § 195.20(c).

# SUBCHAPTER G—NOISE ABATEMENT PROGRAMS

## PART 201—NOISE EMISSION STANDARDS FOR TRANSPORTATION EQUIPMENT; INTERSTATE RAIL CARRIERS

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201.20 Applicability and purpose.
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201.25 Measurement location and weather conditions for measurement on receiving property of the noise of retarders, car coupling, locomotive load cell test stands, and stationary locomotives.
201.26 Procedures for the measurement on receiving property of retarder and car coupling noise.
201.27 Procedures for: (1) Determining applicability of the locomotive load cell test stand standard and switcher locomotive standard by noise measurement on a receiving property; (2) measurement of locomotive load cell test stands more than 120 meters (400 feet) on a receiving property.
201.28 Testing by railroad to determine probable compliance with the standard.

AUTHORITY: Noise Control Act of 1972, sec. 17(a), 86 Stat. 1234 (42 U.S.C. 4916(a)).

SOURCE: 45 FR 1263, Jan. 4, 1980, unless otherwise noted.

## Subpart A—General Provisions

### § 201.1 Definitions.

As used in this part, all terms not defined herein shall have the meaning given them in the Act:

(a) *Act* means the Noise Control Act of 1972 (Pub. L. 92–574, 86 Stat. 1234).

(b) *Car Coupling Sound* means a sound which is heard and identified by the observer as that of car coupling impact, and that causes a sound level meter indicator (FAST) to register an increase of at least ten decibels above the level observed immediately before hearing the sound.

(c) *Carrier* means a common carrier by railroad, or partly by railroad and partly by water, within the continental United States, subject to the Interstate Commerce Act, as amended, excluding street, suburban, and interurban electric railways unless operated as a part of a general railroad system of transportation.

(d) *Classification of Railroads* means the division of railroad industry operating companies by the Interstate Commerce Commission into three categories. As of 1978, Class I railroads must have annual revenues of $50 million or greater, Class II railroads must have annual revenues of between $10 and $50 million, and Class III railroads must have less than $10 million in annual revenues.

(e) *Commercial Property* means any property that is normally accessible to the public and that is used for any of the purposes described in the following standard land use codes (reference *Standard Land Use Coding Manual.* U.S. DOT/FHWA, reprinted March 1977): 53–59, Retail Trade; 61–64, Finance, Insurance, Real Estate, Personal, Business and Repair Services; 652–659, Legal and other professional services; 671, 672, and 673 Governmental Services; 692 and 699, Welfare, Charitable and Other Miscellaneous Services; 712 and 719, Nature exhibitions and other Cultural Activities; 721, 723, and 729, Entertainment, Public and other Public Assembly; and

74–79, Recreational, Resort, Park and other Cultural Activities.

(f) *dB(A)* is an abbreviation meaning A-weighted sound level in decibels, reference: 20 micropascals.

(g) *Day-night Sound Level* means the 24-hour time of day weighted equivalent sound level, in decibels, for any continuous 24-hour period, obtained after addition of ten decibels to sound levels produced in the hours from 10 p.m. to 7 a.m. (2200–0700). It is abbreviated as $L_{dn}$.

(h) *Decibel* means the unit measure of sound level, abbreviated as dB.

(i) *Energy Average Level* means a quantity calculated by taking ten times the common logarithm of the arithmetic average of the antilogs of one-tenth of each of the levels being averaged. The levels may be of any consistent type, e.g. maximum sound levels, sound exposure levels, and day-night sound levels.

(j) *Energy Summation of Levels* means a quantity calculated by taking ten times the common logarithm of the sum of the antilogs of one-tenth of each of the levels being summed. The levels may be of any consistent type, e.g., day-night sound level or equivalent sound level.

(k) *Equivalent Sound Level* means the level, in decibels, of the mean-square A-weighted sound pressure during a stated time period, with reference to the square of the standard reference sound pressure of 20 micropascals. It is the level of the sound exposure divided by the time period and is abbreviated as $L_{eq.}$

(l) *Fast Meter Response* means that the ''fast'' response of the sound level meter shall be used. The fast dynamic response shall comply with the meter dynamic characteristics in paragraph 5.3 of the American National Standard Specification for Sound Level Meters. ANSI S1.4–1971. This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018.

(m) *Idle* means that condition where all engines capable of providing motive power to the locomotive are set at the lowest operating throttle position; and where all auxiliary non-motive power engines are not operating.

(n) *Interstate Commerce* means the commerce between any place in a State and any place in another State, or between places in the same State through another State, whether such commerce moves wholly by rail or partly by rail and partly by motor vehicle, express, or water. This definition of ''interstate commerce'' for purposes of this regulation is similar to the definition of ''interstate commerce'' in section 203(a) of the Interstate Commerce Act (49 U.S.C. 303(a)).

(o) *Load Cell* means a device external to the locomotive, of high electrical resistance, used in locomotive testing to simulate engine loading while the locomotive is stationary. (Electrical energy produced by the diesel generator is dissipated in the load cell resistors instead of the traction motors).

(p) *Locomotive* means for the purpose of this regulation, a self-propelled vehicle designed for and used on railroad tracks in the transport or rail cars, including self-propelled rail passenger vehicles.

(q) *Locomotive Load Cell Test Stand* means the load cell §201.1(o) and associated structure, equipment, trackage and locomotive being tested.

(r) *Maximum Sound Level* means the greatest A-weighted sound level in decibels measured during the designated time interval or during the event, with either fast meter response §201.1(l) or slow meter response §201.1(ii) as specified. It is abbreviated as $L_{max}$.

(s) *Measurement Period* means a continuous period of time during which noise of railroad yard operations is assessed, the beginning and finishing times of which may be selected after completion of the measurements.

(t) *Rail Car* means a non-self-propelled vehicle designed for and used on railroad tracks.

(u) *Railroad* means all the roads in use by any common carrier operating a railroad, whether owned or operated under a contract, agreement, or lease.

(v) *Receiving Property Measurement Location* means a location on receiving property that is on or beyond the railroad facility boundary and that meets the receiving property measurement location criteria of subpart C.

(w) *Receiving Property* means any residential or commercial property that receives the sound from railroad facility operations, but that is not owned or operated by a railroad; except that occupied residences located on property owned or controlled by the railroad are included in the definition of ''receiving property.'' For purposes of this definition railroad crew sleeping quarters located on property owned or controlled by the railroad are not considered as residences. If, subsequent to the publication date of these regulations, the use of any property that is currently not applicable to this regulation changes, and it is newly classified as either residential or commercial, it is not receiving property until four years have elapsed from the date of the actual change in use.

(x) *Residential Property* means any property that is used for any of the purposes described in the following standard land use codes (ref. *Standard Land Use Coding Manual.* U.S. DOT/FHWA Washington, DC, reprinted March 1977): 1, Residential: 651, Medical and other Health Services; 68, Educational Services; 691, Religious Activities; and 711, Cultural Activities.

(y) *Retarder (Active)* means a device or system for decelerating rolling rail cars and controlling the degree of deceleration on a car by car basis.

(z) *Retarder Sound* means a sound which is heard and identified by the observer as that of a retarder, and that causes a sound level meter indicator at fast meter response § 201.1(l) to register an increase of at least ten decibels above the level observed immediately before hearing the sound.

(aa) *Sound Level* means the level, in decibels, measured by instrumentation which satisfies the requirements of American National Standard Specification for Sound Level Meters S1.4–1971 Type 1 (or S1A) or Type 2 if adjusted as shown in Table 1. This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018. For the purpose of these procedures the sound level is to be measured using the Aweighting of spectrum and either the FAST or SLOW dynamic averaging characteristics, as designated. It is abbreviated as $L_A$.

(bb) *Sound Exposure Level* means the level in decibels calculated as ten times the common logarithm of time integral of squared A-weighted sound pressure over a given time period or event divided by the square of the standard reference sound pressure of 20 micropascals and a reference duration of one second.

(cc) *Sound Pressure Level* (in stated frequency band) means the level, in decibels, calculated as 20 times the common logarithm of the ratio of a sound pressure to the reference sound pressure of 20 micropascals.

(dd) *Special Purpose Equipment* means maintenance-of-way equipment which may be located on or operated from rail cars including: Ballast cribbing machines, ballast regulators, conditioners and scarifiers, bolt machines, brush cutters, compactors, concrete mixers, cranes and derricks, earth boring machines, electric welding machines, grinders, grouters, pile drivers, rail heaters, rail layers, sandblasters, snow plows, spike drivers, sprayers and other types of such maintenance-of-way equipment.

(ee) *Special Track Work* means track other than normal tie and ballast bolted or welded rail or containing devices such as retarders or switching mechanisms.

(ff) *Statistical Sound Level* means the level in decibels that is exceeded in a stated percentage (x) of the duration of the measurement period. It is abbreviated as $L_x$.

(gg) *Switcher Locomotive* means any locomotive designated as a switcher by the builder or reported to the ICC as a switcher by the operator-owning-railroad and including, but not limited to, all locomotives of the builder/model designations listed in Appendix A to this subpart.

(hh) *Warning Device* means a sound emitting device used to alert and warn people of the presence of railroad equipment.

(ii) *Slow Meter Response* means that the slow response of the sound level meter shall be used. The slow dynamic response shall comply with the meter dynamic characteristics in paragraph 5.4 of the American National Standard Specification for Sound Level Meters. ANSI S1.4–1971. This publication is

available from the American National Standards Institute Inc., 1430 Broadway, New York, New York 10018.

[45 FR 1263, Jan. 4, 1980, as amended at 47 FR 14709, Apr. 6, 1982]

### APPENDIX A TO SUBPART A OF PART 201—SWITCHER LOCOMOTIVES

[The following locomotives are considered to be ''switcher locomotives'' under the general definition of this regulation]

| Type | Engine |
|---|---|
| General Electric Co. | |
| 44 ton | 8–D17000(2). |
| 70 ton | 6–CBFWL–6T. |
| 95 ton | 6–CBFWL–6T. |
| Electromotive Division (GMC) | |
| SC | 8–201A. |
| NC | 12–201A. |
| NC1 | 12–201A. |
| NC2 | 12–201A. |
| NW | 12–201A. |
| NW1 | 12–201A. |
| NW1A | 12–201A. |
| NW2 | 12–567. |
| NW2 | 12–567A. |
| NW3 | 12–567. |
| NW4 | 12–201A. |
| NW5 | 12–567B. |
| SW | 8–201A/6–567. |
| SW1 | 6–567A/AC. |
| SW2 | 6–567. |
| SW3 | 6–567. |
| SW600 | 6–567C. |
| SW7 | 12–567A. |
| SW8 | 8–567B/BC. |
| SW900 | 8–567B. |
| SW9 | 12–567B/BC/C. |
| SW1200 | 12–567C. |
| SW1000 | 8–645E. |
| SW1001 | 8–645E. |
| SW1500 | 12–645E. |
| MP15 | 12–645E. |
| MP15AC | 12–645E. |
| GMD1 | 12–567C. |
| RS1325 | 12–567C. |
| Transfer Switcher including ''Cow and Calf'' | |
| T | 12–201A(2) |
| TR | 12–567(2) |
| TR1 | 16–567(2) |
| TR2 | 12–567A(2) |
| TR3 | 12–567(3) |
| TR4 | 12–567A(2) |
| TR5 | 12–567B(2) |
| TR6 | 8–567B(2) |
| Baldwin | |
| VO–660 | 6–VO. |
| DS–446 | 6–606NA. |
| DS4475 | 6–750. |
| S–8 | 6–606. |
| VO–1000 | 8–VO. |
| DS–4410 | 8–608NA. |
| DS–4410 | 6–606SC. |
| S–12 | 6–606A. |

### APPENDIX A TO SUBPART A OF PART 201—SWITCHER LOCOMOTIVES—Continued

[The following locomotives are considered to be ''switcher locomotives'' under the general definition of this regulation]

| Type | Engine |
|---|---|
| DRS–4410 [1] | 6–606SC. |
| DRS–12 [1] | 6–606A. |
| Fairbanks Morse | |
| H–10–44 | 6–OP. |
| H–12–44 | 6–OP. |
| H–12–44TS | 6–OP. |
| H–12–46 [1] | 6–OP. |
| Lima | |
| 750 hp. | 6–Hamilton. |
| 800 hp. | 6–Hamilton. |
| 1000 hp. | 8–Hamilton. |
| 1200 hp. | 8–Hamilton. |
| LRS [1] | 8–Hamilton. |
| TL [1] | 8–Hamilton (2). |
| ALCO and MLW | |
| S1 | 6–539NA. |
| S2 | 6–539T. |
| S3 | 6–539NA. |
| S4 | 6–539T. |
| S5 | 6–251. |
| S6 | 6–251A,B. |
| S7 | 6–539. |
| S10 | 6–539. |
| S11 | 6–539. |
| S12 | 6–539T. |
| S13 | 6–251C. |
| RSD–1 | 6–539. |
| RSC–13 | 6–539. |
| RSC–24 | 12–244 |
| RS1 | 6–539T. |
| RS2 [1] | 12–244. |
| RS3 [1] | 12–244. |
| RS10 [1] | 12–244. |
| RSC–2 [1] | 12–244. |
| RS3 [1] | 12–244. |
| RSD–4 [1] | 12–244. |
| RSD–5 [1] | 12–244. |
| T6 | 6–251B. |
| C–415 [1] | 8–251F. |
| M–420TR | 12–251. |

[1] These models may be found assigned to road service as well as switcher service, but are considered switcher locomotives for the purpose of this regulation.

## Subpart B—Interstate Rail Carrier Operations Standards

### § 201.10 Applicability.

The provisions of this subpart apply to all rail cars and all locomotives, except steam locomotives, operated or controlled by carriers as defined in subpart A of this part, except that § 201.11 (a), (b), and (c) do not apply to gas turbine-powered locomotives and to any locomotive type which cannot be connected by any standard method to a

load cell. They apply to the total sound level emitted by rail cars and locomotives operated under the conditions specified, including the sound produced by refrigeration and air conditioning units which are an integral element of such equipment. The provisions of this subpart apply to all active retarders, all car coupling operations, all switcher locomotives, and all load cell test stands. These provisions do not apply to the sound emitted by a warning device, such as a horn, whistle or bell when operated for the purpose of safety. They do not apply to special purpose equipment which may be located on or operated from railcars; they do not apply to street, suburban or interurban electric railways unless operated as a part of a general railroad system of transportation. When land use changes after the publication date of this regulation from some other use to residential or commercial land use around a specific railyard facility, this regulation will become effective four (4) years from the date of that land use change.

### § 201.11 Standard for locomotive operation under stationary conditions.

(a) Commencing December 31, 1976, no carrier subject to this regulation shall operate any locomotive to which this regulation is applicable, and of which manufacture is completed on or before December 31, 1979, which produces A-weighted sound levels in excess of 93 dB at any throttle setting except idle, when operated singly and when connected to a load cell, or in excess of 73 dB at idle when operated singly, and when measured in accordance with the criteria specified in Subpart C of this part with slow meter response at a point 30 meters (100 feet) from the geometric center of the locomotive along a line that is both perpendicular to the centerline of the track and originates at the locomotive geometric center.

(b) No carrier subject to this regulation shall operate any locomotive to which this regulation is applicable, and of which manufacture is completed after December 31, 1979, which produces A-weighted sound levels in excess of 87 dB at any throttle setting except idle, when operated singly and when connected to a load cell, or in excess of 70 dB at idle when operated singly, and when measured in accordance with the criteria specified in Subpart C of this part with slow meter response at a point 30 meters (100 feet) from the geometric center of the locomotive along a line that is both perpendicular to the centerline of the track and originates at the locomotive geometric center.

(c) Commencing January 15, 1984, no carrier subject to this regulation may operate any switcher locomotive to which this regulation is applicable, and of which manufacture is completed on or before December 31, 1979, which produces A-weighted sound levels in excess of 87 dB at any throttle setting except idle, when operated singly and when connected to a load cell, or in excess of 70 dB at idle, and when measured in accordance with the criteria specified in Subpart C of this part with slow meter response at a point 30 meters (100 feet) from the geometric center of the locomotive along a line that is both perpendicular to the centerline of the track and originates at the locomotive geometric center. All switcher locomotives that operate in a particular railroad facility are deemed to be in compliance with this standard if the A-weighted sound level from stationary switcher locomotives, singly or in combination with other stationary locomotives, does not exceed 65 dB when measured with fast meter response at any receiving property measurement location near that particular railyard facility and when measured in accordance wtih Subpart C of this regulation.

[45 FR 1263, Jan. 4, 1980; 47 FR 14709, Apr. 6, 1982]

### § 201.12 Standard for locomotive operation under moving conditions.

(a) Commencing December 31, 1976, no carrier subject to this regulation may operate any locomotive or combination of locomotives to which this regulation is applicable, and of which manufacture is completed on or before December 31, 1979, which produces A-weighted sound levels in excess of 96 dB when moving at any time or under any condition of grade, load, acceleration, or deceleration, when measured in accordance with the criteria specified in Subpart C of this regulation with fast meter response at 30 meters (100 feet)

from the centerline of any section of track having less than a two (2) degree curve (or a radius of curvature greater than 873 meters (2865 feet)).

(b) No carrier subject to this regulation may operate any locomotive or combination of locomotives to which this regulation is applicable, and of which manufacture is completed after December 31, 1979, which produce A-weighted sound levels in excess of 90 dB when moving at any time or under any condition of grade, load, acceleration, or deceleration, when measured in accordance with the criteria specified in Subpart C of this part with fast meter response at 30 meters (100 feet) from the centerline of any section of track having less than a two (2) degree curve (or a radius of curvature greater than 873 meters (2,865 feet)).

(c) Commencing January 15, 1984, no carrier subject to this regulation may operate any switcher locomotive or a combination of switcher locomotives to which this regulation is applicable, and of which manufacture is completed on or before December 31, 1979 which produce A-weighted sound levels in excess of 90 dB when moving at any time or under any condition of grade, load, acceleration or deceleration, and when measured in accordance with the criteria in Subpart C of this part with fast meter response at 30 meters (100 feet) from the centerline of any section of track having less than a two (2) degree curve (or a radius of curvature greater than 873 meters (2,865 feet)). All switcher locomotives that operate in a particular railroad facility are deemed to be in compliance with this standard if the A-weighted sound level from stationary switcher locomotives, singly or in combination with other stationary locomotives, does not exceed 65 dB when measured with fast meter response at any receiving property measurement location near that particular railyard facility and when measured in accordance with Subpart C of this regulation.

[45 FR 1263, Jan. 4, 1980; 47 FR 14709, Apr. 6, 1982]

### § 201.13 Standard for rail car operations.

Effective December 31, 1976, no carrier subject to this regulation shall operate any rail car or combination of rail cars which while in motion produce sound levels in excess of (1) 88 dB(A) at rail car speeds up to and including 75 km/hr (45 mph); or (2) 93 dB(A) at rail car speeds greater than 72 km/hr (45 mph); when measured in accordance with the criteria specified in Subpart C of this part with fast meter response at 30 meters (100) feet from the centerline of any section of track which is free of special track work or bridges or trestles and which exhibits less than a two (2) degree curve (or a radius of curvature greater than 873 meters (2,865 feet)).

[45 FR 1263, Jan. 4, 1980; 47 FR 14709, Apr. 6, 1982]

### § 201.14 Standard for retarders.

Effective January 15, 1984, no carrier subject to this regulation shall operate retarders that exceed an adjusted average maximum A-weighted sound level of 83 dB at any receiving property measurement location, when measured with fast meter response in accordance with Subpart C of this part.

[45 FR 1263, Jan. 4, 1980; 47 FR 14709, Apr. 6, 1982]

### § 201.15 Standard for car coupling operations.

Effective January 15, 1984, no carrier subject to this regulation shall conduct car coupling operations that exceed an adjusted average maximum A-weighted sound level of 92 dB at any receiving property measurement location, when measured with fast meter response in accordance with Subpart C of this part, except, such coupling will be found in compliance with this standard and the carrier will be considered in compliance, if the railroad demonstrates that the standard is exceeded at the receiving property measurement locations (where the standard was previously exceeded) when cars representative of those found to exceed the standard are coupled at similar locations at coupling speeds of eight miles per hour or less.

[45 FR 1263, Jan. 4, 1980; 47 FR 14709, Apr. 6, 1982]

### § 201.16 Standard for locomotive load cell test stands.

(a) Effective January 15, 1984, no carrier subject to this reguation shall operate locomotive load cell test stands that exceed an A-weighted sound level of 78 dB when measured with slow meter response in accordance with Subpart C of this part excluding § 201.23 (b) and (c), at a point 30 meters (100 feet) from the geometric center of the locomotive undergoing test, along a line that is both perpendicular to the centerline of the track and originates at the locomotive geometric center, and in the direction most nearly towards the closest receiving property measurement location. All locomotive load cell test stands in a particular railroad facility are in compliance with this standard if the A-weighted sound level from the load cell does not exceed 65 dB at any receiving property measurement location near that particular railyard facility and when measured with fast meter response in accordance with Subpart C of this regulation.

(b) If the conditions of any part of § 201.23(a) cannot be met at a specific load cell test stand site, then the A-weighted sound level from that specific load cell test stand must not exceed 65 dB when measured with fast meter response at a receiving property measurement location more than 120 meters (400 feet) from the geometric center of the locomotive being tested and in accordance with Subpart C of this regulation.

[45 FR 1263, Jan. 4, 1980; 47 FR 14709, Apr. 6, 1982]

## Subpart C—Measurement Criteria

### § 201.20 Applicability and purpose.

The following criteria are applicable to and contain the necessary parameters and procedures for the measurement of the noise emission levels prescribed in the standards of Subpart B of this part. These criteria are specified in order to further clarify and define such standards. Equivalent measurement procedures may be used for establishing compliance with these regulations. Any equivalent measurement procedure, under any circumstance, shall not result in a more stringent noise control requirement than those specified in this regulation using the measurement procedures in Subpart C.

### § 201.21 Quantities measured.

The quantities to be measured under the test conditions described below, are the A-weighted sound levels for ''fast'' or ''slow'' meter response as defined in the American National Standard S1.4–1971.

### § 201.22 Measurement instrumentation.

(a) A sound level meter or alternate sound level measurement system that meets, as a minimum, all the requirements of American National Standard S1.4–1971[1] for a Type 1 (or S1A) instrument must be used with the ''fast'' or ''slow'' meter response chacteristic as specified in Subpart B. To insure Type 1 response, the manufacturer's instructions regarding mounting or orienting of the microphone, and positioning of the observer must be observed. In the event that a Type 1 (or S1A) instrument is not available for determining non-compliance with this regulation, the measurements may be made with a Type 2 (or S2A), but with the measured levels reduced by the following amount to account for possible measurement instrument errors pertaining to specific measurements and sources:

TABLE 1—SOUND LEVEL CORRECTIONS WHEN USING A TYPE 2 (OR S2A) INSTRUMENT

| Measurement section | Source | Decibels[1] |
|---|---|---|
| 201.24 | Locomotives | 0 |
| | Rail cars | 0 |
| | Locomotive load cell test stand | 0 |
| 201.26 | Retarder | 4 |
| | Car coupling | 2 |
| 201.27 | Locomotive load cell test stand | 0 |
| | Stationary locomotive | 0 |

[1] Amount of correction to be subtracted from measured level (dB).

(b) A microphone windscreen and an acoustic calibrator of the coupler type must be used as recommended by: (1) the manufacturer of the sound level meter or (2) the manufacturer of the microphone. The choice of both devices

[1] American National Standards are available from the American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.

must be based on ensuring that Type 1 or 2 performance, as appropriate, is maintained for frequencies below 10,000 Hz.

### §201.23 Test site, weather conditions and background noise criteria for measurement at a 30 meter (100 feet) distance of the noise from locomotive and rail car operations and locomotive load cell test stands.

(a) The standard test site shall be such that the locomotive or train radiates sound into a free field over the ground plane. This condition may be considered fulfilled if the test site consists of an open space free of large, sound reflecting objects, such as barriers, hills, signboards, parked vehicles, locomotives or rail cars on adjacent tracks, bridges or buildings within the boundaries described by Figure 1, as well as conforms to the other requirements of this §201.23.

(b) Within the complete test site, the top of at least one rail upon which the locomotive or train is located shall be visible (line of sight) from a position 1.2 meters (4 feet) above the ground at the microphone location, except as provided in paragraph (c) of this section.

(c) Ground cover such as vegetation, fenceposts, small trees, telephone poles, etc., shall be limited within the area in the test site between the vehicle under test and the measuring microphone such that 80 percent of the top of at least one rail along the entire test section of track be visible from a position 1.2 meters (4 feet) above the ground at the microphone location; except that no single obstruction shall account for more than 5 percent of the total allowable obstruction.

(d) The ground elevation at the microphone location shall be within plus 1.5 meters (5 feet) or minus 3.0 meters (10 feet) of the elevation of the top of the rail at the location in-line with the microphone.

(e) Within the test site, the track shall exhibit less than a 2 degree curve or a radius of curvature greater than 873 meters (2,865 feet). This paragraph shall not apply during a stationary test. The track shall be tie and ballast, free of special track work and bridges or trestles.

(f) Measurements shall not be made during precipitation.

(g) The maximum A-weighted fast response sound level observed at the test site immediately before and after the test shall be at least 10 dB(A) below the level measured during the test. For the locomotive and rail car pass-by tests this requirement applies before and after the train containing the rolling stock to be tested has passed. This background sound level measurement shall include the contribution from the operation of the load cell, if any, including load cell contribution during test.

(h) Noise measurements may only be made if the measured wind velocity is 19.3 km/hr (12 mph) or less. Gust wind measurements of up to 33.2 km/hr (20 mph) are allowed.

### §201.24 Procedures for measurement at a 30 meter (100 feet) distance of the noise from locomotive and rail car operations and locomotive load cell test stands.

(a) *Microphone positions.* (1) The microphone shall be located within the test site according to the specifications given in the test procedures of paragraphs (b), (c) and (d) of this section, and shall be positioned 1.2 meters (4 feet) above the ground. It shall be oriented with respect to the source in accordance with the manufacturer's recommendations.

(2) The observer shall not stand between the microphone and the source whose sound level is being measured.

(b) *Stationary locomotive and locomotive load cell test stand tests.* (1) For stationary locomotive and locomotive load cell test stand tests, the microphone shall be positioned on a line perpendicular to the track at a point 30 meters (100 feet) from the track centerline at the longitudinal midpoint of the locomotive.

(2) The sound level meter shall be observed for thirty seconds after the test throttle setting is established to assure operating stability. The maximum sound level observed during that time shall be utilized for compliance purposes.

(3) Measurement of stationary locomotive and locomotive load cell test stand noise shall be made with all cooling fans operating.

(c) *Rail car pass-by test.* (1) For rail car pass-by tests, the microphone shall

be positioned on a line perpendicular to the track 30 meters (100 feet) from the track centerline.

(2) Rail car noise measurements shall be made when the locomotives have passed a distance 152.4 meters (500 feet) or 10 rail cars beyond the point at the intersection of the track and the line which extends perpendicularly from the track to the microphone location, providing any other locomotives are also at least 152.4 meters (500 feet) or 10 rail car lengths away from the measuring point. The maximum sound level observed in this manner which exceeds the noise levels specified in § 201.13 shall be utilized for compliance purposes.

(3) Measurements shall be taken on reasonably well maintained tracks.

(4) Noise levels shall not be recorded if brake squeal is present during the test measurement.

(d) *Locomotive pass-by test.* (1) For locomotive pass-by tests, the microphone shall be positioned on a line perpendicular to the track at a point 30 meters (100 feet) from the track centerline.

(2) The noise level shall be measured as the locomotive approaches and passes by the microphone location. The maximum noise level observed during this period shall be utilized for compliance purposes.

(3) Measurements shall be taken on reasonably well maintained tracks.

$$\sigma_{1-\mathrm{hr}} = \sqrt{\frac{\sigma_{15}{}^{2} + \sigma_{15}{}^{2} + \sigma_{15}{}^{2} + \sigma_{15}{}^{2}}{4}}$$

**§ 201.25 Measurement location and weather conditions for measurement on receiving property of the noise of retarders, car coupling, locomotive load cell test stands, and stationary locomotives.**

(a) Measurements must be conducted only at receiving property measurement locations.

(b) Measurement locations on receiving property must be selected such that no substantially vertical plane surface, other than a residential or commercial unit wall or facility boundary noise barrier, that exceeds 1.2 meters (4 feet) in height is located within 10 meters (33.3 feet) of the microphone and that no exterior wall of a residential or commercial structure is located within 2.0 meters (6.6 feet) of the microphone. If the residential structure is a farm home, measurements must be made 2.0 to 10.0 meters (6.6 to 33.3 feet) from any exterior wall.

(c) No measurement may be made when the average wind velocity during the period of measurement exceeds 19.3 km/hr (12 mph) or when the maximum wind gust velocity exceeds 32.2 km/hr (20 mph).

(d) No measurement may be taken when precipitation, e.g., rain, snow, sleet, or hail, is occurring.

**§ 201.26 Procedures for the measurement on receiving property of retarder and car coupling noise.**

(a) *Retarders*—(1) *Microphone.* The microphone must be located on the receiving property and positioned at a height between 1.2 and 1.5 meters (4 to 5 feet) above the ground. The microphone must be positioned with respect to the equipment in accordance with the manufacturers' recommendations for Type 1 or 2 performance as appropriate. No person may stand between the microphone and the equipment being measured or be otherwise positioned relative to the microphone at variance with the manufacturers' recommendations for Type 1 or 2 performance as appropriate.

(2) *Data.* The maximum A-weighted sound levels (FAST) for every retarder sound observed during the measurement period must be read from the indicator and recorded. At least 30 consecutive retarder sounds must be measured. The measurement period must be at least 60 minutes and not more than 240 minutes.

(3) *Adjusted average maximum A-weighted sound level.* The energy average level for the measured retarder sounds must be calculated to determine the value of the average maximum A-weighted sound level ($L_{ave\ max}$). This value is then adjusted by adding the adjustment (C) from Table 2 appropriate to the number of measurements divided by the duration of the measurement period (n/T), to obtain the adjusted average maximum A-weighted sound level ($L_{adj\ ave\ max}$) for retarders.

(b) *Car coupling impact*—(1) *Microphone.* The microphone must be located on the receiving property and at a distance of at least 30 meters (100 feet) from the centerline of the nearest track on which car coupling occurs and its sound is measured (that is, either the microphone is located 30 meters (100 feet) from the nearest track on which couplings occur, or all sounds resulting from car coupling impacts that occur on tracks with centerlines located less than 30 meters (100 feet) from the microphone are disregarded). The microphone shall be positioned at a height between 1.2 and 1.5 meters (4 and 5 feet) above the ground, and it must be positioned with respect to the equipment in accordance with the manufacturers' recommendations for Type 1 or 2 performance as appropriate. No person may stand between the microphone and the equipment being measured or be otherwise positioned relative to the microphone at variance with the manufacturers' recommendations for Type 1 or 2 performance as appropriate.

(2) *Data.* The maximum A-weighted sound levels (FAST) for every car coupling impact sound observed during the measurement period must be read from the indicator and recorded. At least 30 consecutive car coupling impact sounds must be measured. The measurement period must be at least 60 minutes and not more than 240 minutes, and must be reported.

TABLE 2—ADJUSTMENT TO $L_{ave\ max}$ TO OBTAIN $L_{adj\ ave\ max}$ FOR RETARDERS AND CAR COUPLING IMPACTS [1]

[n/T=number of measurements/measurement duration (min) C=Adjustment in dB]

| | |
|---|---|
| 0.111 to 0.141 | −9 |
| 0.142 to 0.178 | −8 |
| 0.179 to 0.224 | −7 |
| 0.225 to 0.282 | −6 |
| 0.283 to 0.355 | −5 |
| 0.356 to 0.447 | −4 |
| 0.448 to 0.562 | −3 |
| 0.563 to 0.708 | −2 |
| 0.709 to 0.891 | −1 |
| 0.892 to 1.122 | 0 |
| 1.123 to 1.413 | +1 |
| 1.414 to 1.778 | +2 |
| 1.779 to 2.239 | +3 |
| 2.240 to 2.818 | +4 |
| 2.819 to 3.548 | +5 |
| 3.549 to 4.467 | +6 |

[1] $L_{adj\ ave\ max}=L_{ave\ max}$ +C in dB.

Values in Table 2 were calculated from [C=10 log n/T] with intervals selected to round off values to the nearest whole decibel. The table may be extended or interpolated to finer interval gradations by using this defining equation.

(3) *Adjusted average maximum A-weighted sound level.* The energy average level for the measured car coupling sounds is calculated to determine the average maximum sound level ($L_{ave\ max}$). It is then adjusted by adding the adjustment (C) from Table 2 appropriate to the number of measurements divided by the duration of the measurement period (n/T), to obtain the adjusted average maximum A-weighted sound level ($L_{adj\ ave\ max}$) for car coupling impacts.

**§ 201.27 Procedures for: (1) Determining applicability of the locomotive load cell test stand standard and switcher locomotive standard by noise measurement on a receiving property; (2) measurement of locomotive load cell test stands more than 120 meters (400 feet) on a receiving property.**

(a) *Microphone.* The microphone must be located at a receiving property measurement location and must be positioned at a height between 1.2 and 1.5 meters (4 and 5 feet) above the ground. Its position with respect to the equipment must be in accordance with the manufacturers' recommendations for Type 1 or 2 performance as appropriate. No person may stand between the microphone and the equipment being measured or be otherwise positioned

relative to the microphone at variance to the manufacturers' recommendations for Type 1 or Type 2 performance as appropriate.

(b) *Data.* (1) When there is evidence that at least one of these two types of nearly steady state sound sources is affecting the noise environment, the following measurements must be made. The purpose of these measurements is to determine the A-weighted $L_{90}$ statistical sound level, which is to be used as described in subparagraph (c) below to determine the applicability of the source standards. Before this determination can be made, the measured $L_{90}$ is to be ''validated'' by comparing the measured $L_{10}$ and $L_{99}$ statistical sound levels. If the difference between these levels is sufficiently small (4 dB or less), the source(s) being measured is considered to be a nearly steady state source.

(2) Data shall be collected by measuring the instantaneous A-weighted sound level (FAST) at a rate of at least once each 10 seconds for a measurement period of at least 15 minutes and until 100 measurements are obtained. The data may be taken manually by direct reading of the indicator at 10 second intervals (±1 second), or by attaching a statistical analyzer, graphic level recorder, or other equivalent device to the sound level meter for a more continuous recording of the instantaneous sound level.

(3) The data shall be analyzed to determine the levels exceeded 99%, 90%, and 10% of the time, i.e., $L_{99}$, $L_{90}$, and $L_{10}$, respectively. The value of $L_{90}$ is considered a valid measure of the A-weighted sound level for the standards in § 201.16 only if the difference between $L_{10}$ and $L_{99}$ has a value of 4 dB or less. If a measured value of $L_{90}$ is not valid for this purpose, measurements may be taken over a longer period to attempt to improve the certainty of the measurement and to validate $L_{90}$. If $L_{90}$ is valid and is less than the level in applicable standards for these source types, the sources are in compliance. If the measured value of $L_{90}$ is valid and exceeds the initial 65 dB requirement for any of the source types that appear to be affecting the noise environments, the evaluation according to the following paragraph (c) is required.

(c) *Determination of applicability of the standard when $L_{90}$ is validated and is in excess of one or more of the source standards.* The following procedures must be used to determine the compliance of the various source types when $L_{90}$ is validated and in excess of one or more of the applicable standards.

(1) The principal direction of the nearly steady-state sound at the measurement location must be determined, if possible, by listening to the sound and localizing its apparent source(s). If the observer is clearly convinced by this localization process that the sound emanates only from one or both of these two sources, then:

(i) If only stationary locomotive(s), including at least one switcher locomotive, are present, the value of $L_{90}$ is the value of the A-weighted sound level to be used in determining if the 65 dB requirement is exceeded and compliance with the standards in §§ 201.11(c) and 201.12(c) is necessary.

(ii) If only a locomotive load cell test stand and the locomotive being tested are present and operating, the value of $L_{90}$ is the value of the A-weighted sound level to be used in determining applicability of the standard in § 201.16.

(iii) If a locomotive load cell test stand(s) and the locomotive being tested are present and operating with stationary locomotive(s), including at least one switcher locomotive, the value $L_{90}$ minus 3 dB is the value of the A-weighted sound level to be used in determining applicability of the standards in §§ 201.11(c), 201.12(c) and 201.16.

(iv) If a locomotive load cell test stand(s) and the locomotive being tested are present and operating, and a stationary locomotive(s) is present, and if the nearly steady-state sound level is observed to change by 10 dB, coincident with evidence of a change in operation of the locomotive load cell test stand but without apparent change in the location of stationary locomotives, another measurement of $L_{90}$ must be made in accordance with paragraph (b) of this section. If this additional measure of $L_{90}$ is validated and differs from the initial measure of $L_{90}$ by an absolute value of 10 dB or more, then the higher value of $L_{90}$ is the value of the A-weighted sound level to be used in

determining applicability of the standard in § 201.16.

(2) In order to accomplish the comparison demonstration of paragraph (c)(3) of this section, when one or more source types is found not to be in compliance with the applicable standard(s), documentation of noise source information shall be necessary. This will include, but not be limited to, the approximate location of all sources of each source type present and the microphone position on a diagram of the particular railroad facility, and the distances between the microphone location and each of the sources must be estimated and reported. Additionally, if other rail or non-rail noise sources are detected, they must be identified and similarly reported.

(3) If it can be demonstrated that the validated $L_{90}$ is less than 5 dB greater than any $L_{90}$ measured at the same receiving property location when the source types that were operating during the initial measurement(s) are either turned off or moved, such that they can no longer be detected, the initial value(s) of $L_{90}$ must not be used for determining applicability to the standards. This demonstration must be made at a time of day comparable to that of the initial measurements and when all other conditions are acoustically similar to those reported in paragraph (c)(2) of this section.

[45 FR 1263, Jan. 4, 1980; 47 FR 14709, Apr. 6, 1982]

### § 201.28 Testing by railroad to determine probable compliance with the standard.

(a) To determine whether it is probably complying with the regulation, and therefore whether it should institute noise abatement, a railroad may take measurements on its own property at locations that:

(1) Are between the source and receiving property

(2) Derive no greater benefit from shielding and other noise reduction features that does the receiving property; and

(3) Otherwise meet the requirements of § 201.25.

(b) Measurements made for this purpose should be in accordance with the appropriate procedures in § 201.26 or § 201.27. If the resulting level is less than the level stated in the standard, then there is probably compliance with the standard.

(c) This procedure is set forth to assist the railroad in devising its compliance plan, not as a substantive requirement of the regulation.

# PART 202—MOTOR CARRIERS ENGAGED IN INTERSTATE COMMERCE

## Subpart A—General Provisions

Sec.
202.10 Definitions.
202.11 Effective date.
202.12 Applicability.

## Subpart B—Interstate Motor Carrier Operations Standards

202.20 Standards for highway operations.
202.21 Standard for operation under stationary test.
202.22 Visual exhaust system inspection.
202.23 Visual tire inspection.

AUTHORITY: Sec. 18, 36 Stat. 1249, 42 U.S.C. 4917(a).

## Subpart A—General Provisions

### § 202.10 Definitions.

As used in this part, all terms not defined herein shall have the meaning given them in the Act:

(a) *Act* means the Noise Control Act of 1972 (Pub. L. 92–574, 86 Stat. 1234).

(b) *Common carrier by motor vehicle* means any person who holds himself out to the general public to engage in the transportation by motor vehicle in interstate or foreign commerce of passengers or property or any class or classes thereof for compensation, whether over regular or irregular routes.

(c) *Contract carrier by motor vehicle* means any person who engages in transportation by motor vehicle of passengers or property in interstate or foreign commerce for compensation (other than transportation referred to in paragraph (b) of this section) under continuing contracts with one person or a limited number of persons either (1) for the furnishing of transportation services through the assignment of motor vehicles for a continuing period

of time to the exclusive use of each person served or (2) for the furnishing of transportation services designed to meet the distinct need of each individual customer.

(d) *Cutout or by-pass or similar devices* means devices which vary the exhaust system gas flow so as to discharge the exhaust gas and acoustic energy to the atmosphere without passing through the entire length of the exhaust system, including all exhaust system sound attenuation components.

(e) *dB(A)* means the standard abbreviation for A-weighted sound level in decibels.

(f) *Exhaust system* means the system comprised of a combination of components which provides for enclosed flow of exhaust gas from engine parts to the atmosphere.

(g) *Fast meter response* means that the fast dynamic response of the sound level meter shall be used. The fast dynamic response shall comply with the meter dynamic characteristics in paragraph 5.3 of the American National Standard Specification for Sound Level Meters, ANSI S1. 4–1971. This publication is available from the American National Standards Institute, Inc., 1420 Broadway, New York, New York 10018.

(h) *Gross Vehicle Weight Rating* (GVWR) means the value specified by the manufacturer as the loaded weight of a single vehicle.

(i) *Gross Combination Weight Rating* (GCWR) means the value specified by the manufacturer as the loaded weight of a combination vehicle.

(j) *Highway* means the streets, roads, and public ways in any State.

(k) *Interstate commerce* means the commerce between any place in a State and any place in another State or between places in the same State through another State, whether such commerce moves wholly by motor vehicle or partly by motor vehicle and partly by rail, express, water or air. This definition of ''interstate commerce'' for purposes of these regulations is the same as the definition of ''interstate commerce'' in section 203(a) of the Interstate Commerce Act. [49 U.S.C. 303(a)]

(l) *Motor carrier* means a common carrier by motor vehicle, a contract carrier by motor vehicle, or a private carrier of property by motor vehicle as those terms are defined by paragraphs (14), (15), and (17) of section 203(a) of the Interstate Commerce Act [49 U.S.C. 303(a)].

(m) *Motor vehicle* means any vehicle, machine, tractor, trailer, or semitrailer propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property, or any combination thereof, but does not include any vehicle, locomotive, or car operated exclusively on a rail or rails.

(n) *Muffler* means a device for abating the sound of escaping gases of an internal combustion engine.

(o) *Open site* means an area that is essentially free of large sound-reflecting objects, such as barriers, walls, board fences, signboards, parked vehicles, bridges, or buildings.

(p) *Private carrier of property by motor vehicle* means any person not included in terms ''common carrier by motor vehicle'' or ''contract carrier by motor vehicle'', who or which transports in interstate or foreign commerce by motor vehicle property of which such person is the owner, lessee, or bailee, when such transportation is for sale, lease, rent or bailment, or in furtherance of any commercial enterprise.

(q) *Sound level* means the quantity in decibles measured by a sound level meter satisfying the requirements of American National Standards Specification for Sound Level Meters S1.4–1971. This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018. Sound level is the frequency-weighted sound pressure level obtained with the standardized dynamic characteristic ''fast'' or ''slow'' and weighting A, B, or C; unless indicated otherwise, the A-weighting is understood.

[39 FR 38215, Oct. 29, 1974]

### § 202.11 Effective date.

The provisions of Subpart B shall become effective October 15, 1975, except that the provisions of § 202.20(b) and § 202.21(b) of Subpart B shall apply to motor vehicles manufactured during or after the 1986 model year.

[51 FR 852, Jan. 8, 1986]

### §202.12 Applicability.

(a) The provisions of Subpart B apply to all motor carriers engaged in interstate commerce.

(b) The provisions of Subpart B apply only to those motor vehicles of such motor carriers which have a gross vehicle weight rating or gross combination weight rating in excess of 10,000 pounds, and only when such motor vehicles are operating under the conditions specified in Subpart B.

(c) Except as provided in paragraphs (d) and (e) of this section, the provisions of Subpart B apply to the total sound produced by such motor vehicles when operating under such conditions, including the sound produced by auxiliary equipment mounted on such motor vehicles.

(d) The provisions of Subpart B do not apply to auxiliary equipment which is normally operated only when the transporting vehicle is stationary or is moving at a speed of 5 miles per hour or less. Examples of such equipment include, but are not limited to, cranes, asphalt spreaders, ditch diggers, liquid or slurry pumps, air compressors, welders, and trash compactors.

(e) The provisions of Subpart B do not apply to warning devices, such as horns and sirens; or to emergency equipment and vehicles such as fire engines, ambulances, police vans, and rescue vans, when responding to emergency calls; or to snow plows when in operation.

(f) The provisions of §202.20(a) and §202.21(a) of Subpart B apply only to applicable motor vehicles manufactured prior to the 1986 model year.

(g) The provisions of §202.20(b) and §202.21(b) apply to all applicable motor vehicles manufactured during or after the 1986 model year.

[39 FR 38215, Oct. 29, 1974, as amended at 51 FR 852, Jan. 8, 1986]

## Subpart B—Interstate Motor Carrier Operations Standards

### §202.20 Standards for highway operations.

(a) No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which at any time or under any condition of highway trade, load, acceleration or deceleration generates a sound level in excess of 86dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of 35 MPH or less; or 90 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of more than 35 MPH.

(b) No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which at any time or under any condition of highway grade, load, acceleration or deceleration generates a sound level in excess of 83 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of 35 MPH or less; or 87 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of more than 35 MPH.

[39 FR 38215, Oct. 29, 1974, as amended at 51 FR 852, Jan. 8, 1986]

### §202.21 Standard for operation under stationary test.

(a) No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which generates a sound level in excess of 88 dB(A) measured on an open site with fast meter response at 50 feet from the longitudinal centerline of the vehicle, when its engine is accelerated from idle with wide open throttle to governed speed with the vehicle stationary, transmission in neutral, and clutch engaged. This section shall not apply to any vehicle which is not equipped with an engine speed governor.

(b) No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which generates a sound level in excess of 85 dB(A) measured on an open site with fast meter response at 50 feet from the longitudinal centerline of the vehicle when its engine is accelerated from idle with wide open

throttle to governed speed with the vehicle stationary, transmission in neutral, and clutch engaged. This paragraph shall not apply to any vehicle which is not equipped with an engine speed governor.

[39 FR 38215, Oct. 29, 1974, as amended at 51 FR 852, Jan. 8, 1986]

### § 202.22 Visual exhaust system inspection.

No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable unless the exhaust system of such vehicle is (a) free from defects which affect sound reduction; (b) equipped with a muffler or other noise dissipative device; and (c) not equipped with any cut-out, bypass, or similar device.

### § 202.23 Visual tire inspection.

No motor carrier subject to these regulations shall at any time operate any motor vehicle of a type to which this regulation is applicable on a tire or tires having a tread pattern which as originally manufactured, or as newly retreaded, is composed primarily or cavities in the tread (excluding sipes and local chunking) which are not vented by grooves to the tire shoulder or circumferentially to each other around the tire. This § 202.23 shall not apply to any motor vehicle which is demonstrated by the motor carrier which operates it to be in compliance with the noise emission standard specified for operations on highways with speed limits of more than 35 MPH in § 202.20 of this Subpart B, if the demonstration is conducted at the highway speed limit in effect at the inspection location, or, if speed is unlimited, the demonstration is conducted at a speed of 65 MPH.

[39 FR 38215, Oct. 29, 1974]

## PART 203—LOW-NOISE-EMISSION PRODUCTS

Sec.

203.1 Definitions.
203.2 Application for certification.
203.3 Test procedures.
203.4 Low-noise-emission product determination.
203.5 Suitable substitute decision.
203.6 Contracts for low-noise-emission products.
203.7 Post-certification testing.
203.8 Recertification.

AUTHORITY: Sec. 15, Noise Control Act, 1972, Pub. L. 92–574, 86 Stat. 1234.

SOURCE: 39 FR 6670, Feb. 21, 1974, unless otherwise noted.

### § 203.1 Definitions.

(a) As used in this part, any term not defined herein shall have the meaning given it in the Noise Control Act of 1972 (Pub. L. 92–574).

(1) *Act* means the Noise Control Act of 1972 (Pub. L. 92–574).

(2) *Federal Government* includes the legislative, executive, and judicial branches of the Government of the United States, and the government of the District of Columbia.

(3) *Administrator* means the Administrator of the Environmental Protection Agency.

(4) *Product* means any manufactured article or goods or component thereof; except that such term does not include—

(i) Any aircraft, aircraft engine, propellor or appliance, as such terms are defined in section 101 of the Federal Aviation Act of 1958; or

(ii)(*a*) Any military weapons or equipment which are designed for combat use; (*b*) any rockets or equipment which are designed for research, experimental or developmental work to be performed by the National Aeronautics and Space Administration; or (*c*) to the extent provided by regulations of the Administrator, any other machinery or equipment designed for use in experimental work done by or for the Federal Government.

(5) *Low-Noise-Emission Product Determination* means the Administrator's determination whether or not a product, for which a properly filed application has been received, meets the low-noise-emission product criterion.

(6) *Suitable Substitute Decision* means the Administrator's decision whether a product which the Administrator has determined to be a low-noise-emission product is a suitable substitute for a product or products presently being purchased by the Federal Government.

### §203.2 Application for certification.

(a) Any person desiring certification of a class or model of product under section 15 of the act shall submit to the Administrator an application for certification. The application shall be completed upon such forms as the Administrator may deem appropriate and shall contain:

(1) A description of the product, including its power source, if any;

(2) Information pertaining to the test facility for the product establishing that the test facility meets all requirements which EPA may prescribe;

(3) All noise emission data from the test of the product;

(4) Data required by the Administrator relative, but not limited to, the following characteristics;

(i) Safety;

(ii) Performance Characteristics;

(iii) Reliability of product and reliability of low-noise-emission features;

(iv) Maintenance;

(v) Operating Costs;

(vi) Conformance with Federal Agency Purchase Specifications; and

(5) Such other information as the Administrator may request.

(b) Specific data requirements relative to paragraph (a)(4) of this section will be published separately from the low-noise-emission criterion for that product or class of products.

(c) The Administrator will, immediately upon receipt of the application for certification, publish in the FEDERAL REGISTER a notice of the receipt of the application. The notice will request written comments and documents from interested parties in support of, or in opposition to, certification of the class or model of product under consideration.

### §203.3 Test procedures.

(a) The applicant shall test or cause his product to be tested in accordance with procedures contained in the regulations issued pursuant to section 6 of the act unless otherwise specified.

(b) The Administrator may conduct whatever investigation is necessary, including actual inspection of the product at a place designated by him.

### §203.4 Low-noise-emission product determination.

(a) The Administrator will, within ninety (90) days after receipt of a properly filed application for certification, determine whether such product is a low-noise-emission product. In doing so, he will determine if the product:

(1) Is one for which a noise source emission standard has been promulgated under section 6 of the act;

(2) Emits levels of noise in amounts significantly below the levels specified in noise emission standard under regulations under section 6 of the act applicable to that product or class of products; and

(3) Is labeled in accordance with regulations issued pursuant to section 8 of the act.

(b) The Administrator will, upon making the determination whether a product is a low-noise-emission product, publish in the FEDERAL REGISTER notice of his determination, and the reasons therefor.

(c) The notice of determination that a product is a low-noise-emission product shall be revocable whenever a change in the low-noise-emission product criterion for what product occurs between determination and decision. Notice of any revocation will be published in the FEDERAL REGISTER, together with a statement of the reasons therefor.

(d) The notice of determination that a product is a low-noise-emission product shall expire upon publication in the FEDERAL REGISTER of the Administrator's notice of a decision that a product will not be certified.

### §203.5 Suitable substitute decision.

(a) If the Administrator determines that a product is a low-noise-emission product, then within one hundred and eighty (180) days of such determination, in consultation with the appropriate Federal agencies, the Administrator will decide whether such product is a suitable substitute for any class or model or product being purchased by the Federal Government for use by its agencies. Such decision will be based upon the data obtained under §203.2, the Administrator's evaluation of the data, comments of interested parties,

and, as the Administrator deems appropriate, an actual inspection or test of the product at such places and times as the Administrator may designate.

(b) In order to compare the data for any class or model of product with any class or model of product presently being purchased by the Federal Government for which the applicant seeks to have its product substituted, the Administrator will enter into appropriate agreements with other Government agencies to gather the necessary data regarding such class or model.

(c) Immediately upon making the decision as to whether a product determined to be a low-noise-emission product is a suitable substitute for any product or class of products being purchased by the Federal Government for its use, the Administrator shall publish in the FEDERAL REGISTER notice of such decision and the reasons therefor.

(d) If the Administrator decides that the product is a suitable substitute for products being purchased by the Federal Government, he will issue a certificate that the product is a suitable substitute for a product or class of products presently being purchased by the Federal Government and will specify with particularity the product or class of products for which the certified product is a suitable substitute.

(e) Any certification made under this section shall be effective for a period of one year from date of issuance.

### § 203.6 Contracts for low-noise-emission products.

(a) Data relied upon by the Administrator in determining that a product is a certified low-noise-emission product will be incorporated by reference in any contract for the procurement of such product.

(b) A determination of price to the Government of any certified low-noise-emission product will be made by the Administrator of General Services in coordination with the appropriate Federal agencies in accordance with such procedures as he may prescribe and with subsection c(1) of section 15 of the Act.

### § 203.7 Post-certification testing.

The Administrator will, from time to time, as he deems appropriate, test the emissions of noise from certified low-noise-emission products purchased by the Federal Government. If at any time he finds that the noise emission levels exceed the levels on which certification was based, the Administrator shall give the suppliers of such product written notice of this finding, publish such findings in the FEDERAL REGISTER and give the supplier an opportunity to make necessary repairs, adjustments or replacements. If no repairs, adjustments or replacements are made within a period to be set by the Administrator, he may order the supplier to show cause why the product involved should be eligible for recertification.

### § 203.8 Recertification.

(a) A product for which a certificate has been issued may be recertified for the following year upon reapplication to the Administrator for this purpose upon such forms as the Administrator may deem appropriate.

(b) If the applicant supplies information establishing that:

(1) The data previously submitted continues to describe his product for purpose of certification;

(2) The low-noise-emission product criterion and ''suitable substitute'' criteria are to be the same during the period recertification is desired; and

(3) No notice has been issued under § 203.7,

then recertification will be made within 30 days after receipt of an appropriate recertification application by the Administrator.

## PART 204—NOISE EMISSION STANDARDS FOR CONSTRUCTION EQUIPMENT

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APPENDIX I TO PART 204

AUTHORITY: (42 U.S.C. 4905), 86 Stat. 1237.

SOURCE: 41 FR 2172, Jan. 14, 1976, unless otherwise noted.

## Subpart A—General Provisions

### § 204.1 General applicability.

The provisions of this subpart are applicable to all products for which regulations have been published under this part and which are manufactured after the effective date of such regulations.

### § 204.2 Definitions.

(a) As used in this subpart, all terms not defined herein shall have the meaning given them in the Act.

(1) *Act* means the Noise Control Act of 1972 (Pub. L. 92–574, 86 Stat. 1234).

(2) *Administrator* means the Administrator of the Environmental Protection Agency or his authorized representative.

(3) *Agency* means the United States Environmental Protection Agency.

(4) *Export exemption* means an exemption from the prohibitions of section 10 (a) (1), (2), (3), and (4) of the Act, granted by statute under section 10(b)(2) of the Act for the purpose of exporting regulated products.

(5) *National security exemption* means an exemption from the prohibitions of section 10(a) (1), (2), (3), and (5) of the Act, which may be granted under section 10(b)(1) of the Act for the purpose of national security.

(6) [Reserved]

(7) *Testing exemption* means an exemption from the prohibitions of section 10(a) (1), (2), (3), and (5) of the Act, which may be granted under section 10(b)(1) of the Act for the purpose of research, investigations, studies, demonstrations, or training, but not including national security where lease or sale of the exempted product is involved.

(8) *Warranty* means the warranty required by section 6(c)(1) of the Act.

(9) *Tampering* means those acts prohibited by section 10(a)(2) of the Act.

(10) *Maintenance instructions* means those instructions for maintenance, use, and repair, which the Administrator is authorized to require pursuant to section 6(c)(1) of the Act.

(11) *Type I Sound Level Meter* means a sound level meter which meets the Type I requirements of American National Standard Specification S1.4–1971 for sound level meters. This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018.

(12) *dBA* is the standard abbreviation for A-weighted sound level in decibels.

(13) *Reasonable assistance* means providing timely and unobstructed access to test products or products and records required by this part and opportunity for copying such records or testing such test products.

(14) *Slow meter response* means the meter ballistics of meter dynamic characteristics as specified by American National Standard S1.4–1971 or subsequent approved revisions.

(15) *Sound level* means the weighted sound pressure level measured by the use of a metering characteristic and weighing A, B, or C as specified in American National Standard Specification for Sound Level Meters S1.4–1971 or subsequent approved revision. The weighting employed must be specified, otherwise A-weighting is understood.

(16) *Sound pressure level* means, in decibels, 20 times the logarithm to the

base ten of the ratio of a sound pressure to the reference sound pressure of 20 micropascals (20 micronewtons per square meter). In the absence of any modifier, the level is understood to be that of a root-mean-square pressure.

(17) *Product* means any construction equipment for which regulations have been promulgated under this part and includes ''test product.''

(18) *Test product* means any product that is required to be tested pursuant to this part.

[41 FR 2172, Jan. 14, 1976, as amended at 47 FR 57711, Dec. 28, 1982]

### § 204.3 Number and gender.

As used in this part, words in the singular shall be deemed to import the plural, and words in the masculine gender shall be deemed to import the feminine and vice versa, as the case may require.

### § 204.4 Inspection and monitoring.

(a) Any inspection or monitoring activities conducted under this section shall be for the purpose of determining (1) whether test products are being selected and prepared for testing in accordance with the provisions of these regulations, (2) whether test product testing is being conducted in accordance with these regulations, and (3) whether products being produced for distribution into commerce comply with these regulations.

(b) The Director, Noise Enforcement Division, may request that a manufacturer subject to this part admit an EPA Enforcement Officer during operating hours to any of the following:

(1) Any facility or site where any product to be distributed into commerce is manufactured, assembled, or stored;

(2) Any facility or site where any tests conducted pursuant to this part or any procedures or activities connected with such tests are or were performed; and

(3) Any facility or site where any test product is present.

(c)(1) An EPA Enforcement Officer, once admitted to a facility or site, will not be authorized to do more than:

(i) To inspect and monitor test product manufacture and assembly, selection, storage, preconditioning, noise emission testing, and maintenance, and to verify correlation or calibration of test equipment;

(ii) To inspect products prior to their distribution in commerce;

(iii) [Reserved]

(iv) To inspect and photograph any part or aspect of any such product and any component used in the assembly thereof that are reasonably related to the purpose of his entry;

(v) To obtain from those in charge of the facility or site such reasonable assistance as he may request to enable him to carry out any proper function listed in this section.

(2) [Reserved]

(3) The provisions of this section apply whether the facility or site is owned or controlled by the manufacturer or by one who acts for the manufacturer.

(d) For purposes of this section:

(1) An ''EPA Enforcement Officer'' is an employee of the EPA Office of Enforcement who displays upon arrival at a facility or site the credentials identifying him as such an employee and a letter signed by the Director, Noise Enforcement Division designating him to make the inspection.

(2) Where test product storage areas or facilities are concerned, ''operating hours'' shall mean all times during which personnel other than custodial personnel are at work in the vicinity of the area or facility and have access to it.

(3) Where facilities or areas other than those covered by paragraph (d)(2) of this section are concerned, ''operating hours'' shall mean all times during which product manufacture or assembly is in operation or all times during which product testing or maintenance, production, or compilation of records is taking place, or any other procedure or activity related to selective enforcement audit testing or to product manufacture or assembly is being carried out.

(e) The manufacturer shall admit to a facility or site an EPA Enforcement Officer who presents a warrant authorizing entry. In the absence of such warrant, entry to any facility or site under this section will be only upon the consent of the manufacturer.

(1) It is not a violation of this regulation or the Act for any person to refuse entry without a warrant.

(2) The Administrator or his designee may proceed ex parte to obtain a warrant whether or not the manufacturer has refused entry.

(42 U.S.C. 4905, 4912, 86 Stat. 1237–1239, 1244)

[41 FR 2172, Jan. 14, 1976, as amended at 43 FR 27989, June 28, 1978; 47 FR 57711, Dec. 28, 1982]

### § 204.5 Exemptions.

#### § 204.5–1 Testing exemption.

(a) A new product intended to be used solely for research, investigations, studies, demonstrations or training, and so labeled or marked on the outside of the container and on the product itself, shall be exempt from the prohibitions of sections 10(a) (1), (2), (3), and (5) of the Act.

(b) No request for a testing exemption is required.

(c) For purposes of section 11(d) of the Act any testing exemption shall be void ab initio with respect to each new product, originally intended for research, investigations, studies, demonstrations, or training, but distributed in commerce for other uses.

[47 FR 57711, Dec. 28, 1982]

#### § 204.5–2 National security exemptions.

(a) A new product which is produced to conform with specifications developed by a national security agency, and so labeled or marked on the outside of the container and on the product itself, shall be exempt from the prohibitions of sections 10(a) (1), (2), (3), and (4) of the Act.

(b) No request for a national security exemption is required.

(c) For purposes of section 11(d) of the Act, any national security exemption shall be void ab initio with respect to each new product, originally intended to be produced to conform with specifications developed by a national security agency but distributed in commerce for other uses.

(d) Any manufacturer or person subject to the liabilities of section 11(a) with respect to any product originally intended for a national security agency, but distributed in commerce for use in any State, may be excluded from the application of section 11(a) with respect to such product based upon a showing that such manufacturer:

(1) Had no knowledge of such product being distributed in commerce for use in any state; and

(2) Made reasonable efforts to ensure that such products would not be distributed in commerce for use in any State. Such reasonable efforts would include investigation, prior dealings, contract provisions, etc.

[47 FR 57711, Dec. 28, 1982]

#### § 204.5–3 Export exemptions.

(a) A new product intended solely for export, and so labeled or marked on the outside of the container and on the product itself, shall be exempt from the prohibitions of section 10(a), (1), (2), (3), and (4) of the Act.

(b) No request for an export exemption is required.

(c) For purposes of section 11(d) of the Noise Control Act, any export exemption under section 10(b)(2) shall be void ab initio with respect to each new product intended solely for export which is distributed in commerce for use in any state.

(d) The Administrator will not institute proceedings against any manufacturer pursuant to section 11(d)(1) of the Noise Control Act with respect to any product, originally intended for export, but distributed in commerce for use in any state, if it is demonstrated to the Administrator's satisfaction that:

(1) The manufacturer had no knowledge that such product would be distributed in commerce for use in any state; and

(2) The manufacturer made reasonable efforts to ensure that such product would not be distributed in commerce for use in any state. Such reasonable efforts would include consideration of prior dealings with any person which resulted in introduction into commerce of a product manufactured for export only, investigation of prior instances known to the manufacturer of introduction into commerce of a product manufactured for export only, and contract provisions which minimize the

probability of introduction into commerce of a product manufactured for export only.

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 61454, Dec. 5, 1977. Redesignated at 47 FR 57711, Dec. 28, 1982]

## Subpart B—Portable Air Compressors

### § 204.50 Applicability.

The provisions of this subpart shall apply to portable air compressors which are manufactured after the effective dates specified in § 204.52, and which are ''New Products'' as defined in the Act. These provisions apply only to portable air compressors with a rated capacity equal to or above 75 cubic feet per minute which deliver air at pressures greater than 50 psig. The provisions do not apply to the pneumatic tools or equipment that the portable air compressor is designed to power.

### § 204.51 Definitions.

(a) *Portable air compressor* or *compressor* means any wheel, skid, truck, or railroad car mounted, but not self-propelled, equipment designed to activate pneumatic tools. This consists of an air compressor (air end), and a reciprocating rotary or turbine engine rigidly connected in permanent alignment and mounted on a common frame. Also included are all cooling, lubricating, regulating, starting, and fuel systems, and all equipment necessary to constitute a complete, self-contained unit with a rated capacity of 75 cfm or greater which delivers air at pressures greater than 50 psig, but does not include any pneumatic tools themselves.

(b) *Maximum Rated Capacity* means that the portable air compressor, operating at the design full speed with the compressor on load, delivers its rated cfm output and pressure, as defined by the manufacturer.

(c) *Model year* means the manufacturer's annual production period which includes January 1 of such calendar year; Provided, that if the manufacturer has no annual production period, the term ''model year'' shall mean the calendar year.

(d) *Compressor configuration* means the basic classification unit of a manufacturer's product line and is comprised of compressor lines, models or series which are identical in all material respects with regard to the parameters listed in § 204.55–3.

(e) *Category* means a group of compressor configurations which are identical in all aspects with respect to the parameters listed in paragraph (c)(1)(i) of § 204.55–2.

(f) [Reserved]

(g) *Noise emission test* means a test conducted pursuant to the measurement methodology specified in § 204.54.

(h) *Inspection Criteria* means the rejection and acceptance numbers associated with a particular sampling plan.

(i) *Acceptable Quality Level (AQL)* means the maximum percentage of failing compressors that, for purposes of sampling inspection can be considered satisfactory as a process average.

(j) *Batch* means the collection of compressors of the same category or configuration, as designated by the Administrator in a test request, from which a batch sample is to be randomly drawn and inspected to determine conformance with the acceptability criteria.

(k) *Batch sample* means the collection of compressors that are drawn from a batch.

(l) *Batch sample size* means the number of compressors of the same category or configuration which is randomly drawn from the batch sample and which will receive emissions tests.

(m) *Test sample* means the collection of compressors from the same category or configuration which is randomly drawn from the batch sample and which will receive emissions tests.

(n) *Batch size* means the number, as designated by the Administrator in the test request, of compressors of the same category or configuration in a batch.

(o) *Test sample size* means the number of compressors of the same configuration in a test sample.

(p) *Acceptable of a batch* means that the number of non-complying compressors in the batch sample is less than or equal to the acceptance number as determined by the appropriate sampling plan.

(q) *Rejection of a batch* means that the number of non-complying compressors in the batch sample is greater than or equal to the rejection number as determined by the appropriate sampling plan.

(r) *Acceptance of a batch sequence* means that the number of rejected batches in the sequence is less than or equal to the sequence acceptable number as determined by the appropriate sampling plan.

(s) *Rejection of a batch sequence* means that the number of rejected batches in a sequence is greater than or equal to the sequence rejection number as determined by the appropriate sampling plan.

(t) *Shift* means the regular production work period for one group of workers.

(u) *Failing compressor* means that the measured noise emissions of the compressor, when measured in accordance with the applicable procedure, exceeds the applicable standard.

(v) *Acceptance of a compressor* means that the measured noise emissions of the compressor, when measured in accordance with the applicable procedure, conforms to the applicable standard.

(w) *Test Compressor* means a compressor used to demonstrate compliance with the applicable noise emissions standard.

(x) *Tampering* means those acts prohibited by section 10(a)(2) of the Act.

(Secs. 6 and 13, Noise Control Act, Pub. L. 92–574, 86 Stat. 1244; (42 U.S.C. 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 41635, Aug. 18, 1977; 47 FR 57711, Dec. 28, 1982]

### § 204.52 Portable air compressor noise emission standard.

(a) Effective January 1, 1978, portable air compressors with maximum rated capacity of less than or equal to 250 cubic feet per minute (cfm) shall not produce an average sound level in excess of 76 dBA when measured and evaluated according to the methodology provided by this regulation. Effective July 1, 1978, portable air compressors with maximum rated capacity greater than 250 cfm shall not produce an average sound level in excess of 76 dBA when measured and evaluated according to the methodology provided by this regulation.

(b) In-Use Standard. [Reserved]

(c) Low Noise Emission Product. [Reserved]

### § 204.54 Test procedures.

(a) *General.* This section prescribes the conditions under which noise emission standard compliance Selective Enforcement Auditing or Testing by the Administrator must be conducted and the measurement procedures that must be used to measure the sound level and to calculate the average sound level of portable air compressors on which the test is conducted.

(b) *Test site description.* The location for measuring noise employed during noise compliance testing must consist of an open site above a hard reflecting plane. The reflecting plane must consist of a surface of sealed concrete or sealed asphalt and must extend one (1) meter beyond each microphone location. No reflecting surface, such as a building, signboard, hillside, etc., shall be located within 10 meters of a microphone location.

(c) *Measurement equipment.* The measurement equipment must be used during noise standard compliance testing and must consist of the following or its equivalent:

(1) A sound level meter and microphone system that conform to the Type I requirements of American National Standard (ANS) S1.4–1971, ''Specification for Sound Level Meters,'' and to the requirements of the International Electrotechnical Commission (IEC) Publication No. 179, ''Precision Sound Level Meters.''

(2) A windscreen must be employed with the microphone during all measurements of portable air compressor noise when the wind speed exceeds 11 km/hr. The windscreen shall not affect the A-weighted sound levels from the portable air compressor in excess of ±0.5 dB.

(3) The entire acoustical instrumentation system including the microphone and cable shall be calibrated before each test series and confirmed afterward. A sound level calibrator accurate to within ±0.5 dB shall be used. A calibration of the instrumentation shall be performed at least annually

using the methodology of sufficient precision and accuracy to determine compliance with ANS S1.4–1971 and IEC 179. This calibration shall consist, at a minimum, of an overall frequency response calibration and an attenuator (gain control) calibration plus a measurement of dynamic range and instrument noise floor.

(4) An anemometer or other device accurate to within ±10 percent shall be used to measure wind velocity.

(5) An indicator accurate to within ±2 percent shall be used to measure portable air compressor engine speed.

(6) A gauge accurate to within ±5 percent shall be used to measure portable compressor air pressure.

(7) A metering device accurate to within ±10 percent shall be used to measure the portable air compressor compressed air volumetric flow rate.

(8) A barometer for measuring atmospheric pressure accurate to within ±5 percent.

(9) A thermometer for measuring temperature accurate to within ±1 degree.

(d) *Portable air compressor operation.* The portable air compressor must be operated at the design full speed with the compressor on load, delivering its rated flow and output pressure, during noise emission standard compliance testing. The air discharge shall be provided with a resistive loading such that no significant pressure drop or throttling occurs across the compressor discharge valve. The air discharge shall be piped clear of the test area or fed into an effective silencer. The sound pressure level due to the air discharge shall be at least 10 dB below the sound pressure level generated by the portable air compressor.

(e) *Test conditions.* Noise standard compliance testing must be carried out under the following conditions:

(1) No rain or other precipitation,

(2) No wind above 19 km/hr,

(3) No observer located within 1 meter, in any direction, of any microphone location, nor between the test unit and any microphone,

(4) Portable air compressor sound levels, at each microphone location, 10 dB or greater than the background sound level,

(5) The machine shall have been warmed up and shall be operating in a stable condition as for continuous service and at its maximum rated capacity. All cooling air vents in the engine/compressor enclosure, normally open during operation, shall be fully open during all sound level measurements. Service doors that should be closed during normal operation (at any and all ambient temperatures) shall be closed during all sound level measurements.

(f) *Microphone locations.* Five microphone locations must be employed to acquire portable air compressor sound levels to test for noise standard compliance. A microphone must be located 7±.1 meters from the right, left, front, and back sides and top of the test unit. The microphone position to the right, left, front, and back sides of the test unit must be located 1.5±.1 meters above the reflecting plane.

(g) *Data required.* The following data must be acquired during noise emission standard compliance testing:

(1) A-weighted sound level at one microphone location prior to operation of the test unit and at all microphone locations during test unit operations, as defined in paragraph (d) of this section.

(2) Portable air compressor engine speed.

(3) Portable air compressor compressed gas pressure.

(4) Portable air compressor flow rate.

(5) All other data contained in Appendix I, Table IV.

(h) *Calculation of average sound level.* The average A-weighted sound level from measurements at the specified microphone locations must be calculated by the following method:

$$L=10 \log (1/5[\text{Antilog } L_1/10+\text{Antilog } L_2/10+\text{Antilog } L_3/10+\text{ Antilog } L_4/10+\text{ Antilog } L_5/10])$$

Where:

$L$=The average A-weighted sound level (in decibels)

$L_1$=The A-weighted sound level (in decibels) at microphone position 1

$L_2$=The A-weighted sound level (in decibels) at microphone position 2

$L_3$=The A-weighted sound level (in decibels) at microphone position 3

$L_4$=The A-weighted sound level (in decibels) at microphone position 4

$L_5$=The A-weighted sound level (in decibels) at microphone position 5

(i) The Administrator may approve applications from manufacturers of portable air compressors for the approval of test procedures which differ from those contained in this part so long as the alternate procedures have been demonstrated to correlate with the prescribed procedure. To be acceptable, alternate testing procedures shall be such that the test results obtained will identify all those test units which would not comply with the noise emission limit prescribed in § 204.52 when tested in accordance with the procedures contained in § 204.54 (a) through (h). Tests conducted by manufacturers under approved alternate procedures may be accepted by the Administrator for all purposes.

(j) *Presentation of information.* All information required by this section may be recorded using the format recommended on the Noise Data Sheet shown in Appendix I, Table IV.

[41 FR 2172, Jan. 14, 1976, as amended at 41 FR 8347, Feb. 26, 1976; 47 FR 57711, Dec. 28, 1982]

## § 204.55 Requirements.

### § 204.55–1 General standards.

(a) Every new compressor manufactured for distribution in commerce in the United States which is subject to the standards prescribed in this subpart and not exempted in accordance with § 204.5:

(1) Shall be labeled in accordance with the requirements of § 204.55–4.

(2) Shall conform to the applicable noise emission standard established in § 204.52

(b) [Reserved]

[41 FR 2172, Jan. 14, 1976, as amended at 47 FR 57711, Dec. 28, 1982]

### § 204.55–2 Requirements.

(a)(1) Prior to distribution in commerce, compressors of a specific configuration must verify such configurations in accordance with this subpart.

(2) [Reserved]

(3) At any time with respect to a configuration under this subpart, the Administrator may require that the manufacturer ship test compressors to an EPA test facility in order for the Administrator to perform the tests required for production verification.

(b) The requirements for purposes of testing by the Administrator and Selective Enforcement Auditing consist of:

(1) Testing in accordance with § 204.54 of a compressor selected in accordance with § 204.57–2; and

(2) Compliance of the test compressor with the applicable standards when tested in accordance with § 204.54.

(c)(1) In lieu of testing compressors of every configuration, as described in paragraph (b) of this section, the manufacturer may elect to verify the configuration based on representative testing, the requirements of which consist of:

(i) Grouping configurations into a category where each category will be determined by a separate combination of at least the following parameters (a manufacturer may use more parameters):

(A) Engine type.

(*1*) Gasoline—two stroke cycle

(*2*) Gasoline—four stroke cycle

(*3*) Diesel—two stroke cycle

(*4*) Diesel—four stroke cycle

(*5*) Rotary—Wankel

(*6*) Turbine

(*7*) Other

(B) Engine manufacturer

(C) Compressor delivery rate (at rated pressure)

(ii) Identifying the configuration within each category which emits the highest sound level in dBA based on best technical judgment, emission test data, or both.

(iii) Testing in accordance with § 204.54 selected in accordance with § 204.57–2 which must be a compressor of the configuration which is identified pursuant to paragraph (c)(1)(iii) of this section as having the highest sound level (estimated or actual) within the category.

(iv) Compliance of the test compressor with applicable standards when tested in accordance with § 204.54.

(2) Where the requirements of paragraph (c)(1) of this section are complied with, all those configurations contained within a category are considered represented by the tested compressor.

(3) Where the manufacturer tests a compressor configuration which has not been determined as having the highest sound level of a category, but all other requirements of paragraph (c)(1) of this section are complied with, all those configurations contained within that category which are determined to have sound levels no greater than the tested compressor are considered to be represented by the tested compressor: However, a manufacturer must for purposes of Testing by the Administrator and Selective Enforcement Auditing verify according to the requirements of paragraph (b)(1) and/or (c)(1) of this section any configurations in the subject category which have a higher sound level than the compressor configuration tested.

(d) A manufacturer may elect for purposes of Testing by the Administrator and Selective Enforcement Auditing to use representative testing, pursuant to paragraph (c) of this section, all or part of his product line.

(e) The manufacturer may, at his option, proceed with any of the following alternatives with respect to any compressor determined not in compliance with applicable standards:

(1) In the case of representative testing, a new test compressor from another configuration must be selected according to the requirements of paragraph (c) of this section in order to verify the configurations represented by the non-compliant compressor.

(2) Modify the test compressor and demonstrate by testing that it meets applicable standards. The manufacturer must modify all production compressors of the same configuration in the same manner as the test compressor before distribution into commerce.

(Secs. 6 and 13, Noise Control Act, Pub. L. 92–574, 86 Stat. 1244; (42 U.S.C. 4912); 42 U.S.C. 4905; 86 Stat. 1237 and secs. 6, 10, 11, 13, Pub. L. 92–574, 86 Stat. 1234 (42 U.S.C. 4905, 4909, 4910, 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 61455, Dec. 5, 1977; 47 FR 57711, Dec. 28, 1982; 49 FR 26738, June 29, 1984]

### § 204.55–3 Configuration identification.

(a) A separate compressor configuration shall be determined by each combination of the following parameters:

(1) The compressor type (screw, sliding vane, etc.).

(2) Number of compressor stages.

(3) Maximum pressure (psi).

(4) Air intake system of compressor:

(i) Number of filters;

(ii) Type of filters.

(5) The engine system:

(i) Number of cylinders and configuration (L–6, V–8, V–12);

(ii) Displacement;

(iii) Horsepower;

(iv) Full load rpm.

(6) Type cooling system, e.g., air cooled, water cooled.

(7) Fan:

(i) Diameter;

(ii) Maximum fan rpm.

(8) The compressor enclosure:

(i) Height, length, and width;

(ii) Acoustic material manufacturer, type, part number.

(9) The induction system (engine):

(i) Natural;

(ii) Turbocharged.

(10) The muffler:

(i) Manufacturer;

(ii) Manufacturer part number;

(iii) Quantity of mufflers used;

(11) Category parameters listed at § 204.55–2.

### § 204.55–4 Labeling.

(a)(1) The manufacturer of any compressor subject to the standards prescribed in § 204.52 shall, at the time of manufacture, affix a permanent, legible label, of the type and in the manner described below, containing the information hereinafter provided, to all such compressors to be distributed in commerce.

(2) The label shall be permanently attached, in a readily visible position, on the compressor enclosure.

(3) The label shall be affixed by the compressor manufacturer, who has verified such compressor, in such a manner that it cannot be removed without destroying or defacing the label, and shall not be affixed to any equipment that is easily detached from such compressor.

(4) Labels for compressors not manufactured solely for use outside the United States shall contain the following information lettered in the English

language in block letters and numerals, which shall be of a color that contrasts with the background of the label:

(i) The label heading: Compressor Noise Emission Control Information;

(ii) Full corporate name and trademark of manufacturer;

(iii) Date of manufacture, which may consist of a serial number or code in those instances where records are specified and maintained.

(iv) The statement:

This Compressor Conforms to U.S. E.P.A. Regulations for Noise Emissions Applicable to Portable Air Compressors. The following acts or the causing thereof by any person are prohibited by the Noise Control Act of 1972:

(A) The removal or rendering inoperative, other than for the purpose of maintenance, repair, or replacement, of any noise control device or element of design (listed in the owner's manual) incorporated into this compressor in compliance with the Noise Control Act;

(B) The use of this compressor after such device or element of design has been removed or rendered inoperative.

(b) Compressors manufactured solely for use outside the United States shall be clearly labeled ''For Export Only.''

(Secs. 6, 13, Pub. L. 92–574, (42 U.S.C. 4912); 42 U.S.C. 4905; 86 Stat. 1237 and secs. 6, 10, 11, 13, Pub. L. 92–574, 86 Stat. 1234 (42 U.S.C. 4905, 4909, 4910, 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 61455, Dec. 5, 1977. Redesignated at 47 FR 57712, Dec. 28, 1982, and amended at 49 FR 26738, June 29, 1984]

### § 204.56 Testing by the Administrator.

(a)(1) The Administrator may require that any compressor tested or scheduled to be tested pursuant to these regulations or any other untested compressors be submitted to him, at such place and time as he may designate, for the purpose of conducting tests in accordance with the test procedures described in § 204.54 to determine whether such compressors conform to applicable regulations.

(2) The Administrator may specify that he will conduct such testing at the manufacturer's facility, in which case instrumentation and equipment of the type required by these regulations shall be made available by the manufacturer for test operations. The Administrator may conduct such tests with his own equipment, which shall be equal to or exceed the performance specifications of the instrumentation or equipment specified by the Administrator in these regulations.

(b)(1) If, based on tests conducted by the Administrator or other relevant information, the Administrator determines that the test facility does not meet the requirements of § 204.54–1 (a) and (b) he will notify the manufacturer in writing of his determination and the reasons therefor.

(2) The manufacturer may at any time within 15 days after receipt of a notice issued under paragraph (b)(1) of this section request a hearing conducted in accordance with 5 U.S.C. 554 on the issue of whether his test facility was in conformance. Such notice will not take effect until 15 days after receipt by the manufacturer, or if a hearing is requested under this paragraph, until adjudication by the hearing examiner.

(3) After any notification issued under paragraph (b)(1) of this section has taken effect, no data thereafter derived from such test facility will be acceptable for purposes of this part.

(4) The manufacturer may request in writing that the Administrator reconsider this determination under paragraph (b)(1) of this section based on data or information which indicates that changes have been made to the test facility and such changes have resolved the reasons for disqualification.

(5) The Administrator will notify the manufacturer of his determination and an explanation of the reasons underlying it with regard to the requalification of the test facility within 10 working days after receipt of the manufacturer's request for reconsideration pursuant to paragraph (b)(4) of this section.

(Secs. 6, 13, Pub. L. 92–574 (42 U.S.C. 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 61455, Dec. 5, 1977]

### § 204.57 Selective enforcement auditing.

### § 204.57–1 Test request.

(a) The Administrator will request all testing under this subpart by means of a test request addressed to the manufacturer.

(b) [Reserved]

(c) The test request will specify the compressor category or configuration selected for testing, the batch from which sampling is to begin, for testing and the batch size, the manufacturer's plant or storage facility from which the compressors must be selected, and the time at which compressors must be selected. The test request will also provide for situations in which the selected configuration or category is unavailable for testing. The test request may include an alternative category or configuration selected for testing in the event that compressors of the first specified category or configuration are not available for testing because the compressors are not being manufactured at the specified plant and/or are not being manufactured during the specified time or not being stored at the specified plant or storage facility.

(d) Any manufacturer shall, upon receipt of the test request, select and test a batch sample of compressors from two consecutively produced batches of the compressor category or configurations specified in the test request in accordance with these regulations and the conditions specified in the test request.

(e)(1) Any testing conducted by the manufacturer pursuant to a test request shall be initiated within such period as is specified in the test request; Except, that such initiation may be delayed for increments of 24 hours or one business day where ambient test site weather conditions in any 24-hour period do not permit testing: *Provided*, That ambient test site weather conditions for that period are recorded.

(2) The manufacturer shall complete noise emission testing on a minimum of five compressors per day, unless otherwise provided for by the Administrator or unless ambient test site conditions only permit the testing of a lesser number: *Provided*, That ambient test site weather conditions for that period are recorded.

(3) The manufacturer will be allowed 24 hours to ship compressors from a batch sample from the assembly plant to the testing facility if the facility is not located at the plant or in close proximity to the plant; Except, that the Administrator may approve more time based upon a request by the manufacturer accompanied by a satisfactory justification.

(f) The Administrator may issue an order to the manufacturer to cease to distribute into commerce compressors of a specified category or configuration being manufactured at a particular facility if:

(1) The manufacturer refuses to comply with the provisions of a test request issued by the Administrator pursuant to this section; or

(2) The manufacturer refuses to comply with any of the requirements of this section.

(g) A cease-to-distribute order shall not be issued under paragraph (f) of this section if such refusal is caused by conditions and circumstances outside the control of the manufacturer which render it impossible to comply with the provisions of a test request or any other requirements of this section. Such conditions and circumstances shall include, but are not limited to, any uncontrollable factors which result in the temporary unavailability of equipment and personnel needed to conduct the required tests, such as equipment breakdown or failure or illness of personnel, but shall not include failure of the manufacturer to adequately plan for and provide the equipment and personnel needed to conduct the tests. The manufacturer will bear the burden of establishing the presence of the conditions and circumstances required by this paragraph.

(h) Any such order shall be issued only after a notice and opportunity for a hearing in accordance with section 554 of Title 5 of the United States Code.

(Secs. 6, 11 and 13, Noise Control Act, Pub. L. 92–574, 86 Stat. 1244; (42 U.S.C. 4910 and 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 41635, Aug. 18, 1977; 42 FR 61455, Dec. 5, 1977; 47 FR 57712, Dec. 28, 1982]

### § 204.57–2 Test compressor sample selection.

(a) Compressors comprising the batch sample which are required to be tested pursuant to a test request in accordance with this subpart will be randomly selected from a batch of compressors of the category or configuration specified in the test request. The random selection will be achieved by

sequentially numbering all of the compressors in the batch and then using a table of random numbers to select the number of compressors, as specified in paragraph (c) of this section, based on the batch size designated by the Administrator in the test request. An alternative selection plan may be used by a manufacturer: *Provided,* That such a plan is approved by the Administrator.

(b) The Acceptable Quality Level is 10 percent. The appropriate sampling plans associated with the designated AQL are contained in Appendix I, Table II.

(c) The appropriate batch sample size will be determined by reference to Appendix I, Tables I and II. A code letter is obtained from Table I based on the batch size designated by the Administrator in a test request. The batch sample size will be equal to the maximum cumulative sample size as listed in Table II for the appropriate code letter obtained from Table I plus an additional ten percent rounded off to the next highest number.

(d) Individual compressors comprising the test sample will be randomly selected from the batch sample using the same random selection plan as in paragraph (a) of this section. Test sample size will be determined by entering Table II.

(e) The test compressor of the category or configuration selected for testing shall have been assembled by the manufacturer for distribution in commerce using the manufacturers normal production process.

(f) Unless otherwise indicated in the test request, the manufacturer will select the batch sample from the production batch next scheduled after receipt of the test request of the category or configuration specified in the test request.

(g) Unless otherwise indicated in the test request, the manufacturer shall select the compressors designated in the test request for testing.

(h) At their discretion, EPA Enforcement Officers, rather than the manufacturer, may select the compressors designated in the test request.

(i) The manufacturer will keep on hand all compressors in the batch sample until such time as the batch is accepted or rejected in accordance with § 204.57–6; Except, that compressors actually tested and found to be in conformance with these regulations need not be kept.

**§ 204.57–3 Test compressor preparation.**

(a) Prior to the official test, the test compressor selected in accordance with § 204.57–2 shall not be prepared, tested, modified, adjusted, or maintained in any manner unless such adjustments, preparations, modifications and/or tests are part of the manufacturer's prescribed manufacturing and inspection procedures and are documented in the manufacturer's internal compressor assembly and inspection procedures or unless such adjustments and/or tests are required or permitted under this subpart or are approved in advance by the Administrator. The manufacturer may perform adjustments, preparations, modifications and/or tests normally performed by a dealer to prepare the compressor for delivery to a customer or the adjustments, preparations, modifications and/or tests normally performed at the port-of-entry by the manufacturer to prepare the compressor for delivery to a dealer or customer.

(b) Equipment of fixtures necessary to conduct the test may be installed on the compressor: *Provided,* That such equipment of fixtures shall have no effect on the noise emissions of the compressor, as determined by the appropriate measurement methodology.

(c) In the event of compressor manfunction (i.e., failure to start, misfiring cylinder, etc.), the manufacturer may perform the maintenance necessary to enable the compressor to operate in a normal manner.

(d) No quality control, testing, assembly, or selection procedures shall be used on the completed test compressor or any portion thereof, including parts and subassemblies, that will not normally be used during the production and assembly of all other compressors of that category which will be distributed in commerce, unless such procedures are required or permitted under this subpart or are approved in advance by the Administrator.

[47 FR 57712, Dec. 28, 1982]

### § 204.57–4 Testing.

(a) The manufacturer shall conduct one valid test in accordance with the test procedures specified in § 204.54 for each compressor selected for testing pursuant to this subpart.

(b) No maintenance will be performed on test compressors, except as provided for by § 204.57–3. In the event a compressor is unable to complete the emission test, the manufacturer may replace the compressor. Any replacement compressor will be a production compressor of the same configuration, and the replacement compressor will be randomly selected from the batch sample and will be subject to all the provisions of these regulations.

### § 204.57–5 Reporting of test results.

(a)(1) The manufacturer shall submit a copy of the test report for all testing conducted pursuant to § 204.57 at the conclusion of each twenty-four hour period during which testing is done.

(2) For each test conducted the manufacturer will provide the following information:

(i) Configuration and category identification, where applicable.

(ii) Year, make, assembly date, and model of compressor.

(iii) Compressor serial number.

(iv) Test results by serial numbers

(3) The first test report for each batch sample will contain a listing of all serial numbers in that batch.

(b) In the case where an EPA Enforcement Officer is present during testing required by this subpart, the written reports requested in paragraph (a) of this section may be given directly to the Enforcement Officer.

(c) Within five days after completion of testing of all compressors in a batch sample, the manufacturer shall submit to the Administrator a final report which will include the information required by the test request in the format as stipulated, in addition to the following:

(1) The name, location, and description of the manufacturer's noise test facilities which meet the specifications of § 204.54 and were utilized to conduct testing reported pursuant to this section; except, that a test facility that has been described in a previous submission under this subpart need not be described again but must be identified as such.

(2) A description of the random compressor selection method used, referencing any tables of random numbers that were used, and the name of the person in charge of the random number selection.

(3) The following information for each test conducted:

(i) The completed data sheet required by § 204.54 for all noise emission tests including, for each invalid test, the reason for invalidation.

(ii) A complete description of any modification, repair, preparation, maintenance, and/or testing which was performed on the test compressor and will not be performed on all other production compressors.

(iii) The reason for the replacement, where a replacement compressor was authorized by the Administrator, and, if any, the test results for replaced compressors.

(4) The following statement and endorsement:

> This report is submitted pursuant to section 6 and section 13 of the Noise Control Act of 1972. All testing for which data is reported herein was conducted in strict conformance with applicable regulations under 40 CFR Part 204 *et seq.* All the data reported herein are a true and accurate representation of such testing. All other information reported herein is, to the best of (company) knowledge true and accurate. I am aware of the penalties associated with violations of the Noise Control Act of 1972 and the regulations thereunder.
>
> (authorized representative)

(d) All information required to be forwarded to the Administrator pursuant to this section shall be addressed to Director, Noise Enforcement Division (EN–387), U.S. Environmental Protection Agency, Washington, DC 20460.

(Secs. 6 and 13, Noise Control Act, Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 41635, Aug. 18, 1977; 43 FR 38705, Aug. 30, 1978]

### § 204.57–6 Acceptance and rejection of batches.

(a) A failing compressor is one whose measured sound level is in excess of the applicable noise emission standard.

(b) The batch from which a batch sample is selected will be accepted or rejected based upon the number of failing compressors in the batch sample. A sufficient number of test samples will be drawn from the batch sample until the cumulative number of failing compressors is less than or equal to the acceptance number or greater than or equal to the rejection number appropriate for the cumulative number of compressors tested. The acceptance and rejection numbers listed in Appendix I, Table II at the appropriate code letter obtained according to § 204.57–2 will be used in determining whether the acceptance or rejection of a batch has occurred.

(c) Acceptance or rejection of a batch takes place when a decision is made on the last compressor required to make a decision under paragraph (b) of this section.

### § 204.57–7 Acceptance and rejection of batch sequence.

(a) The manufacturer will continue to inspect consecutive batches until the batch sequence is accepted or rejected. The batch sequence will be accepted or rejected based upon the number of rejected batches. A sufficient number of consecutive batches will be inspected until the cumulative number of rejected batches is less than or equal to the sequence acceptance number or greater than or equal to the sequence rejection number appropriate for the cumulative number of batches inspected. The acceptance and rejection numbers listed in Appendix I, Table III at the appropriate code letter obtained according to § 204.57–2 will be used in determining whether the acceptance or rejection of a batch sequence has occurred.

(b) Acceptance or rejection of a batch sequence takes places when the decision is made on the last compressor required to make a decision under paragraph (a) of this section.

(c) If the batch sequence is accepted, the manufacturer will not be required to perform any additional testing on compressors from subsequent batches pursuant to the initiating test request.

(d) The Administrator may terminate testing earlier than required in paragraph (b) of this section based on a request by the manufacturer accompanied by voluntary cessation of distribution in commerce, from all plants, of compressors from the configuration in question: *Provided,* That once production is reinitiated, the manufacturer must take the action described in § 204.57–9 (a)(1) and (a)(2) prior to distribution in commerce of any compressors from any plant of the compressor category or configuration in question.

### § 204.57–8 Continued testing.

(a) If a batch sequence is rejected in accordance with paragraph (b) of § 204.57–7, the Administrator may require that any or all compressors of that category, configuration or subgroup thereof produced at that plant be tested before distribution in commerce.

(b) The Administrator will notify the manufacturer in writing of his intent to require such continued testing of compressors pursuant to paragraph (a) of this section.

(c) The manufacturer may request a hearing on the issues of whether the selective enforcement audit was conducted properly; whether the criteria for batch sequence rejection in § 204.57–7 have been met; and, the appropriateness or scope of a continued testing order. In the event that a hearing is requested, the hearing shall begin no later than 15 days after the date on which the Administrator received the hearing request. Neither the request for a hearing nor the fact that a hearing is in progress shall affect the responsibility of the manufacturer to commence and continue testing required by the Administrator pursuant to paragraph (a) of this section.

(d) Any tested compressor which demonstrates conformance with the applicable standards may be distributed into commerce.

(e) Any knowing distribution into commerce of a compressor which does not comply with the applicable standards is a prohibited act.

(Sec. 6, 13, Pub. L. 92–574 (42 U.S.C. 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 61455, Dec. 5, 1977; 44 FR 54295, Sept. 19, 1979]

**§ 204.57–9 Prohibition of distribution in commerce; manufacturer's remedy.**

(a) The Administrator will permit the cessation of continued testing under § 204.57–8 once the manufacturer has taken the following actions:

(1) Submit a written report to the Administrator which identifies the reason for the noncompliance of the compressors, describes the problem, and describes the proposed quality control and/or quality assurance remedies to be taken by the manufacturer to correct the problem or follows the requirements for an engineering change. Such requirements include the following:

(i) Any change to a configuration with respect to any of the parameters stated in § 204.55–3 shall constitute the addition of a new and separate configuration or category to the manufacturer's product line.

(ii) When a manufacturer introduces a new category or configuration to his product line, he shall proceed in accordance with § 204.55–2.

(iii) If the configuration to be added can be grouped within a verified category and the new configuration is estimated to have a lower sound level than a previously verified configuration with the same category, the configuration shall be considered verified.

(2) Demonstrates that the specified compressor category, configuration or subgroup thereof has passed a retest conducted in accordance with § 204.57 and the conditions specified in the initial test request.

(3) The manufacturer may begin testing under paragraph (a)(2) of this section, upon submitting such report, and may cease continued testing upon making the demonstration required by paragraph (a)(2) of this section: *Provided,* That the Administrator may require resumption of contined testing if he determines that the manufacturer has not satisfied the requirements of paragraphs (a) (1) and (2) of this section.

(4) In lieu of paragraphs (a) (1) and (2) of this section, the Administrator will permit the cessation of continued testing under § 204.57–8 with respect to any subgroup of a nonconforming category or configuration if the manufacturer demonstrates to the satisfaction of the Administrator that such subgroup does not exhibit the cause of the nonconformity of such category or configuration.

(b) Any compressor failing the prescribed noise emission tests conducted pursuant to this Subpart B may not be distributed in commerce until necessary adjustments or repairs have been made and the compressor passes a retest.

(c) No compressors of a rejected batch which are still in the hands of the manufacturer may be distributed in commerce unless the manufacturer has demonstrated to the satisfaction of the Administrator that such compressors do, in fact, conform to the regulations; except, that any compressor that has been tested and does, in fact, conform with these regulations may be distributed in commerce.

(Secs. 6, 10, 13, Pub. L. 92–574 (42 U.S.C. 4909 and 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 61455, Dec. 5, 1977; 47 FR 57712, Dec. 28, 1982]

**§ 204.58 In-use requirements.**

**§ 204.58–1 Warranty.**

(a) The portable air compressor manufacturer shall include in the owner's manual or in other information supplied to the ultimate purchaser, the following statement:

NOISE EMISSIONS WARRANTY

The manufacturer warrants to the ultimate purchaser and each subsequent purchaser that this air compressor was designed, built, and equipped to conform at the time of sale to the first retail purchaser, with all applicable U.S. E.P.A. noise control regulations.

This warranty is not limited to any particular part, component, or system of the air compressor. Defects in the design, assembly, or in any part, component, or system of the compressor which, at the time of sale to the first retail purchaser, caused noise emissions to exceed Federal standards are covered by this warranty for the life of the air compressor.

(b) [Reserved]

(Secs. 6 and 13, Noise Control Act, Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 47 FR 57712, Dec. 28, 1982]

### § 204.58–2 Tampering.

(a) For each configuration of air compressors covered by this part, the manufacturer shall develop a list of those acts which, in his judgment, might be done to the air compressor in use and which would constitute the removal or rendering inoperative of noise control devices or elements of design of the compressor.

(b) The manufacturer shall include in the owner's manual the following information:

(1) The statement:

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Federal law prohibits the following acts or the causing thereof:

(1) The removal or rendering inoperative by any persons, other than for purposes of maintenance, repair, or replacement, of any devices or element of design incorporated into any new compressor for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or (2) the use of the compressor after such device or element of design has been removed or rendered inoperative by any person.

(2) The statement:

Among those acts included in the prohibition against tampering are the acts listed below.

Immediately following this statement, the manufacturer shall include the list developed under paragraph (a) of this section.

(c) Any act included in the list prepared pursuant to paragraph (a) of this section is presumed to constitute tampering; however, in any case in which a proscribed act has been committed and it can be shown that such act resulted in no increase in the sound level of the compressor or that the compressor still meets the noise emission standard of § 204.52, such set will not constitute tampering.

(d) The provisions of this section are not intended to preclude any State or local jurisdiction from adopting and enforcing its own prohibitions against the removal or rendering inoperative of noise control systems on compressors subject to this part.

(Secs. 6 and 13, Noise Control Act, Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 47 FR 57713, Dec. 28, 1982]

### § 204.58–3 Instructions for maintenance, use, and repair.

(a)(1) The manufacturer shall provide to the ultimate purchaser of each portable air compressor covered by this part written instructions for the proper maintenance, use, and repair of the compressor in order to provide reasonable assurance of the elimination or minimization of noise emission degradation throughout the life of the compressor.

(2) The purpose of the instructions is to inform purchasers and mechanics of those acts necessary to reasonably assure that degradation of noise emission levels is eliminated or minimized during the life of the compressor. Manufacturers should prepare the instructions with this purpose in mind. The instructions should be clear and, to the extent practicable, written in nontechnical language.

(3) The instructions must not be used to secure an unfair competitive advantage. They should not restrict replacement equipment to original equipment or service to dealer service. Manufacturers who so restrict replacement equipment must make public any performance specifications on such equipment.

(b) For the purpose of encouraging proper maintenance, the manufacturer shall provide a record or log book which shall contain a performance schedule for all required noise emission control maintenance. Space shall be provided in this record book so that the purchaser can note what maintenance was done, by whom, where and when.

(Secs. 6, 13, Pub. L. 92–574 (42 U.S.C. 4912))

[41 FR 2172, Jan. 14, 1976, as amended at 47 FR 57713, Dec. 28, 1982]

### § 204.59 Recall of non-complying compressors.

(a) Pursuant to section 11(d)(1) of the Act, the Administrator may issue an order to the manufacturer to recall and

repair or modify any compressor distributed in commerce not in compliance with this subpart.

(b) A recall order issued pursuant to this section shall be based upon a determination by the Administrator that compressors of a specified category or configuration have been distributed in commerce which do not conform to the regulations. Such determination may be based on:

(1) A technical analysis of the noise emission characteristics of the category or configuration in question; or

(2) Any other relevant information, including test data.

(c) For the purposes of this section, noise emissions may be measured by any test prescribed in §204.54 for testing prior to sale or any other test which has been demonstrated to correlate with the prescribed test procedure.

(d) Any such order shall be issued only after notice and an opportunity for a hearing in accordance with section 554 of Title 5 of the United States Code.

(e) All costs, including labor and parts, associated with the recall and repair or modification of non-complying compressors under this section shall be borne by the manufacturer.

(f) This section shall not limit the discretion of the Administrator to take any other actions which are authorized by the Act.

(Secs. 6, 11, Pub. L. 92–574 (42 U.S.C. 4910))

[41 FR 2172, Jan. 14, 1976, as amended at 42 FR 61456, Dec. 5, 1977]

## APPENDIX I TO PART 204

### TABLE I—SAMPLE SIZE CODE LETTERS

| Batch size | Code letter |
|---|---|
| 4 to 8 | A. |
| 9 to 15 | B. |
| 16 to 25 | C. |
| 26 and larger | D. |

### TABLE II—SAMPLING PLANS FOR INSPECTING BATCHES

| Sample size code letter | Test sample | Test sample size | Cumulative test sample size | Batch inspection criteria | |
|---|---|---|---|---|---|
| | | | | Acceptance number | Rejection number |
| A | 1st | 4 | 4 | 0 | 1 |
| B | 1st | 3 | 3 | 0 | 1 |
| C | 1st | 3 | 3 | 0 | 2 |
| | 2d | 3 | 6 | 1 | 2 |
| D | 1st | 2 | 2 | (1) | 2 |
| | 2d | 2 | 4 | (1) | 2 |
| | 3d | 2 | 6 | 0 | 2 |
| | 4th | 2 | 8 | 0 | 3 |
| | 5th | 2 | 10 | 1 | 3 |
| | 6th | 2 | 12 | 1 | 3 |
| | 7th | 2 | 14 | 2 | 3 |

[1] Batch acceptance not permitted at this sample size.

### TABLE III—BATCH SEQUENCE PLANS

| Sample size code letter | Number batches | Cumulative number batches | Sequence inspection criteria | |
|---|---|---|---|---|
| | | | Acceptance number | Rejection number |
| A | 2 | 2 | 1 | (1) |
| | 2 | 4 | 2 | 4 |
| | 2 | 6 | 3 | 5 |
| | 2 | 8 | 4 | 5 |
| B | 2 | 2 | 0 | (1) |
| | 2 | 4 | 1 | 4 |
| | 2 | 6 | 2 | 5 |
| | 2 | 8 | 3 | 5 |
| | 2 | 10 | 4 | 6 |
| | 2 | 12 | 5 | 6 |
| C | 2 | 2 | (2) | 2 |
| | 2 | 4 | 0 | 2 |

TABLE III—BATCH SEQUENCE PLANS—Continued

| Sample size code letter | Number batches | Cumulative number batches | Sequence inspection criteria | |
|---|---|---|---|---|
| | | | Acceptance number | Rejection number |
| | 2 | 6 | 0 | 3 |
| | 2 | 8 | 1 | 3 |
| | 2 | 10 | 2 | 4 |
| | 2 | 12 | 3 | 4 |
| D | 2 | 2 | 0 | 2 |
| | 2 | 4 | 1 | 3 |
| | 2 | 6 | 2 | 4 |
| | 2 | 8 | 3 | 4 |

[1] Batch sequence rejection not permitted for this number of batches.
[2] Batch sequence acceptance not permitted for this number of batches.

TABLE IV—RECOMMENDED FORMAT FOR PORTABLE AIR COMPRESSOR NOISE DATA SHEET

Test report number: ..... .
Subject:
Manufacturer: ..... Model: ..... Serial No.: .....
Rated speed: ..... Rpm: ..... Rated capacity: ..... ..... cfm ($m^3$/in).
Configuration identification: ..... Category identification: ..... .....
Portable air compressor identification No.: ..... Build date: ..... .....
Test conditions:
Manufacturer's test site identification and location: .....
Reflecting plane composition: .....
Operating speed as tested:
Beginning of test ..... rpm
End of test ..... rpm
Air pressure supplied: ..... psi (kg/$cm^2$) Ambient wind speed———mph (km/hr).
Actual flow rate: ..... cfm ($m^3$/min.) Atmospheric pressure———psi (kg/$cm^2$).
Temperature: ..... °F (°C)
Instrumentation:
Microphone Manufacturer: ..... Model No.: ..... Serial No.: .....
Sound Level Meter Manufacturer: ..... Model No.: ..... Serial No.: .....
Calibrator Manufacturer: ..... Model No.: ..... Serial No.: .....
Other and Manufacturer: ..... Model No.: ..... Serial No.: .....
Data:

| Sound levels (decibels) | Background sound level at location 1 (decibels) | Location | | | | | Average sound level (decibels) |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | |
| A-Weighted | | | | | | | |

Tested by: ..... Date: ..... .....
Reported by: ..... Date: ..... .....
Supervisory personnel: ..... Title: ..... ..... .....
Title: ..... ..... .....

# PART 205—TRANSPORTATION EQUIPMENT NOISE EMISSION CONTROLS

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**Subpart E—Motorcycle Exhaust Systems**

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APPENDIX I TO SUBPARTS D AND E—MOTORCYCLE NOISE EMISSION TEST PROCEDURES
APPENDIX II TO SUBPART E—SAMPLING TABLES

AUTHORITY: Secs. 6, 10, 11, 13, Pub. L. 92–574, 86 Stat. 1234 (42 U.S.C. 4905, 4909, 4910, 4912).

SOURCE: 41 FR 15544, Apr. 13, 1976, unless otherwise noted.

## Subpart A—General Provisions

### § 205.1 General applicability.

The provisions of this subpart are applicable to all products for which regulations have been published under this part and which are manufactured after the effective date of such regulations.

**§ 205.2 Definitions.**

(a) As used in this subpart, all terms not defined herein shall have the meaning given them in the Act.

(1) *Act* means the Noise Control Act of 1972 (Pub. L. 92–574, 86 Stat. 1234).

(2) *Administrator* means the Administrator of the Environmental Protection Agency or his authorized representative.

(3) *Agency* means the United States Environmental Protection Agency.

(4) *Export exemption* means an exemption from the prohibitions of section 10(a) (1), (2), (3), and (4) of the Act, granted by statute under section 10(b)(2) of the Act for the purpose of exporting regulated products.

(5) *National security exemption* means an exemption from the prohibitions of section 10(a) (1), (2), (3), and (5) of the Act, which may be granted under section 10(b)(1) of the Act for the purpose of national security.

(6) [Reserved]

(7) *Sound Level* means 20 times the logarithm to base 10 of the ratio of pressure of a sound to the reference pressure. The reference pressure is 20 micropascals (20 micronewtons per square meter). NOTE: Unless otherwise explicitly stated, it is to be understood that the sound pressure is the effective (rms) sound pressure, per American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018.

(8) *Sound Pressure Level* means in decibels, 20 times the logarithm to the base 10 of the ratio of a sound pressure to the reference sound pressure of 20 micropascals (20 micronewtons per square meter). In the absence of any modifier, the level is understood to be that of a root-mean-square pressure. The unit of any sound level is the decibel, having the unit symbol dB.

(9) *dB(A)* means the standard abbreviation for A-weighted sound levels in decibels.

(10) *Highway* means the streets, roads, and public ways in any State.

(11) *Fast Meter Response* means that the fast dynamic response of the sound level meter shall be used. The fast dynamic response shall comply with the meter dynamic characteristics in paragraph 5.3 of the American National Standard Specification for Sound Level Meters, ANSI SI.4–1971. This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018.

(12) *Person* means an individual, corporation, partnership, or association, and except as provided in sections 11(e) and 12(a) of the Act includes any officer, employee, department, agency or instrumentality of the United States, a State or any political subdivision of a State.

(13) *Reasonable assistance* means providing timely and unobstructed access to test products or products and records required by this part, and opportunity for copying such records or testing such test products.

(14) *Ultimate purchaser* means the first person who in good faith purchases a product for purposes other than resale.

(15) *New product* means (i) a product the equitable or legal title of which has never been transferred to an ultimate purchaser, or (ii) a product which is imported or offered for importation into the United States and which is manufactured after the effective date of a regulation under section 6 or 8 which would have been applicable to such product had it been manufactured in the United States.

(16) *Manufacturer* means any person engaged in the manufacturing or assembling of new products, or the importing of new products for resale, or who acts for and is controlled by any such person in connection with the distribution of such products.

(17) *Commerce* means trade, traffic, commerce, or transportation:

(i) Between a place in a State and any place outside thereof, or

(ii) Which affects trade, traffic, commerce, or transportation described in paragraph (a)(17)(i) of this section.

(18) *Distribute in commerce* means sell in, offer for sale in, or introduce or deliver for introduction into, commerce.

(19) *State* includes the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, Guam, and the Trust Territory of the Pacific Islands.

(20) *Federal Agency* means an executive agency (as defined in section 105 of title 5, United States Code) and includes the United States Postal Service.

(21) *Environmental noise* means the intensity, duration, and the character of sounds from all sources.

(22) *Warranty* means the warranty required by section 6(c)(1) of the Act.

(23) *Tampering* means those acts prohibited by section 10(a)(2) of the Act.

(24) *Maintenance instructions* or *instructions* means those instructions for maintenance, use, and repair, which the Administrator is authorized to require pursuant to section 6(c)(1) of the Act.

(25) *Type I Sound Level Meter* means a sound level meter which meets the Type I requirements of ANSI SI.4–1972 specification for sound level meters. This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018.

(26) *Testing exemption* means an exemption from the prohibitions of section 10(a) (1), (2), (3), and (5) of the Act, which may be granted under section 10(b)(1) of the Act for the purpose of research, investigations, studies, demonstrations, or training, but not including national security.

(27) *Product* means any transportation equipment for which regulations have been promulgated under this part and includes ''test product.''

(28) *Test product* means any product that is required to be tested pursuant to this part.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61457, Dec. 5, 1977]

### § 205.3 Number and gender.

As used in this part, words in the singular shall be deemed to import the plural, and words in the masculine gender shall be deemed to import the feminine and vice versa, as the case may require.

### § 205.4 Inspection and monitoring.

(a) Any inspection or monitoring activities conducted under this section shall be for the purpose of determining (1) whether test products are being selected and prepared for testing in accordance with the provisions of these regulations, (2) whether test product testing is being conducted in accordance with these regulations, and (3) whether products being produced for distribution into commerce comply with these regulations.

(b) The Director, Noise Enforcement Division, may request that a manufacturer subject to this part admit an EPA Enforcement Officer during operating hours to any of the following:

(1) Any facility or site where any product to be distributed into commerce is manufactured, assembled, or stored;

(2) Any facility or site where any tests conducted pursuant to this part or any procedures or activities connected with such tests are or were performed; and

(3) Any facility or site where any test product is present.

(c)(1) An EPA Enforcement Officer, once admitted to a facility or site, will not be authorized to do more than:

(i) To inspect and monitor test product manufacture and assembly, selection, storage, preconditioning, noise emission testing, and maintenance, and to verify correlation or calibration of test equipment;

(ii) To inspect products prior to their distribution in commerce:

(iii) To inspect and photograph any part or aspect of any such product and any component used in the assembly thereof that are reasonably related to the purpose of his entry.

(iv) [Reserved]

(v) To obtain from those in charge of the facility or site such reasonable assistance as he may request to enable him to carry out any proper function listed in this section.

(2) [Reserved]

(3) The provisions of this section apply whether the facility or site is owned or controlled by the manufacturer or by one who acts for the manufacturer.

(d) For purposes of this section:

(1) An ''EPA Enforcement Officer'' is an employee of the EPA Office of Enforcement who displays upon arrival at a facility or site the credentials identifying him as such an employee and a letter signed by the Director, Noise Enforcement Division designating him to make the inspection.

(2) Where test product storage areas or facilities are concerned, ''operating hours'' shall mean all times during which personnel other than custodial

personnel are at work in the vicinity of the area or facility and have access to it.

(3) Where facilities or areas other than those covered by paragraph (d)(2) of this section are concerned, ''operating hours'' shall mean all times during which product manufacture or assembly is in operation or all times during which product testing and maintenance is taking place and/or production or compilation of records is taking place, or any other procedure or activity related to selective enforcement audit testing or product manufacture or assembly being carried out in a facility.

(e) The manufacturer shall admit to a facility or site an EPA Enforcement Officer who presents a warrant authorizing entry. In the absence of such warrant, entry to any facility or site under this section will be only upon the consent of the manufacturer.

(1) It is not a violation of this regulation or the Act for any person to refuse entry without a warrant.

(2) The Administrator or his designee may proceed ex parte to obtain a warrant whether or not the manufacturer has refused entry.

[41 FR 15544, Apr. 13, 1976, as amended at 43 FR 27990, June 28, 1978; 47 FR 57713, Dec. 28, 1982]

## § 205.5 Exemptions.

### § 205.5–1 Testing exemption.

(a) A new product intended to be used solely for research, investigations, studies, demonstrations or training, and so labeled or marked on the outside of the container and on the product itself, shall be exempt from the prohibitions of section 10(a)(1), (2), (3), and (5) of the Act.

(b) No request for a testing exemption is required.

(c) For purposes of section 11(d) of the Act, any testing exemption shall be void ab initio with respect to each new product, originally intended for research, investigations, studies, demonstrations, or training, but distributed in commerce for other uses.

[47 FR 57713, Dec. 28, 1982]

### § 205.5–2 National security exemptions.

(a) A new product which is produced to conform with specifications developed by a national security agency, and so labeled or marked on the outside of the container and on the product itself, shall be exempt from the prohibitions of section 10(a)(1), (2), (3), and (5) of the Act.

(b) No request for a national security exemption is required.

(c) For purposes of section 11(d) of the Act, any national security exemption shall be void ab initio with respect to each new product, originally intended to be produced to conform with specifications developed by a national security agency, but distributed in commerce for other uses.

(d) Any manufacturer or person subject to the liabilities of section 11(a) with respect to any product originally intended for a national security agency, but distributed in commerce for use in any State, may be excluded from the application of section 11(a) with respect to such product based upon a showing that such manufacturer:

(1) Had no knowledge of such product being distributed in commerce for use in any state; and

(2) Made reasonable effort to ensure that such products would not be distributed in commerce for use in any State. Such reasonable efforts would include investigation, prior dealings, contract provisions, etc.

[47 FR 57714, Dec. 28, 1982]

### § 205.5–3 Export exemptions.

(a) A new product intended solely for export, and so labeled or marked on the outside of the container and on the product itself, shall be exempt from the prohibitions of section 10(a), (1), (2), (3), and (4) of the Act.

(b) No request for an export exemption is required.

(c) For purposes of section 11(d) of the Noise Control Act, the Administrator may consider any export exemption under section 10(b)(2) as void ab initio with respect to each new product intended solely for export which is distributed in commerce for use in any State.

(d) In deciding whether to institute proceedings against a manufacturer pursuant to section 11(d)(1) of the Act with respect to any product originally

intended solely for export but distributed in commerce for use in any state, the Administrator will consider:

(1) Whether the manufacturer had knowledge that such product would be distributed in commerce for use in any state; and

(2) Whether the manufacturer made reasonable efforts to ensure that such product would not be distributed in commerce for use in any state. Such reasonable efforts would include consideration of prior dealings with any person which resulted in introduction into commerce of a product manufactured for export only, investigation of prior instances known to the manufacturer of introduction into commerce of a product manufactured for export only, and contract provisions which minimize the probability of introduction into commerce of a product manufactured for export only.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61457, Dec. 5, 1977. Redesignated at 47 FR 57714, Dec. 28, 1982]

## Subpart B—Medium and Heavy Trucks

### § 205.50 Applicability.

(a) Except as otherwise provided for in these regulations the provisions of this subpart apply to any vehicle which has a gross vehicle weight rating (GVWR) in excess of 10,000 pounds, which is capable of transportation of property on a highway or street and which meets the definition of the term ''new product'' in the Act.

(b) The provisions of the subpart do not apply to highway, city, and school buses or to special purpose equipment which may be located on or operated from vehicles. Tests performed on vehicles containing such equipment may be carried out with the special purpose equipment in nonoperating condition. For purposes of this regulation special purpose equipment includes, but is not limited to, construction equipment, snow plows, garbage compactors and refrigeration equipment.

### § 205.51 Definitions.

(a) As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in other subparts of this part.

(1) *Acceptable Quality Level* means the maximum percentage of failing vehicles that for purposes of sampling inspection, can be considered satisfactory as a process average.

(2) *Acceptance of a batch* means that the number of noncomplying vehicles in the batch sample is less than or equal to the acceptance number as determined by the appropriate sampling plan.

(3) *Batch* means the collection of vehicles of the same category, configuration or subgroup thereof as designated by the Administrator in a test request, from which a batch sample is to be drawn, and inspected to determine conformance with the acceptability criteria.

(4) *Batch size* means the number as designated by the Administrator in the test request of vehicles of the same category or configuration in a batch.

(5) *Batch sample* means the collection of vehicles of the same category, configuration or subgroup thereof which are drawn from a batch and from which test samples are drawn.

(6) *Batch sample size* means the number of vehicles of the same category or configuration in a batch sample.

(7) *Cab over axle* or *cab over engine* means the cab which contains the operator/passenger compartment is directly above the engine and front axle and the entire cab can be tilted forward to permit access to the engine compartment.

(8) *Category* means a group of vehicle configurations which are identical in all material aspects with respect to the parameters listed in § 205.55–2.

(9) *Configuration* means the basic classification unit of a manufacturer's product line and is comprised of all vehicle designs, models or series which are identical in material aspects with respect to the parameters listed in § 205.55–3.

(10) *Acceptance of a Batch sequence* means that the number of rejected batches in the sequence is less than or equal to the acceptance number as determined by the appropriate sampling plan.

(11) *Rejection of a Batch sequence* means that the number of rejected batches in a sequence is equal to or

greater than the rejection number as determined by the appropriate sampling plan.

(12) *Capable of Transportation of Property on a street or highway* means that the vehicle:

(i) Is self propelled and is capable of transporting any material or fixed apparatus, or is capable of drawing a trailer or semi-trailer;

(ii) Is capable of maintaining a cruising speed of at least 25 mph over level, paved surface;

(iii) Is equipped or can readily be equipped with features customarily associated with practical street or highway use, such features including but not being limited to: A reverse gear and a differential, fifth wheel, cargo platform or cargo enclosure, and

(iv) Does not exhibit features which render its use on a street or highway impractical, or highly unlikely, such features including, but not being limited to, tracked road means, an inordinate size or features ordinarily associated with combat or tactical vehicles.

(13) *Exhaust System* means the system comprised of a combination of components which provides for enclosed flow of exhaust gas from engine exhaust port to the atmosphere.

(14) *Gross Combination Weight Rating* (GCWR) means the value specified by the manufacturer as the loaded weight of a combination vehicle.

(15) *Gross Vehicle Weight Rating* (GVWR) means the value specified by the manufacturer as the loaded weight of a single vehicle.

(16) *Inspection Criteria* means the rejection and acceptance numbers associated with a particular sampling plan.

(17) *Model year* means the manufacturer's annual production period which includes January 1 of such calendar year: Provided, that if the manufacturer has no annual production period, the term ''model year'' shall mean the calendar year.

(18) *Noise Control System* includes any vehicle part, component or system the primary purpose of which is to control or cause the reduction of noise emitted from a vehicle.

(19) *Noise emission test* means a test conducted pursuant to the measurement methodology specified in this subpart.

(20) [Reserved]

(21) *Rejection of a batch* means the number of noncomplying vehicles in the batch sample is greater than or equal to the rejection number as determined by the appropriate sampling plan.

(22) *Shift* means the regular production work period for one group of workers.

(23) *Test sample* means the collection of vehicles from the same category, configuration or subgroup thereof which is drawn from the batch sample and which will receive noise emissions tests.

(24) *Failing vehicle* means that the measured emissions of the vehicle, when measured in accordance with the applicable procedure, exceeds the applicable standard.

(25) *Acceptance of a vehicle* means that the measured emissions of the vehicle when measured in accordance with the applicable procedure, conforms to the applicable standard.

(26) *Tampering* means those acts prohibited by section 10(a)(2) of the Act.

(27) *Test sample size* means the number of vehicles of the same category or configuration in a test sample.

(28) *Test vehicle* means a vehicle selected and used to demonstrate compliance with the applicable noise emission standards.

(29) *Vehicle* means any motor vehicle, machine or tractor, which is propelled by mechanical power and capable of transportation of property on a street or highway and which has a gross vehicle weight rating in excess of 10,000 pounds and a partially or fully enclosed operator's compartment.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61456, 61458, Dec. 5, 1977; 47 FR 57714, Dec. 28, 1982]

### § 205.52 Vehicle noise emission standards.

(a) Low Speed Noise Emission Standard.

Vehicles which are manufactured after the following effective dates shall be designed, built and equipped so that they will not produce sound emissions in excess of the levels indicated.

| Effective date | Level |
|---|---|
| (i) January 1, 1979 | 83 dBA. |

| Effective date | Level |
|---|---|
| (ii) January 1, 1988 ..... | 80 dBA. |

(b) The standards set forth in paragraph (a) of this section refer to the sound emissions as measured in accordance with the procedures prescribed in § 205.54–1,2.

(c) Every manufacturer of a new motor vehicle subject to the standards prescribed in this paragraph shall, prior to taking any of the actions specified in section 10(a)(1) of the Act, comply with the other provisions of this subpart or Subpart A, as applicable.

(d) In-Use Standard. [Reserved]

(e) Low Noise Emission Product. [Reserved]

(Sec. 6, Pub. L. 92–574, 86 Stat. 1237 (42 U.S.C. 4905, 4906))

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61456, Dec. 5, 1977; 51 FR 852, Jan. 8, 1986]

### § 205.54 Test procedures.

The procedures described in this and subsequent sections will be the test program to determine the conformity of vehicles with the standards set forth in § 205.52 for the purposes of Selective Enforcement Auditing and Testing by the Administrator.

[47 FR 57714, Dec. 28, 1982]

### § 205.54–1 Low speed sound emission test procedures.

(a) *Instrumentation*. The following instrumentation shall be used, where applicable.

(1) A sound level meter which meets the Type 1 requirements of ANSI S1.4–1971, Specification for Sound Level Meters, or a sound level meter may be used with a magnetic tape recorder and/or a graphic level recorder or indicating meter, providing the system meets the requirements of § 205.54–2.

(2) A sound level calibrator. The calibrator shall produce a sound pressure level, at the microphone diaphragm, that is known to within an accuracy of ±0.5 dB. The calibrator shall be checked annually to verify that its output has not changed.

(3) An engine-speed tachometer which is accurate within ±2 percent of meter reading.

(4) An anemometer or other device for measurement of ambient wind speed accurate within ±10 percent.

(5) A thermometer for measurement of ambient temperature accurate within ±1 C.

(6) A barometer for measurement of ambient pressure accurate within ±1 percent.

(b)(1) The test site shall be such that the truck radiates sound into a free field over a reflecting plane. This condition may be considered fulfilled if the test site consists of an open space free of large reflecting surfaces, such as parked vehicles, signboards, buildings or hillsides, located within 100 feet (30.4 meters) of either the vehicle path or the microphone.

(2) The microphone shall be located 50 feet ±4 in. (15.2±0.1 meter) from the centerline of truck travel and 4 feet ±4 in. (1.2±0.1 meters) above the ground plane. The microphone point is defined as the point of intersection of the vehicle path and the normal to the vehicle path drawn from the microphone. The microphone shall be oriented in a fixed position to minimize the deviation from the flattest system response over the frequency range 100 Hz to 10 kHz for a vehicle traversing from the acceleration point through the end zone.

The microphone shall be oriented with respect to the source so that the sound strikes the diaphragm at the angle for which the microphone was calibrated to have the flattest frequency response characteristic over the frequency range 100 Hz to 10 kHz.

(3) An acceleration point shall be established on the vehicle path 50 feet (15 m) before the microphone point.

(4) An end point shall be established on the vehicle path 100 feet (30 m) from the acceleration point and 50 feet (15 m) from the microphone point.

(5) The end zone is the last 40 feet (12 m) of vehicle path prior to the end point.

(6) The measurement area shall be the triangular paved (concrete or sealed asphalt) area formed by the acceleration point, the end point, and the microphone location.

(7) The reference point on the vehicle, to indicate when the vehicle is at any of the points on the vehicle path,

shall be the front of the vehicle except as follows:

(i) If the horizontal distance from the front of the vehicle to the exhaust outlet is more than 200 inches (5.1 meters), tests shall be run using both the front and rear of the vehicle as reference points.

(ii) If the engine is located rearward to the center of the chassis, the rear of the vehicle shall be used as the reference point.

(8) The plane containing the vehicle path and the microphone location (plane ABCDE in Figure 1) shall be flat within ±2 inches (.05 meters).

(9) Measurements shall not be made when the road surface is wet, covered with snow, or during precipitation.

(10) Bystanders have an appreciable influence on sound level meter readings when they are in the vicinity of the vehicle or microphone; therefore not more than one person, other than the observer reading the meter, shall be within 50 feet (15.2 meters) of the vehicle path or instrument and the person shall be directly behind the observer reading the meter, on a line through the microphone and observer. To minimize the effect of the observer and the container of the sound level meter electronics on the measurements, cable should be used between the microphone and the sound level meter. No observer shall be located within 1 m in any direction of the microphone location.

(11) The maximum A-weighted fast response sound level observed at the test site immediately before and after the test shall be at least 10 dB below the regulated level.

(12) The road surface within the test site upon which the vehicle travels, and, at a minimum, the measurements area (BCD in figure 205.1) shall be smooth concrete or smooth sealed asphalt, free of extraneous material such as gravel.

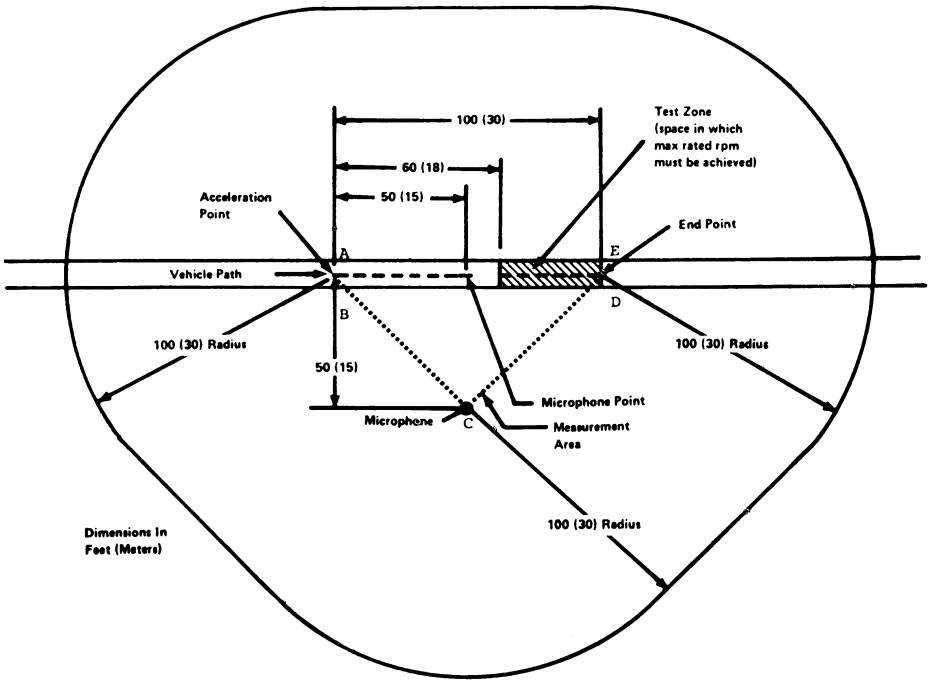



FIGURE 205.1

(13) Vehicles with diesel engines shall be tested using Number 1D or Number 2D diesel fuel possessing a cetane rating from 42 to 50 inclusive.

(14) Vehicles with gasoline engines shall use the grade of gasoline recommended by the manufacturer for use by the purchaser.

(15) Vehicles equipped with thermostatically controlled radiator fans may be tested with the fan not operating.

(c) *Procedures*—(1) *Vehicle operation for vehicles with standard transmissions.* Full throttle acceleration and closed throttle deceleration tests are to be used. A beginning engine speed and proper gear ratio must be determined for use during measurements. Closed throttle deceleration tests are required only for those vehicles equipped with an engine brake.

(i) Select the highest rear axle and/or transmission gear (''highest gear'' is used in the usual sense; it is synonymous to the lowest numerical ratio) and an initial vehicle speed such that at wide-open throttle the vehicle will accelerate from the acceleration point.

(*a*) Starting at no more than two-thirds (66 percent) of maximum rated or of governed engine speed.

(*b*) Reaching maximum rated or governed engine speed within the end zone.

(*c*) Without exceeding 35 mph (56 k/h) before reaching the end point.

(*1*) Should maximum rated or governed rpm be attained before reaching the end zone, decrease the approach rpm in 100 rpm increments until maximum rated or governed rpm is attained within the end zone.

(*2*) Should maximum rated or governed rpm not be attained until beyond the end zone, select the next lower gear until maximum rated or governed rpm is attained within the end zone.

(*3*) Should the lowest gear still result in reaching maximum rated or governed rpm beyond the permissible end zone, unload the vehicle and/or increase the approach rpm in 100 rpm increments until the maximum rated or governed rpm is reached within the end zone.

(ii) For the acceleration test, approach the acceleration point using the engine speed and gear ratio selected in paragraph (c)(1) of this section and at the acceleration point rapidly establish wide-open throttle. The vehicle reference shall be as indicated in paragraph (b)(7) of this section. Acceleration shall continue until maximum rated or governed engine speed is reached.

(iii) Wheel slip which affects maximum sound level must be avoided.

(2) *Vehicle operation for vehicles with automatic transmissions.* Full throttle acceleration and closed throttle deceleration tests are to be used. Closed throttle deceleration tests are required only for those vehicles equipped with an engine brake.

(i) Select the highest gear axle and/or transmission gear (highest gear is used in the usual sense; it is synonymous to the lowest numerical ratio) in which no up or down shifting will occur under any operational conditions of the vehicle during the test run. Also, select an initial vehicle speed such that at wide-open throttle the vehicle will accelerate from the acceleration point.

(*a*) Starting at two-thirds (66 percent) of maximum rated or of governed engine speed.

(*b*) Reaching maximum rated or governed engine speed within the end zone.

(*c*) Without exceeding 35 mph (56 k/h) before reaching the end point.

(*1*) Should maximum rated or governed rpm be attained before reaching the end zone, decrease the approach rpm in 100 rpm increments until maximum rated or governed rpm is attained within the end zone.

(*2*) Should maximum rated or governed rpm not be attained until beyond the end zone, select the next lower gear until maximum rated or governed rpm is attained within the end zone.

(*3*) Should the lowest gear still result in reaching maximum rated or governed rpm beyond the permissible end zone, unload the vehicle and/or increase the approach rpm in 100 rpm increments until the maximum rated or governed rpm is reached within the end zone, notwithstanding that approach engine speed may now exceed two-thirds of maximum rated or of full load governed engine speed.

(*4*) Should the maximum rated or governed rpm still be attained before entering the end zone, and the engine rpm during approach cannot be further lowered, begin acceleration at a point

10 feet closer to the beginning of the end zone. The approach rpm to be used is to be that rpm used prior to the moving of the acceleration point 10 feet closer to the beginning of the end zone.

(*5*) Should the maximum rated or governed rpm still be attained before entering the end zone, repeat the instructions in paragraph (c)(2)(i)(*c*)(*4*) of this section until maximum rated or governed rpm is attained within the end zone.

(ii) For the acceleration test, approach the acceleration point using the engine speed and gear ratio selected in paragraph (c)(2)(i) of this section and at the acceleration point rapidly establish wide-open throttle. The vehicle reference shall be as indicated in paragraph (b)(7) of this section. Acceleration shall continue until maximum rated or governed engine speed is reached.

(iii) Wheel slip which affects maximum sound level must be avoided.

(3) *Measurements.* (i) The meter shall be set for ''fast response'' and the A-weighted network.

(ii) The meter shall be observed during the period while the vehicle is accelerating or decelerating. The applicable reading shall be the highest sound level obtained for the run. The observer is cautioned to rerun the test if unrelated peaks should occur due to extraneous ambient noises. Readings shall be taken on both sides of the vehicle.

(iii) The sound level associated with a side shall be the average of the first two pass-by measurements for that side, if they are within 2 dB(A) of each other. Average of measurements on each side shall be computed separately. If the first two measurements for a given side differ by more than 2 dB(A), two additional measurements shall be made on each side, and the average of the two highest measurements on each side, within 2 dB(A) of each other, shall be taken as the measured vehicle sound level for that side. The reported vehicle sound level shall be the higher of the two averages.

(d) *General requirements.* (1) Measurements shall be made only when wind velocity is below 12 mph (19 km/hr).

(2) Proper usage of all test instrumentation is essential to obtain valid measurements. Operating manuals or other literature furnished by the instrument manufacturer shall be referred to for both recommended operation of the instrument and precautions to be observed. Specific items to be adequately considered are:

(i) The effects of ambient weather conditions on the performance of the instruments (for example, temperature, humidity, and barometric pressure).

(ii) Proper signal levels, terminating impedances, and cable lengths on multi-instrument measurement systems.

(iii) Proper acoustical calibration procedure to include the influence of extension cables, etc. Field calibration shall be made immediately before and after each test sequence. Internal calibration means is acceptable for field use, provided that external calibration is accomplished immediately before or after field use.

(3)(i) A complete calibration of the instrumentation and external acoustical calibrator over the entire frequency range of interest shall be performed at least annually and as frequently as necessary during the yearly period to insure compliance with the standards cited in American National Standard S1.4–1971 ''Specifications for Sound Level Meters'' for a Type 1 instrument over the frequency range 50 Hz–10,000 Hz.

(ii) If calibration devices are utilized which are not independent of ambient pressure (e.g., a piston-phone) corrections must be made for barometric or altimetric changes according to the recommendation of the instrument manufacturer.

(4) The truck shall be brought to a temperature within its normal operating temperature range prior to commencement of testing. During testing appropriate caution shall be taken to maintain the engine temperatures within such normal operating range.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 11836, Mar. 1, 1977; 42 FR 61456, Dec. 5, 1977]

**§ 205.54–2 Sound data acquisition system.**

(a) Systems employing tape recorders and graphic level recorders may be established as equivalent to a Type I—ANSI S1.4–1971 sound level meter for use in determining compliance with this regulation by meeting the requirements of this section (§ 205.54–2(b)). This sound data acquisition system qualification procedure is based primarily on ANSI S6.1–1973.

(1) *Performance requirements*—(i) *System frequency response.* It is required that the overall steady-state frequency response of the data acquisition system shall be within the tolerances prescribed in Table 205.1 when measured in accordance with section (2). The tolerances in Table 205.1 are applicable to either flat or A-weighted response. (See paragraph (a)(3)(iii) of this section.)

(ii) *Detector response.* To ensure that a (true) rms indication is provided, the difference between the level indicated for a 1000 Hz sinusoidal signal equivalent to a sound level of 86 dB (rms) and the level indicated for an octave band of random noise of equal energy as the sinusoidal signal centered at 1000 Hz shall be no greater than 0.5 dB. A true rms voltmeter shall be used to determine equivalence of two input signals.

(iii) *Indicating meter.* If an indicating meter is used to obtain sound levels or band pressure levels, it must meet the requirements of paragraphs (a)(1)(ii) and (vi)(B) of this section and the following.

TABLE 205.1—SYSTEM RESPONSE DATA

| Freq. (hertz) | A-weighted response (Re-1000 Hz, dB) | Tolerance (decibels) | |
|---|---|---|---|
| | | Plus— | Minus— |
| 31.5 | −39.4 | 1.5 | 1.5 |
| 40.0 | −34.6 | 1.5 | 1.5 |
| 50.0 | −30.2 | 1.0 | 1.0 |
| 63.0 | −26.2 | 1.0 | 1.0 |
| 80.0 | −22.5 | 1.0 | 1.0 |
| 100.0 | −19.1 | 1.0 | 1.0 |
| 125.0 | −16.1 | 1.0 | 1.0 |
| 160.0 | −13.4 | 1.0 | 1.0 |
| 200.0 | −10.9 | 1.0 | 1.0 |
| 250.0 | −8.6 | 1.0 | 1.0 |
| 315.0 | −6.6 | 1.0 | 1.0 |
| 400.0 | −4.8 | 1.0 | 1.0 |
| 500.0 | −3.2 | 1.0 | 1.0 |
| 630.0 | −1.9 | 1.0 | 1.0 |
| 800.0 | −.8 | 1.0 | 1.0 |
| 1,000.0 | 0 | 1.0 | 1.0 |
| 1,250.0 | .6 | 1.0 | 1.0 |
| 1,600.0 | 1.0 | 1.0 | 1.0 |
| 2,000.0 | 1.2 | 1.0 | 1.0 |
| 2,500.0 | 1.3 | 1.0 | 1.0 |
| 3,150.0 | 1.2 | 1.0 | 1.0 |
| 4,000.0 | 1.0 | 1.0 | 1.0 |
| 5,000.0 | .5 | 1.5 | 2.0 |
| 6,300.0 | −.1 | 1.5 | 2.0 |
| 8,000.0 | −1.1 | 1.5 | 3.0 |
| 10,000.0 | −2.5 | 2.0 | 4.0 |
| 12,500.0 | −4.3 | 3.0 | 6.0 |

(A) The scale shall be graduated in 1 dB steps.

(B) No scale indication shall be more than 0.2 dB different from the true value of the signal when an input signal equivalent to 86 dB sound level indicates correctly.

(C) Maximum indication for an input signal of 1000 Hz tone burst of 0.2 sec duration shall be within the range of −2 to 0 dB with respect to the steady-state indication for a 1000 Hz tone equivalent to 86 dB sound level.

(iv) *Microphone.* If microphone is used which has not been provided as a component of a precision sound level meter, it must be determined to meet the microphone characteristics described in IEC Publication 179, Precision Sound Level Meters.

(v) *Magnetic tape recorders.* No requirements are described in this document pertaining to tape recorders, except for frequency response. Generally, recorders of adequate quality to provide the frequency response performance required will also meet other minimum requirements for distortion, signal-to-noise ratio, etc.

(vi) *Graphic level recorder dynamic response.* When using a graphic level recorder, it is necessary to select pen response settings such that the readings obtained are statistically equivalent to those obtained by directly reading a meter which meets the ''fast'' dynamic requirement of a precision sound level meter indicating meter system for the range of vehicles to be tested. To ensure statistical equivalence, at least 30 comparative observations of real test data shall be made and the average of the absolute value of the differences observed shall be less than 0.5 dB. The settings described in this paragraph

likely assure appropriate dynamic response; however, different settings may be selected on the basis of the above requirement.

(A) Use a pen writing speed of nominally 60–100 dB/sec. If adjustable, low frequency response should be limited to about 20 Hz.

(B) Indicated overshoot for a suddenly applied 1000 Hz sinusoidal signal equivalent to 86 dB sound level shall be no more than 1.1 dB and no less than 0.1 dB.

(2) *Frequency response qualification procedure.* (i) Typical noise measurement and analysis configurations are shown in Figures 205.2 through 205.4. The qualification procedure described herein duplicates these configurations, but with the microphone replaced by an electronic sinewave oscillator. Caution should be exercised when connecting an oscillator to the input of a sound level meter to ensure, perhaps by using a resistive voltage divider network, that the input is not overloaded (see § 205.54–2(a)(2)(ii)).

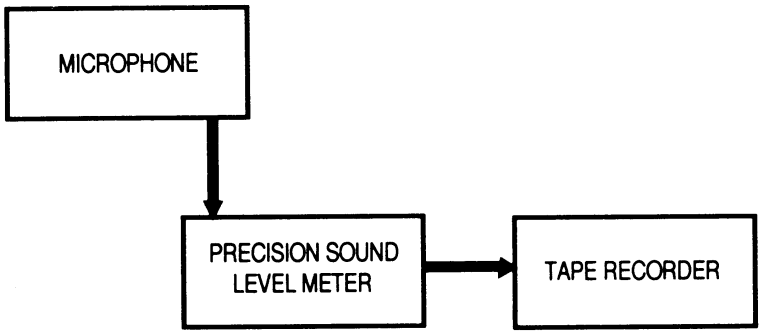



FIGURE 205.2 DATA RECORDING

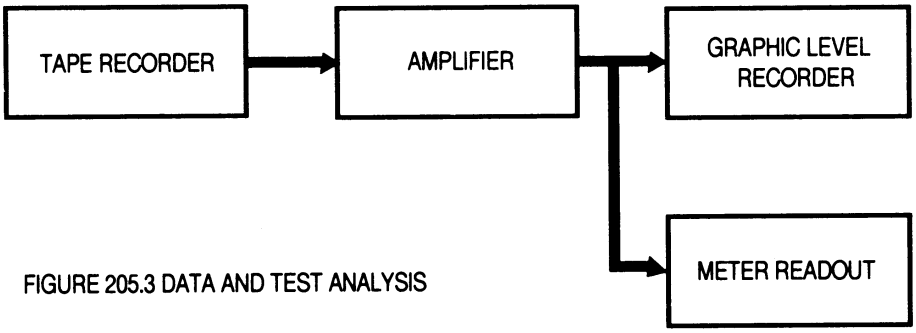



FIGURE 205.3 DATA AND TEST ANALYSIS

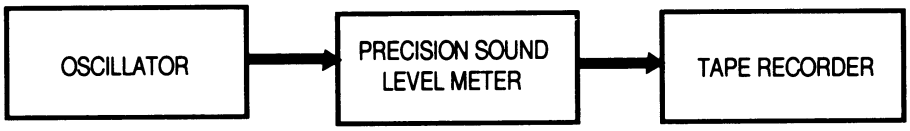



FIGURE 205.4 TEST RECORDING

(ii) Calibrate the oscillator to be used by measuring its output relative to the voltage which is equivalent to 86 dB sound level at each of the 27 frequencies listed in Table 205.1 using an electronic voltmeter of known calibration. Record the result in voltage level in dB re voltage corresponding to 86 dB sound level at 1000 Hz. This will describe the frequency response characteristics of the oscillator.

(iii) If a graphic level recorder is to be used, connect it to the oscillator output. If the oscillator and graphic level recorder can be synchronized, slowly sweep the frequency over the range of 31.5 to 12,500 Hz, recording the oscillator output. If they cannot be synchronized, record oscillator output for signals at the 27 frequencies given in Table 205.1. The differences between the combined response thus obtained and the oscillator response obtained previously will describe the frequency response of the graphic level recorder.

(iv) If visual observation of an indicating meter is to be used for obtaining data, the oscillator should be connected to the indicating meter input (such as the microphone input of a sound level meter) and the meter reading observed for a fixed oscillator output voltage setting for signals at the 27 frequencies given in Table 205.1.

(v) To check a tape recorder, connect the instruments as shown in Figure 205.4. Using a 1000 Hz tone, adjust the oscillator output level to obtain a reading 15 dB below maximum record level. If the synchronized oscillator/graphic level recorder system is to be used for analysis, record an oscillator sweep over the range of 31.5 to 12,500 Hz, using an appropriate tape recorder input attenuator setting. Alternatively, tape-record frequency tones at the 27 frequencies given in Table 205.1. Replay the tape recordings using the setup shown in Figure 205.3. Record the data on a graphic level recorder or through visual observation of the indicating meter. Subtract the oscillator frequency response in paragraph (b)(2) of this section from the response obtained through the record-playback sequence to obtain the record/reproduce frequency response of the system except for the microphone.

(vi) To obtain the overall system frequency response, add the manufacturer's microphone calibration data to the response just obtained. This may be the frequency response for the specific microphone to be used, including calibration tolerances. Alternatively, use the manufacturer's ''typical'' microphone response plus and minus the maximum deviation expected from ''typical'' including calibration tolerances. Use the microphone response curve which corresponds to the manner in which it is used in the field. It may be required to add a correction to the response curves provided to obtain field response; refer to the manufacturer's manual.

(vii) Adjustment or repair of equipment may be required to obtain response within the requirements of paragraph (a) of this section. After any adjustments, the system shall be requalified according to paragraph (b) of this section.

(3) *General comments.* (i) Calibrate tape recorders using the brand and type of magnetic tape used for actual data acquisition. Differences in tape can cause an appreciable variation in the recorder/reproduce frequency response characteristics of tape recorder.

(ii) It shall be ensured that the instrumentation used will perform within specifications and applicable tolerances over the temperature, humidity, and other environmental variation ranges which may be encountered in vehicle noise measurement works.

(iii) Qualification tests shall be performed using equipment (including cables) and recording and playback techniques identical with those used while recording vehicle noise. For example, if weighted sound level data are normally recorded use similar weighting and apply the tolerances of Table 205.1 to the weighting curve for comparison with record-playback curves. Precautions should also be taken to ensure that source and load impedances are appropriate to the device being tested. Other data acquisition systems may use any combination of microphones, sound level meters, amplifiers, tape recorders, graphic level recorders, or indicating meters. The same approach to qualifying such a system shall be taken as described in this document for the

systems depicted in Figures 205.2, 205.3 and 205.4.

(b) Systems other than those specified in §§205.54–1(a) and 205.54–2(a) may be used for establishing compliance with this regulation. In each case the system must yield sound levels which are equivalent to those produced by a sound level meter Type 1 ANSI S1.4–1971. The manufacturer bears the burden of demonstrating such equivalence.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61456, Dec. 5, 1977; 47 FR 57714, Dec. 28, 1982]

## § 205.55 Requirements.

### § 205.55–1 General requirements.

(a) Every new vehicle manufactured for distribution in commerce in the United States which is subject to the standards prescribed in this subpart and not exempted in accordance with § 205.5:

(1) Shall be labeled in accordance with the requirements of § 205.55–5 of this subpart.

(2) Shall conform to the applicable noise emission standard established in § 205.52 of this regulation.

(b) The requirements of paragraph (a) apply to new products which conform to the definition of vehicles in these regulations and at the time such new products are assembled to that state of completeness in which the manufacturer distributes them in commerce.

(c) Subsequent manufacturers of a new product which conforms to the definition of vehicle in these regulations when received by them from a prior manufacturer, need not fulfill the requirements of paragraph (a)(1) where such requirements have already been complied with by a prior manufacturer.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61456, Dec. 5, 1977; 47 FR 57714, Dec. 28, 1982]

### § 205.55–2 Compliance with standards.

(a)(1) Prior to distribution in commerce of vehicles of a specific configuration, the first manufactures of such vehicles must verify such configurations in accordance with the requirements of this subpart.

(2) [Reserved]

(3) At any time following receipt of notice under this section with respect to a configuration, the Administrator may require that the manufacturer ship test vehicles to the EPA test facility in order for the Administrator to perform the tests required for production verification.

(b) The requirements for purposes of testing by the Administrator and selective enforcement auditing with regard to each vehicle configuration consist of:

(1) Testing in accordance with § 205.54 of a vehicle selected in accordance with § 205.57–2, and

(2) Compliance of the test vehicle with the applicable standard when tested in accordance with § 205.54.

(c)(1) In lieu of testing vehicles of every configuration as described in paragraph (b) of this section, the manufacturer may elect to verify the configuration based on representative testing, the requirements of which consist of:

(i) Grouping configurations into a category where each category will be determined by a separate combination of at least the following parameters (a manufacturer may use more parameters):

(*a*) *Engine type.*

(*1*) Gasoline—two stroke cycle.

(*2*) Gasoline—four stroke cycle.

(*3*) Diesel—two stroke cycle.

(*4*) Diesel—four stroke cycle.

(*5*) Rotary—wankel.

(*6*) Turbine.

(*7*) Other.

(*b*) *Engine manufacturer.*

(*c*) *Engine displacement.*

(*d*) *Engine configuration* (e.g., L–6, V–8, etc.).

(*e*) *Series* (i.e., cab design) including but not limited to conventional, cab over engine, and cab forward.

(ii) Identifying the configuration within each category which emits the highest sound pressure level (dBA) based on his best technical judgment and/or emission test data;

(iii) Testing in accordance with § 205.54 of a vehicle selected in accordance with § 205.57–2 which must be a vehicle of the configuration which is identified pursuant to paragraph (c)(1)(ii) of this section as having the highest sound pressure level (estimated or actual) within the category; and

(iv) Compliance of the test vehicle with applicable standards when tested in accordance with § 205.54.

(2) Where the requirements of paragraph (c)(1) are complied with, all those configurations contained within a category are considered represented by the tested vehicle.

(3) Where the manufacturer tests a vehicle configuration which has not been determined as having the highest sound pressure level of a category, but all other requirements of paragraph (c)(1) of this section are complied with all those configurations contained with that category which are determined to have sound pressure levels no greater than the tested vehicle are considered to be represented by the tested vehicle, however, a manufacturer must for purposes of Testing by the Administrator and Selective Enforcement Auditing verify according to the requirements of paragraphs (b)(1) and/or (c)(1) of this section any configurations in the subject category which have a higher sound pressure level than the vehicle configuration tested.

(d) [Reserved]

(e) The manufacturer may, at his option, proceed with any of the following alternatives with respect to any vehicle determined not in compliance with applicable standards.

(1) In the case of representative testing a new test vehicle from another configuration must be selected according to the requirements of paragraph (c) of this section, in order to verify the configurations represented by the non-compliant vehicle.

(2) Modify the test vehicle and demonstrate by testing that it meets applicable standards. The manufacturer must modify all production vehicles of the same configuration in the same manner as the test vehicle before distribution into commerce.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61458, Dec. 5, 1977; 47 FR 57714, Dec. 28, 1982; 48 FR 27040, June 13, 1983]

### § 205.55–3 Configuration identification.

(a) A separate vehicle configuration shall be determined by each combination of the following parameters:

(1) *Exhaust system configuration.* (i) Single vertical.

(ii) Dual vertical.

(iii) Single horizontal.

(iv) Dual horizontal.

(2) *Air induction system* (*engine*). (i) Natural.

(ii) Turbocharged.

(3) *Fan.* (i) Diameter.

(ii) Drive.

(*a*) Direct.

(*b*) Thermostatic.

(iii) Max fan rpm.

(4) *Engine manufacturer's horsepower rating.*

(5) *Cab characteristic.* (i) Sleeper.

(ii) Non sleeper.

(6) *Category parameters listed in § 205.55–2.*

### § 205.55–4 Labeling-compliance.

(a)(1) The manufacturer of any vehicle subject to the provisions of § 205.52 shall, at the time of manufacture, affix a permanent, legible label, of the type and in the manner described below, containing the information hereinafter provided, to all such vehicles to be distributed in commerce. The labels shall be affixed in such a manner that they cannot be removed without destroying or defacing them, and shall not be affixed to any equipment which is easily detached from such vehicle.

(2) A label shall be permanently attached, in a readily visible position, in the operator's compartment.

(3) Labels for vehicles not manufactured solely for use outside the United States shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:

(i) The label heading: Vehicle Noise Emission Control Information;

(ii) Full corporate name and trademark of manufacturer;

(iii) Month and year of manufacture;

(iv) The statement:

This Vehicle Conforms to U.S. EPA Regulations for Noise Emission Applicable to Medium and Heavy Trucks.

The following acts or the causing thereof by any person are prohibited by the Noise Control Act of 1972:

(A) The removal or rendering inoperative, other than for purposes of maintenance, repair, or replacement, of any noise control device or element of design (listed in the owner's manual) incorporated into this vehicle in compliance with the Noise Control Act;

(B) The use of this vehicle after such device or element of design has been removed or rendered inoperative.

(b) Labels for vehicles manufactured solely for use outside the United States shall contain the words ''For Export Only.''

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61456, 61458, Dec. 5, 1977. Redesignated at 47 FR 57715, Dec. 28, 1982]

### § 205.55–5 Labeling-exterior. [Reserved]

### § 205.56 Testing by the Administrator.

(a)(1) The Administrator may require that any vehicles to be tested pursuant to the Act be submitted to him, at such place and time as he may reasonably designate and in such quantity and for such time as he may reasonably require for the purpose of conducting tests in accordance with test procedures described in § 205.54 to determine whether such vehicles or a manufacturer's test facility conform to applicable regulations. It is a condition of the requirements under this section that the manner in which the Administrator conducts such tests, the EPA test facility itself, and the test procedures he employs shall be based upon good engineering practice and meet or exceed the requirements of § 205.54 of the regulations.

(2) The Administrator may specify that he will conduct such testing at the manufacturer's facility, in which case instrumentation and equipment of the type required by these regulations shall be made available by the manufacturer for test operations. The Administrator may conduct such tests with his own equipment, which shall equal or exceed the performance specifications of the instrumentation or equipment specified by the Administrator in these regulations.

(3) The manufacturer may observe tests conducted by the Administrator pursuant to this section on vehicles produced by such manufacturer and may copy the data accumulated from such tests. The manufacturer may inspect any such vehicles before and after testing by the Administrator.

(b)(1) If, based on tests conducted by the Administrator or other relevant information, the Administrator determines that the test facility does not meet the requirements of § 205.54–1 (a) and (b) he will notify the manufacturer in writing of his determination and the reasons therefor.

(2) The manufacturer may at any time within 15 days after receipt of a notice issued under paragraph (b)(1) of this section request a hearing conducted in accordance with 5 U.S.C. 554 on the issue of whether his test facility was in conformance. Such notice will not take effect until 15 days after receipt by the manufacturer, or if a hearing is requested under this paragraph, until adjudication by the hearing examiner.

(3) After any notification issued under paragraph (b)(1) of this section has taken effect, no data thereafter derived from such test facility will be acceptable for purposes of this part.

(4) The manufacturer may request in writing that the Administrator reconsider his determination under paragraph (b)(1) of this section based on data or information which indicates that changes have been made to the test facility and such changes have resolved the reasons for disqualification.

(5) The Administrator will notify the manufacturer of his determination and an explanation of the reasons underlying it with regard to the requalification of the test facility within 10 working days after receipt of the manufacturer's request for reconsideration pursuant to paragraph (b)(4) of this section.

(c)(1) The Administrator will assume all reasonable costs associated with shipment of vehicles to the place designated pursuant to paragraph (a) of this section except with respect to:

(i) [Reserved]

(ii) Testing of a reasonable number of vehicles for purposes of selective enforcement auditing under § 205.57 or testing of smaller numbers of vehicles, if the manufacturer has failed to establish that there is a correlation between its test facility and the EPA test facility or the Administrator has reason to believe, and provides the manufacturer a statement of such reasons, that the vehicles to be tested would fail to meet the standard prescribed in this subpart if tested at the EPA test facility, but

would meet such standard if tested at the manufacturer's test facility;

(iii) Any testing performed during a period when a notice of nonconformance of the manufacturer's test facility issued pursuant to paragraph (b) of this section is in effect;

(iv) Any testing performed at place other than the manufacturer's facility as a result of the manufacturer's failure to permit the Administrator to conduct or monitor testing as required by this part.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61456, 61459, Dec. 5, 1977; 47 FR 57715, Dec. 28, 1982]

## § 205.57 Selective enforcement auditing requirements.

### § 205.57–1 Test request.

(a) The Administrator will request all testing under § 205.57 by means of a test request addressed to the manufacturer.

(1) Except as provided in paragraphs (a) (2) and (3) of this section, the Administrator will not issue to a manufacturer during any model year more test requests than a number determined by dividing the total number of vehicles subject to this regulation which the manufacturer projects he will produce during that model year by 25,000 and rounding to the next higher whole number: Except, that the Administrator may issue one additional test request beyond the annual limit to any manufacturer for each time a batch sequence for any category, configuration or subgroup thereof of such manufacturer's production is rejected in accordance with § 205.57–7.

(2) Any test request issued against a category, configuration or subgroup thereof which the Administrator has reason to believe does not meet the standards specified in § 205.52 will not be counted against the annual limit on test requests described in paragraph (a)(1) of this section. Any such request shall include a statement of the Administrator's reason for such belief.

(3) Any test request under which testing is not completed will not be counted against the annual limit on test requests described in paragraph (a)(1) of this section.

(b) The test request will be signed by the Assistant Administrator for Enforcement or his designee. The test request will be delivered by an EPA Enforcement Officer to the plant manager or other responsible official as designated by the manufacturer.

(c) The test request will specify the vehicle category, configuration or subgroup thereof selected for testing, the batch from which sampling is to begin, the batch size, the manufacturer's plant or storage facility from which the vehicles must be selected, the time at which a vehicle must be selected. The test request will also provide for situations in which the selected configuration or category is unavailable for testing. The test request may include an alternative category or configuration selected for testing in the event that vehicles of the first specified category or configuration are not available for testing because the vehicles are not being manufactured at the specified plant and/or are not being manufactured during the specified time or not being stored at the specified plant or storage facility.

(d) Any manufacturer shall, upon receipt of the test request, select and test a batch sample of vehicles from two consecutively produced batches of the vehicle category or configurations specified in the test request in accordance with these regulations and the conditions specified in the test request.

(e)(1) Any testing conducted by the manufacturer pursuant to a test request shall be initiated within such period as is specified within the test request: Except, that such initiation may be delayed for increments of 24 hours or one business day where ambient test site weather conditions, or other conditions beyond the control of the manufacturer, in any 24-hour period do not permit testing: *Provided,* That these conditions for that period are recorded.

(2) The manufacturer shall complete emission testing on a minimum of five vehicles per day unless otherwise provided for by the Administrator or unless ambient test site conditions only permit the testing of a lesser number: *Provided,* that ambient test site weather conditions for that period are recorded.

(3) The manufacturer will be allowed 24 hours to ship vehicles from a batch sample from the assembly plant to the testing facility if the facility is not located at the plant or in close proximity to the plant: Except, that the Administrator may approve more time based upon a request by the manufacturer accompanied by a satisfactory justification.

(f) The Administrator may issue an order to the manufacturer to cease to distribute into commerce vehicles of a specified category or configuration being manufactured at a particular facility if:

(1) The manufacturer refuses to comply with the provisions of a test request issued by the Administrator pursuant to this section; or

(2) The manufacturer refuses to comply with any of the requirements of this section.

(g) A cease-to-distribute order shall not be issued under paragraph (f) of this section if such refusal is caused by conditions and circumstances outside the control of the manufacturer which renders it impossible to comply with the provisions of a test request or any other requirements of this section. Such conditions and circumstances shall include, but are not limited to, any uncontrollable factors which result in the temporary unavailability of equipment and personnel needed to conduct the required tests, such as equipment break-down or failure or illness of personnel, but shall not include failure of the manufacturer to adequately plan for and provide the equipment and personnel needed to conduct the tests. The manufacturer will bear the burden of establishing the presence of the conditions and circumstances required by this paragraph.

(h) Any such order shall be issued only after a notice and opportunity for a hearing.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61459, Dec. 5, 1977; 43 FR 12326, Mar. 24, 1978]

### § 205.57–2 Test vehicle sample selection.

(a) Vehicles comprising the batch sample which are required to be tested pursuant to a test request in accordance with this subpart will be selected in the manner specified in the test request from a batch of vehicles of the category or configuration specified in the test request. If the test request specifies that the vehicles comprising the batch sample must be selected randomly, the random selection will be achieved by sequentially numbering all of the vehicles in the batch and then using a table of random numbers to select the number of vehicles as specified in paragraph (c) of this section based on the batch size designated by the Administrator in the test request. An alternative random selection plan may be used by a manufacturer: *Provided,* That such a plan is approved by the Administrator. If the test request does not specify that test vehicles must be randomly selected, the manufacturer shall select test vehicles consecutively.

(1) Should a situation arise in which the configuration to be tested consists of only vehicles with automatic transmissions, they shall be tested in accordance with § 205.54–1(c)(2).

(2) If the configuration to be tested consists of both automatic transmission and standard transmission vehicles, the test vehicle shall be a standard transmission vehicle unless the manufacturer has reason to believe that the automatic transmission vehicle emits a greater sound level.

(b) The Acceptable Quality Level is 10 percent. The appropriate sampling plans associated with the designated AQL are contained in Appendix I, Table II.

(c) The appropriate batch sample size will be determined by reference to Appendix I, Table I and II. A code letter is obtained from Table I based on the batch size designated by the Administrator in a test request. The batch sample size will be obtained from Table II. The batch sample size will be equal to the maximum cumulative sample size for the appropriate code letter obtained from Table I plus an additional 10 percent rounded off to the next highest number.

(d) If the test request specifies that vehicles comprising the batch sample must be selected randomly, individual vehicles comprising the test sample will be randomly selected from the batch sample using the same random selection plan as in paragraph (a) of

this section. Test sample size will be determined by entering Table II.

(e) The test vehicle of the category, configuration or subgroup thereof selected for testing shall have been assembled by the manufacturer for distribution in commerce using the manufacturer's normal production process in accordance with § 205.55–5(a).

(f) Unless otherwise indicated in the test request, the manufacturer will select the batch sample from the production batch, next scheduled after receipt of the test request, of the category or configuration specified in the test request.

(g) Unless otherwise indicated in the test request, the manufacturer shall select the vehicles designated in the test request for testing.

(h) At their discretion, EPA Enforcement Officers, rather than the manufacturer, may select the vehicles designated in the test request.

(i) The manufacturer will keep on hand all vehicles in the batch sample until such time as the batch is accepted or rejected in accordance with § 205.57–6: Except, that vehicles actually tested and found to be in conformance with these regulations need not be kept.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61459, Dec. 5, 1977; 47 FR 57715, Dec. 28, 1982; 48 FR 27039, June 13, 1983]

### § 205.57–3 Test vehicle preparation.

(a) Prior to the official test, the test vehicle selected in accordance with § 205–57–2 shall not be prepared, tested, modified, adjusted, or maintained in any manner unless such adjustments, preparation, modification and/or tests are part of the manufacturer's prescribed manufacturing and inspection procedures, and are documented in the manufacturer's internal vehicle assembly and inspection procedures or unless such adjustments and/or tests are required or permitted under this subpart or are approved in advance by the Administrator. For purposes of this section, prescribed manufacturing and inspection procedures include quality control testing and assembly procedures normally performed by the manufacturer on like products during early production so long as the resulting testing is not biased by the procedure. In the case of imported products the manufacturer may perform adjustments, preparations, modification and/or tests normally performed at the port of entry by the manufacturer to prepare the vehicle for delivery to a dealer or customer.

(b) Equipment or fixtures necessary to conduct the test may be installed on the vehicle: *Provided,* That such equipment or fixtures shall have no effect on the noise emissions of the vehicle, as determined by measurement methodology.

(c) In the event of vehicle malfunction (i.e., failure to start, misfiring cylinder, etc.) the manufacturer may perform the maintenance that is necessary to enable the vehicle to operate in a normal manner.

(d) No quality control, testing, assembly or selection procedures shall be used on the completed vehicle or any portion thereof, including parts and subassemblies, that will not normally be used during the production and assembly of all other vehicles of the category which will be distributed in commerce, unless such procedures are required or permitted under this subpart.

[47 FR 57715, Dec. 28, 1982; 48 FR 27039, June 13, 1983]

### § 205.57–4 Testing procedures.

(a) The manufacturer shall conduct one valid test in accordance with the test procedures specified in § 205.54 of this subpart for each vehicle selected for testing pursuant to this subpart.

(b) No maintenance will be performed on test vehicles except as provided for by § 205.57–3. In the event a vehicle is unable to complete the emission test, the manufacturer may replace the vehicle. Any replacement vehicle will be a production vehicle of the same configuration as the replaced vehicle. It will be randomly selected from the batch sample and will be subject to all the provisions of these regulations.

### § 205.57–5 Reporting of the test results.

(a) Within 5 working days after completion of testing of all vehicles in a batch sample the manufacturer shall submit to the Administrator a final report which will include the information

required by the test request in the format stipulated in the test request in addition to the following:

(1) The name, location, and description of the manufacturer's emission test facilities which meet the specifications of § 205.54 and were utilized to conduct testing reported pursuant to this section: Except, that a test facility that has been described in a previous submission under this subpart need not again be described but must be identified as such.

(2) A description of the random vehicle selection method used, referencing any tables of random numbers that were used, name of the person in charge of the random number selection, if the vehicle test request specifies a random vehicle selection.

(3) The following information for each noise emission test conducted,

(i) The completed data sheet required by § 205.54 for all noise emission tests including: For each invalid test, the reason for invalidation.

(ii) A complete description of any modification, repair, preparation, maintenance, and/or testing which could affect the noise emissions of the vehicle and which was performed on the test vehicle but will not be performed on all other production vehicles.

(iii) The reason for the replacement where a replacement vehicle was authorized by the Administrator, and, if any, the test results for the replaced vehicles.

(4) A complete description of the sound data acquisition system if other than those specified in §§ 205.54–1(a) and 205.54–2(a).

(5) The following statement and endorsement:

This report is submitted pursuant to section 6 and section 13 of the Noise Control Act of 1972. To the best of _____(company name) knowledge, all testing for which data are reported herein was conducted in strict conformance with applicable regulations under 40 CFR 205.1 et seq., all the data reported herein are a true and accurate representation of such testing and all other information reported herein is true and accurate. I am aware of the penalties associated with violations of the Noise Control Act of 1972 and the regulations thereunder.

(authorized representative)

(b) All information required to be forwarded to the Administrator pursuant to this section shall be addressed to Director, Noise Enforcement Division (EN–387), U.S. Environmental Protection Agency, Washington, DC 20460.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61459, Dec. 5, 1977; 43 FR 12326, Mar. 24, 1978]

### § 205.57–6 Acceptance and rejection of batches.

(a) The batch from which a batch sample is selected will be accepted or rejected based upon the number of failing vehicles in the batch sample. A sufficient number of test samples will be drawn from the batch sample until the cumulative number of failing vehicles is less than or equal to the acceptance number or greater than or equal to the rejection number appropriate for the cumulative number of vehicles tested. The acceptance and rejection numbers listed in Appendix I, Table II at the appropriate code letter obtained according to § 205.57–2 will be used in determining whether the acceptance or rejection of a batch has occurred.

(b) Acceptance or rejection of a batch takes place when the decision that a vehicle is a failing vehicle is made on the last vehicle required to make a decision under paragraph (a) of this section.

### § 205.57–7 Acceptance and rejection of batch sequence.

(a) The manufacturer will continue to inspect consecutive batches until the batch sequence is accepted or rejected based upon the number of rejected batches. A sufficient number of consecutive batches will be inspected until the cumulative number of rejected batches is less than or equal to the sequence acceptance number of greater than or equal to the sequence rejection number appropriate for the cumulative number of batches inspected. The acceptance and rejection numbers listed in Appendix I, Table III at the appropriate code letter obtained according to § 205.57–2 will be used in determining whether the acceptance or rejection of a batch sequence has occurred.

(b) Acceptance or rejection of a batch sequence takes place when the decision

that a vehicle is a failiing vehicle is made on the last vehicle required to make a decision under paragraph (a) of this section.

(c) If the batch sequence is accepted, the manufactureer will not be required to perform any additional testing on vehicles from subsequent batches pursuant to the initiating test request.

(d) The Administrator may terminate testing earlier than required in paragraph (b) of this section based on a request by the manufacturer accompanied by voluntary cessation of distribution in commerce, of vehicles from the category, configuration or subgroup in question manufactured at the plant which produced the vehicles under test: *Provided,* That before reinitiating distribution in commerce of vehicles from such plant of such vehicle category, configuration or subgroup, the manufacturer must take the action described in § 205.57–9(a)(1) and (a)(2).

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61460, Dec. 5, 1977]

### § 205.57–8 Continued testing.

(a) If a batch sequence is rejected in accordance with paragraph (b) of § 205.57–7, the Administrator may require that any or all vehicles of that category, configuration of subgroup thereof produced at that plant be tested before distribution in commerce.

(b) The Administrator will notify the manufacturer in writing of his intent to require such continued testing of vehicles pursuant to paragraph (a) of this section.

(c) The manufacturer may request a hearing on the issues of whether the selective enforcement audit was conducted properly; whether the criteria for batch sequence rejection in § 204.57–7 have been met; and, the appropriateness or scope of a continued testing order. In the event that a hearing is requested, the hearing shall begin no later than 15 days after the date on which the Administrator received the hearing request. Neither the request for a hearing nor the fact that a hearing is in progress shall affect the reponsibility of the manufacturer to commence and continue testing required by the Administrator pursuant to paragraph (a) of this section.

(d) Any tested vehicle which demonstrated conformance with the applicable standards may be distributed into commerce.

(e) Any knowing distribution into commerce of a vehicle which does not comply with the applicable standards is a prohibited act.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61460, Dec. 5, 1977; 44 FR 54296, Sept. 19, 1979]

### § 205.57–9 Prohibition on distribution in commerce; manufacturer's remedy.

(a) The Administrator will permit the cessation of continued testing under § 205.57–8 once the manufacturer has taken the following actions:

(1) Submit a written report to the Administrator which identifies the reason for the noncompliance of the vehicles, describes the problem and describes the proposed quality control and/or quality assurance remedies to be taken by the manufacturer to correct the problem or follows the requirements for an engineering change. Such requirements include the following:

(i) Any change to a configuration with respect to any of the parameters stated in § 205.55–3 shall constitute the addition of a new and separate configuration or category to the manufacturer's product line.

(ii) When a manufacturer introduces a new category or configuration to his product line, he shall proceed in accordance with § 205.55–2.

(iii) If the configuration to be added can be grouped within a verified category and the new configuration is estimated to have a lower sound pressure level than a previously verified configuration within the same category, the configuration shall be considered verified.

(2) Demonstrates that the specified vehicle category, configuration or subgroup thereof has passed a retest conducted in accordance with § 205.57 and the conditions specified in the initial test request.

(3) The manufacturer may begin testing under paragraph (a)(2) of this section upon submitting such report, and may cease continued testing upon making the demonstration required by

paragraph (a)(2) of this section, provided that the Administrator may require resumption of continued testing if he determines that the manufacturer has not satisfied the requirements of paragraphs (a)(1) and (2) of this section.

(b) Any vehicle failing the prescribed noise emission tests conducted pursuant to this Subpart B may not be distributed in commerce until necessary adjustments or repairs have been made and the vehicle passes a retest.

(c) No vehicles of a rejected batch which are still in the hands of the manufacturer may be distributed in commerce unless the manufacturer has demonstrated to the satisfaction of the Administrator that such vehicles do in fact conform to the regulations: Except, that any vehicle that has been tested and does, in fact, conform with these regulations may be distributed in commerce.

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61460, Dec. 5, 1977; 47 FR 57715, Dec. 28, 1982]

### § 205.58 In-use requirements.

#### § 205.58–1 Warranty.

(a) The vehicle manufacturer shall include the owner's manual or in other information supplied to the ulitmate purchaser the following statement:

NOISE EMISSIONS WARRANTY

(Name of vehicle manufacturer) warrants to the first person who purchases this vehicle for purposes other than resale and to each subsequent purchaser that this vehicle as manufactured by (names of vehicle manufacturer), was designed, built and equipped to conform at the time it left (name of vehicle manufacturer)'s control with all applicable U.S. EPA Noise Control Regulations.

This warranty covers this vehicle as designed, built and equipped by (Name of vehicle manufacturer), and is not limited to any particular part, component or system of the vehicle manufactured by (name of vehicle manufacturer). Defects in design, assembly or in any part, component or system of the vehicle as manufactured by (name of vehicle manufacturer), which, at the time it left (name of vehicle manufacturer)'s control, caused noise emissions to exceed Federal standards, are covered by this warranty for the life of the vehicle.

(b) [Reserved]

[41 FR 15544, Apr. 13, 1976, as amended at 47 FR 57715, Dec. 28, 1982; 48 FR 27040, June 13, 1983]

#### § 205.58–2 Tampering.

(a) For each configuration of vehicles covered by this part, the manufacturer shall develop a list of those acts which, in his judgment, might be done to the vehicle in use and which would constitute the removal or rendering inoperative of noise control devices or elements of design of the vehicle.

(b) The manufacturer shall include in the owner's manual the following information:

(1) The statement:

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Federal law prohibits the following acts or the causing thereof:

(1) The removal or rendering inoperative by any person, other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

(2) The statement:

Among those acts presumed to constitute tampering are the acts listed below.

Immediately following this statement, the manufacturer shall include the list developed under paragraph (a) of this section.

(c) Any act included in the list prepared pursuant to paragraph (a) of this section is presumed to constitute tampering; however, in any case in which a proscribed act has been committed and it can be shown that such act resulted in no increase in the noise level of the vehicle or that the vehicle still meets the noise emission standard of § 205.52, such act will not constitute tampering.

(d) The provisions of this section are not intended to preclude any State or local jurisdiction from adopting and enforcing its own prohibitions against the removal or rendering inoperative of

noise control systems on vehicles subject to this part.

[41 FR 15544, Apr. 13, 1976, as amended at 47 FR 57715, Dec. 28, 1982; 48 FR 27040, June 13, 1983]

### § 205.58–3 Instructions for maintenance, use and repair.

(a)(1) The manufacturer shall provide to the ultimate purchaser of each vehicle covered by this subpart written instructions for the proper maintenance, use and repair of the vehicle in order to provide reasonable assurance of the elimination or minimization of noise emission degradation throughout the life of the vehicle.

(2) The purpose of the instructions is to inform purchasers and mechanics of those acts necessary to reasonably assure that degradation of noise emission level is eliminated or minimized during the life of the vehicle. Manufacturers should prepare the instructions with this purpose in mind. The instructions should be clear and, to the extent practicable, written in nontechnical language.

(3) The instructions must not be used to secure an unfair competitive advantage. They should not restrict replacement equipment to original equipment or service to dealer service. Manufacturers who so restrict replacement equipment should be prepared to make public any performance specifications on such equipment.

(b) For the purpose of encouraging proper maintenance, the manufacturer shall provide a record or log book which shall contain a schedule for the performance of all required noise emission control maintenance. Space shall be provided in this record book so that the purchaser can note what maintenance was done, by whom, where and when.

[41 FR 15544, Apr. 13, 1976, as amended at 47 FR 57716, Dec. 28, 1982]

### § 205.59 Recall of noncomplying vehicles.

(a) Pursuant to section 11(d)(1) of the Act, the Administrator may issue an order to the manufacturer to recall and repair or modify any vehicle distributed in commerce not in compliance with this subpart.

(b) A recall order issued pursuant to this section shall be based upon a determination by the Administrator that vehicles of a specified category or configuration have been distributed in commerce which do not conform to the regulations. Such determination may be based on:

(1) A technical analysis of the noise emission characteristics of the category or configuration in question; or

(2) Any other relevant information, including test data.

(c) For the purposes of this section, noise emissions may be measured by any test prescribed in § 205.54 for testing prior to sale or any other test which has been demonstrated to correlate with the prescribed test procedure.

(d) Any such order shall be issued only after notice and an opportunity for a hearing.

(e) All costs, including labor and parts, associated with the recall and repair or modification of non-complying vehicles under this section shall be borne by the manufacturer.

(f) This section shall not limit the discretion of the Administrator to take any other actions which are authorized by the Act.

## APPENDIX I TO SUBPART B

TABLE I—SAMPLE SIZE CODE LETTERS

| Batch size | Code letter |
|---|---|
| 4 to 8 | A. |
| 9 to 15 | B. |
| 16 to 25 | C. |
| 26 and larger | D. |

TABLE II—SAMPLING PLANS FOR INSPECTING BATCHES

| Sample size code letter | Test sample | Test sample size | Cumulative test sample size | Batch inspection criteria | |
|---|---|---|---|---|---|
| | | | | Acceptance No. | Rejection No. |
| A | 1st | 4 | 4 | 0 | 1 |
| B | 1st | 3 | 3 | 0 | 1 |

TABLE II—SAMPLING PLANS FOR INSPECTING BATCHES—Continued

| Sample size code letter | Test sample | Test sample size | Cumulative test sample size | Batch inspection criteria | |
|---|---|---|---|---|---|
| | | | | Acceptance No. | Rejection No. |
| C | 1st | 3 | 3 | 0 | 2 |
| | 2d | 3 | 6 | 1 | 2 |
| D | 1st | 2 | 2 | (1) | 2 |
| | 2d | 2 | 4 | (1) | 2 |
| | 3d | 2 | 6 | 0 | 2 |
| | 4th | 2 | 8 | 0 | 3 |
| | 5th | 2 | 10 | 1 | 3 |
| | 6th | 2 | 12 | 1 | 3 |
| | 7th | 2 | 14 | 2 | 3 |

[1] Batch acceptance not permitted at this sample size.

TABLE III—BATCH SEQUENCE PLANS

| Sample size code letter | Number of batches | Cumulative number of batches | Sequence inspection criteria | |
|---|---|---|---|---|
| | | | Acceptance No. | Rejection No. |
| A | 2 | 2 | 1 | (2) |
| | 2 | 4 | 2 | 4 |
| | 2 | 6 | 3 | 5 |
| | 2 | 8 | 4 | 5 |
| B | 2 | 2 | 0 | (2) |
| | 2 | 4 | 1 | 4 |
| | 2 | 6 | 2 | 5 |
| | 2 | 8 | 3 | 5 |
| | 2 | 10 | 4 | 6 |
| | 2 | 12 | 5 | 6 |
| C | 2 | 2 | (1) | 2 |
| | 2 | 4 | 0 | 2 |
| | 2 | 6 | 0 | 3 |
| | 2 | 8 | 1 | 3 |
| | 2 | 10 | 2 | 4 |
| | 2 | 12 | 3 | 4 |
| D | 2 | 2 | 0 | 2 |
| | 2 | 4 | 1 | 3 |
| | 2 | 6 | 2 | 4 |
| | 2 | 8 | 3 | 4 |

[1] Batch sequence acceptance not permitted for this number of batches.
[2] Batch sequence rejection not permitted for this number of batches.

TABLE IV—RECOMMENDED FORMAT FOR VEHICLE NOISE DATA SHEET

Test Report Number: ..... Manufacturer: ..... ..... .....
VEHICLE:
Trade Name: ..... VIN: ..... ..... .....
Model Year: ..... Other Reference No: ..... ..... .....
Configuration Identification: ..... Category Identification: ..... ..... .....
Test Site Identification and Location: ..... ..... ..... .....
INSTRUMENTATION:
Microphone Manufacturer: ..... Model No: ..... Serial No: ..... .....
Sound Level Manufacturer: ..... Model No: ..... Serial No: ..... .....
Calibrator Manufacturer: ..... Model No: ..... Serial No: ..... .....
Other and Manufacturer: ..... Model No: ..... Serial No: ..... .....
TEST DATA:
Approach Gear: ..... Date of Test: ..... ..... .....
Approach RPM: ..... Temp: ..... Wind: ..... .....
Acceleration Test: ..... .....
Deceleration Test: ..... .....

Acceleration Test

| | | Run No. | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| dBA | Left ..... | | | | | |
| | Right ..... | | | | | |
| Highest RPM attained in End Zone | | | | | | |
| | Calculated Sound Pressure ..... | ..... | dBA | | | |
| Deceleration Test with Exhaust Brake Applied | | | | | | |
| dBA | Left ..... | | | | | |
| | Right ..... | | | | | |
| | Calculated Sound Pressure ..... | ..... | dBA | | | |

TEST Personnel: .....
(Name)
Recorded By: ..... Date:.....
(Signature)
Supervisor: ..... Title:.....
(Signature)

[41 FR 15544, Apr. 13, 1976, as amended at 42 FR 61460, Dec. 5, 1977]

## Subpart C [Reserved]

## Subpart D—Motorcycles

SOURCE: 45 FR 86708, Dec. 31, 1980, unless otherwise noted.

### § 205.150 Applicability.

(a) Except as otherwise provided in these regulations, the provisions of this subpart apply to 1983 and subsequent model year motorcycles manufactured after December 31, 1982, which meet the definition of ''new product'' in the Act.

(b) The provisions of this subpart do not apply to electric or battery-powered motorcycles.

(c) Except as provided in § 205.158, the provisions of this subpart do not apply to competition motorcycles as defined in § 205.151(a)(3).

### § 205.151 Definitions.

(a) As used in this subpart and in Subpart E, all terms not defined herein shall have the meaning given them in the Act or in Subpart A of this part.

(1) *Motorcycle* means any motor vehicle, other than a tractor, that:

(i) Has two or three wheels;

(ii) Has a curb mass less than or equal to 680 kg (1499 lb); and

(iii) Is capable, with an 80 kg (176 lb) driver, of achieving a maximum speed of at least 24 km/h (15 mph) over a level paved surface.

(2) *Street motorcycle* means:

(i) Any motorcycle that:

(A) With an 80 kg (176 lb) driver, is capable of achieving a maximum speed of at least 40 km/h (25 mph) over a level paved surface; and

(B) Is equipped with features customarily associated with practical street or highway use, such features including but not limited to any of the following: stoplight, horn, rear view mirror, turn signals: or

(ii) Any motorcycle that:

(A) Has an engine displacement less than 50 cubic centimeters;

(B) Produces no more than two brake horse power;

(C) With a 80 kg (176 lb) driver, cannot exceed 48 km/h (30 mph) over a level paved surface.

(3) *Competition motorcycle* means any motorcycle designed and marketed solely for use in closed course competition events.

(4) *Off-road motorcycle* means any motorcycle that is not a street motorcycle or competition motorcycle.

(5) *Acceleration test procedure* means the measurement methodologies specified in Appendix I.

(6) *Acceptable quality level* (AQL) means the maximum allowable average

percentage of vehicles or exhaust systems that can fail sampling inspection under a Selective Enforcement Audit.

(7) *Acoustical Assurance Period* (AAP) means a specified period of time or miles driven after sale to the ultimate purchaser during which a newly manufactured vehicle or exhaust system, properly used and maintained, must continue in compliance with the Federal standard.

(8) *Advertised Engine Displacement* means the rounded off volumetric engine capacity used for marketing purposes by the motorcycle manufacturer.

(9) *Category* means a group of vehicle configurations which are identical in all material aspects with respect to the parameters listed in § 205.157–2 of this subpart.

(10) *Class* means a group of vehicles which are identical in all material aspects with respect to the parameters listed in § 205.155 of this subpart.

(11) *Closed course competition event* means any organized competition event covering an enclosed, repeated or confined route intended for easy viewing of the entire route by all spectators. Such events include short track, dirt track, drag race, speedway, hillclimb, ice race, and the Bonneville Speed Trials.

(12) *Closing rpm* means the engine speed in Figure 2 of Appendix I.

(13) *Configuration* means the basic classification unit of a manufacturer's product line and is comprised of all vehicle designs, models or series which are identical in all material aspects with respect to the parameters listed in § 205.157–3 of this subpart.

(14) *Engine displacement* means volumetric engine capacity as defined in § 205.153.

(15) *Exhaust system* means the combination of components which provides for the enclosed flow of exhaust gas from the engine exhaust port to the atmosphere. ''Exhaust system'' further means any constituent components of the combination which conduct exhaust gases and which are sold as separate products. ''Exhaust System'' does not mean any of the constituent components of the combination, alone, which do not conduct exhaust gases, such as brackets and other mounting hardware.

(16) *Failing vehicle* means a vehicle whose noise level is in excess of the applicable standard.

(17) *Maximum rated RPM* means the engine speed measured in revolutions per minute (RPM) at which peak net brake power (SAE J–245) is developed for motorcycles of a given configuration.

(18) *Model specific code* means the designation used for labeling purposes in §§ 205.158 and 205.169 for identifying the motorcycle manufacturer, class, and ''advertised engine displacement,'' respectively.

(19) *Model year* means the manufacturer's annual production period, which includes January 1 of any calendar year, or if the manufacturer has no annual production period, the term ''model year'' shall mean the calendar year.

(20) *Motorcycle noise level* means the A-weighted noise level of a motorcycle as measured by the acceleration test procedure.

(21) *Noise control system* means any vehicle part, component or system, the purpose of which includes control or the reduction of noise emitted from a vehicle, including all exhaust system components.

(22) *Noise emission standard* means the noise levels in § 205.152 or § 205.166.

(23) *Noise emission test* means a test conducted pursuant to a measurement methodology specified in this subpart.

(24) [Reserved]

(25) *Serial number* means the identification number assigned by the manufacturer to a specific production unit.

(26) *Tampering* means the removal or rendering inoperative by any person, other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any product in compliance with regulations under section 6, prior to its sale or delivery to the ultimate purchaser or while it is in use; or the use of a product after such device or element of design has been removed or rendered inoperative by any person.

(27) *Test vehicle* means a vehicle in a Selective Enforcement Audit test sample.

(28) *Tractor* means for the purposes of this subpart, any two or three wheeled

vehicle used exclusively for agricultural purposes, or for snow plowing, including self-propelled machines used exclusively in growing, harvesting or handling farm produce.

(29) *Vehicle* means any motorcycle regulated pursuant to this subpart.

(30) *Warranty* means the warranty required by section 6(d)(1) of the Act.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57720, Dec. 28, 1982]

### § 205.152 Noise emission standards.

(a) *Noise emission standards.* (1) Street motorcycles of the following and subsequent model years must not produce noise emissions in excess of the levels indicated:

(i) Street motorcycles other than those that meet the definition of § 205.151(a)(2)(ii):

| Model year | A-weighted noise level (dB) |
|---|---|
| (A) 1983 | 83 |
| (B) 1986 | 80 |

(ii) Street motorcycles that meet the definition of § 205.151(a)(2)(ii) (moped-type street motorcycles):

| Model year | A-weighted noise level (dB) |
|---|---|
| (A) 1983 | 70 |

(2) Off-road motorcycles of the following and subsequent model years must not produce noise emissions in excess of the levels indicated:

(i) Off-road motorcycles with engine displacements of 170 cc and lower:

| Model year | A-weighted noise level (dB) |
|---|---|
| (A) 1983 | 83 |
| (B) 1986 | 80 |

(ii) Off-road motorcycles with engine displacements greater than 170 cc:

| Model year | A-weighted noise level (dB) |
|---|---|
| (A) 1983 | 86 |
| (B) 1986 | 82 |

(3) Street motorcycles must be designed, built and equipped so that, when properly maintained and used, they will not produce noise emissions in excess of the levels specified in paragraph (a)(1) of this section, for an Acoustical Assurance Period of one year or a distance of 6000 km (3730 mi) after the time of sale to the ultimate purchaser, whichever occurs first.

(4) Off-road motorcycles must be designed, built and equipped so that, when properly maintained and used, they will not produce noise emissions in excess of the levels specified in paragraph (a)(2) of this section, for an Acoustical Assurance Period of one year or a distance of 3000 km (1865 mi) after the time of sale to the ultimate purchaser, whichever occurs first.

(5) At the time of sale to the ultimate purchaser, all products must comply with the standards set forth in paragraphs (a)(1) and (2) of this section.

(b) *Measurement procedure.* (1) The standards set forth in paragraph (a) of this section refer to noise emissions as measured in accordance with the measurement methodology specified in Appendix I–1 for all motorcycles except those street motorcycles that meet the definition of § 205.151(a)(2)(ii).

(2) The standards set forth in paragraph (a) of this section for street motorcycles that meet the definition of § 205.151(a)(2)(ii) (moped-type street motorcycles) refer to noise emissions measured in accordance with the measurement methodology specified in Appendix I–2.

(c) *Low noise emission product standard.* For the purpose of Low-Noise-Emission Product certification pursuant to 40 CFR part 203, motorcycles procured by the Federal government after the following dates must not produce noise emissions in excess of the noise levels indicated:

(1) For street motorcycles with engine displacement greater than 170 cc:

| Date | A-weighted noise level (dB) |
|---|---|
| (i) January 1, 1982 | 73 |
| (ii) January 1, 1989 | 71 |

(2) For off-road motorcycles with engine displacements greater than 170 cc:

| Date | A-weighted noise level (dB) |
|---|---|
| (i) January 1, 1982 | 75 |

(3) For off-road motorcycles with engine displacement 170 cc and lower and street motorcycles with engine displacement 170 cc and lower that do not meet the definition of § 205.151(a)(2)(ii):

| Date | A-weighted noise level (dB) |
|---|---|
| (i) January 1, 1982 | 71 |

(4) For street motorcycles that meet the definition of § 205.151(a)(2)(ii) (moped-type street motorcycles):

| Date | A-weighted noise level (dB) |
|---|---|
| (i) January 1, 1982 | 60 |

These levels refer to noise emissions as measured in accordance with the measurement methodologies specified in appendix I. LNEP's must also meet all requirements contained in paragraphs (a)(3), (4), and (5), of this section.

(Secs. 10 and 15 of the Noise Control Act, (42 U.S.C. 4909, 4914))

### § 205.153 Engine displacement.

(a) Engine displacement must be calculated using nominal engine values and rounded to the nearest whole cubic centimeter, in accordance with American Society for Testing Materials (ASTM) E 29–67.

(b) For rotary engines, displacement means the maximum volume of a combustion chamber between two rotor tip seals minus the minimum volume of that combustion chamber between those two rotor seals times three times the number of rotors.

cc=(Maximum chamber volume − minimum chamber volume) × 3 × number of rotors.

### § 205.154 Consideration of alternative test procedures.

The Administrator may approve applications from manufacturers of motorcycles for the approval of test procedures which differ from those contained in this subpart so long as the alternative procedures have been demonstrated to correlate with the prescribed procedure. To be acceptable, alternative test procedures must be such that the test results obtained will identify all those test motorcycles which would not comply with the noise emission standards prescribed in § 205.152 when tested in accordance with the measurement methodology specified in Appendix I. After approval by the Administrator, testing conducted by manufacturers using alternative test procedures will be accepted by the Administrator for all purposes including, but not limited to, selective enforcement audit testing.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57720, Dec. 28, 1982]

### § 205.155 Motorcycle class and manufacturer abbreviation.

(a) Motorcycles must be grouped into classes determined by separate combinations of the following parameters:

(1) Engine type:

(i) Gasoline—two stroke.

(ii) Gasoline—four stroke.

(iii) Gasoline—rotary.

(iv) Other.

(2) Engine displacement.

(3) Engine configuration:

(i) Number of cylinders.

(ii) Cylinder arrangement (i.e., in line, opposed, etc.).

(4) Exhaust system:

(i) Muffler: (A) Type, (B) Location, (C) Number.

(ii) Expansion chambers: (A) Location, (B) Size.

(iii) Spark arrestors.

(iv) Other exhaust system components.

### § 205.156 [Reserved]

### § 205.157 Requirements.

### § 205.157–1 General requirements.

(a) Each manufacturer of vehicles manufactured for distribution in commerce in the United States which are subject to the standards prescribed in this subpart and not exempted in accordance with Subpart A, § 205.5:

(1) Shall be labeled in accordance with the requirements of § 205.158 of this subpart.

(2) Must ensure that each vehicle conforms to the applicable noise emission standard establishd in § 205.152 of this subpart.

(b) The requirements of paragraph (a) of this section apply to new products which conform to the definition of vehicles in these regulations and at the time such new products are assembled to that state of completeness in which the manufacturer sends them to a subsequent manufacturer or otherwise distributes them in commerce.

(c) Subsequent manufacturers of a new product which conforms to the definition of vehicle in these regulations when received by them from a prior manufacturer, need not fulfill the requirements of paragraph (a)(1) of this section where such requirements have already been complied with by a prior manufacturer.

(d) The manufacturer who is required to conduct product verification testing to demonstrate compliance with a particular standard, must satisfy all other provisions of this subpart applicable to that standard, including but not limited to, record keeping, reporting and in-use requirements.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57720, Dec. 28, 1982]

### § 205.157–2 Compliance with standards.

(a)(1) Prior to distribution in commerce of vehicles of a specific configuration, the first manufacturer of such vehicle must verify such configurations in accordance with the requirements of this subpart.

(2) [Reserved]

(3) At any time following receipt of notice under paragraph (a)(2)(iii) of this section with respect to a configuration, the Administrator may require that the manufacturer ship test vehicles to an EPA test facility for the required production verification testing.

(b) The requirements for purposes of testing by the Administrator and selective enforcement auditing with regard to each vehicle configuration consist of:

(1) Testing in accordance with § 205.160–4 of a vehicle selected in accordance with § 205.160–2.

(2) Compliance of the test vehicle with the applicable standard when tested in accordance with § 205.160–4.

(c)(1) In lieu of testing vehicles of every configuration as described in paragraph (b) of this section, the manufacturer may elect to verify the configuration based on representative testing. The requirements of representative testing are:

(i) Grouping configurations into categories where each category is determined by a separate combination of at least the following parameters (a manufacturer may use more parameters):

(A) Engine type: (*1*) Gasoline-two stroke; (*2*) gasoline-four stroke; (*3*) gasoline-rotary; and (*4*) other.

(B) Engine displacement.

(C) Engine configuration: (*1*) Number of cylinders; and (*2*) cylinder arrangement (i.e., in line, opposed, etc.)

(ii) Identifying the configuration within each category which emits the highest A-weighted sound level (in dB).

(iii) Testing in accordance with § 205.160–4 of a vehicle selected in accordance with § 205.160–2 which much be a vehicle of the configuration which is identified pursuant to paragraph (c)(1)(ii) of this section as having the highest sound pressure level (estimated or actual) within the category.

(iv) Demonstrating compliance of that vehicle with the applicable standard when tested in accordance with the test procedure specified in Appendix I.

(2) Where the requirements of paragraph (c)(1) of this section are complied with, all those configurations contained within a category are considered represented by the tested vehicle.

(3) Where the manufacturer tests a vehicle configuration which has not been determined as having the highest sound pressure level of a category, but all other requirements of paragraph (c)(1) of this section are complied with, all those configurations contained within that category which are determined to have sound pressure levels not greater than the tested vehicle are considered to be represented by the tested vehicle; however, a manufacturer must for purposes of Testing by the Administrator and Selective Enforcement Auditing verify according to the requirements of (b)(1) and/or (c)(1) of this section any configurations in

the subject category which have a higher sound pressure level than the vehicle configuration tested.

(d) A manufacturer may elect for purposes of Testing by the Administrator and Selective Enforcement Auditing to use representative testing pursuant to paragraph (c) of this section for all or part of his product line.

(e) The manufacturer has the following alternatives if any test vehicle is determined to not be in compliance with applicable standards:

(1) In the case of representative testing, a new test vehicle from another configuration must be selected according to the requirements of paragraph (c) of this section, in order to verify the configurations represented by the non-compliant vehicle.

(2) Modify the test vehicle and demonstrate by testing that it meets applicable standards. The manufacturer must modify all production vehicles of the same configuration in the same manner as the test vehicle before distribution into commerce.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57720, Dec. 28, 1982]

### § 205.157–3 Configuration identification.

(a) A separate vehicle configuration shall be determined by each combination of the following parameters:

(1) Exhaust system (engine): (i) Mufflers; (ii) expansion chambers; (iii) spark arrestors; and (iv) other exhaust system components.

(2) Air induction system (engine): (i) Intake muffler; (ii) intake ducting; and (iii) air cleaner element.

(3) Vehicle drive train: (i) Chain; and (ii) shaft.

(4) Transmission gear ratio: (i) Standard transmission; and (ii) automatic transmission.

(5) Cooling system configuration: (i) Natural air cooled; (ii) liquid cooled; and (iii) forced air cooled.

(6) Category parameters listed in § 205.157–2.

(b) [Reserved]

### § 205.158 Labeling requirements.

(a)(1) The manufacturer of any vehicle subject to this subpart must, at the time of manufacture, affix a label, of the type specified in paragraphs (a)(2), (3), and (4) of this section, to all such vehicles to be distributed in commerce.

(2) The label must be plastic or metal and be welded, riveted, or otherwise permanently attached in a readily visible position.

(3) The label must be affixed by the vehicle manufacturer to the vehicle in such a manner that the label cannot be removed without destroying or defacing it, and must not be affixed to any piece of equipment that is easily detached from such vehicle.

(4) The label must be lettered in the English language in legible block letters and numerals, which must be of a color that contrasts with the background of the label.

(5) The label must contain the following information:

(i) The label heading: Motorcycle Noise Emission Control Information;

(ii) The statement:

This _____ (model year) _____ (model specific code) motorcycle, _____ (serial number), meets EPA noise emission requirements of _____ (noise emission standard) dBA at _____ (closing rpm) rpm by the Federal test procedure. Modifications which cause this motorcycle to exceed Federal noise standards are prohibited by Federal law. See owner's manual.

(6) The model specific code is limited to ten spaces which includes three spaces for the manufacturer's abbreviation (see paragraph (a)(7) of this section), three spaces for the class identification, and four spaces for the advertised engine displacement respectively.

(7) All motorcycle manufacturers shall use the following abbreviations in their model specific code.

| | |
|---|---|
| BMW | BMW |
| Bultaco | BUL |
| Can–Am Bombardier | CAB |
| Chaparral | CHA |
| Cheeta | CHE |
| Ducati | DUC |
| Fox | FOX |
| Harley Davidson | HAR |
| Heald | HEA |
| Hercules | HER |
| Hodaka | HOD |
| Honda | HON |
| Husqvarna | HUS |
| JAWA/CZ | JAW |
| Kawasaki | KAW |
| KTM | KTM |
| Laverda | LAV |
| Moto Benilli | BEN |
| Moto Guzzi | GUZ |
| Moto Morini | MOR |

| | |
|---|---|
| MV Agusta | MVA |
| Norton Triumph | TRI |
| Rokon | ROK |
| Suzuki | SUZ |
| Yamaha | YAM |

(8) Moped manufacturers only shall use the following abbreviations in their model specific code.

| | |
|---|---|
| AMF | AMF |
| Benelli | BEL |
| Califfo | CAL |
| Carabela | CAR |
| Cimatti | CIM |
| Columbia | COL |
| E–Z Rider | EZR |
| Flying Dutchman | FLY |
| Foxi | FOI |
| Gadabout | GAD |
| Garelli | GAR |
| Gitane | GIT |
| Honda | HON |
| Indian | IND |
| Intramotor | INT |
| Italvelo | ITA |
| Kreidler | KRE |
| Lazer | LAZ |
| Malagati | MAL |
| Morini | MOI |
| Motobecane/Solex | MBE |
| Moto Guzzi | GUZ |
| Negrini | NEG |
| Odyssey | ODY |
| Pacer | PAC |
| Pack-A-Way | PAK |
| Peugeot | PEU |
| Puch | PUC |
| Riviera | RIV |
| Sachs | SAC |
| Safari | SAF |
| Scorpion | SCO |
| Smily | SMI |
| Snark | SNA |
| Sori II | SON |
| Speed Bird | SPE |
| Sprinter | SPR |
| SuVega | SUV |
| Tomas | TOM |
| Vaespa | VES |
| Yankee Peddler | YAN |

(9) If a new motorcycle manufacturer begins production of vehicles subject to this regulation, the Administrator will assign him a 3-letter manufacturer abbreviation as soon as reasonably practical after his existence is known to the Agency.

(b) Any vehicle manufactured in the United States solely for use outside the United States must be clearly labeled in accordance with the provisions of paragraphs (a) (2), (3), and (4) of this section with the statement; ''For Export Only''.

(c) Any competition motorcycle as defined in §205.151(a)(3), shall be labeled in accordance with the provisions of paragraphs (a)(1), (2), (3) and (4) of this section with the statement:

This motorcycle is designed for closed course competition use only. It does not conform to U.S. EPA motorcycle noise standards.

(d) It will be permissible for manufacturers to meet the requirements of this section by consolidating these labeling requirements with other government labeling requirements in one or more labels, provided the provisions of paragraphs (a) (2), (3) and (4) of this section are met.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57721, Dec. 28, 1982]

### §205.159 Testing by the Administrator.

(a)(1) In order for the Administrator to determine whether such vehicles or a manufacturer's test facility conform to applicable regulations, the Administrator may require that vehicles to be tested pursuant to the Act be submitted to him, at such place and time as he reasonably designates. He may designate the quantity of vehicles and the duration of time he reasonably requires for the purpose of conducting tests in accordance with test procedures described in appendix I. The manner in which the Administrator conducts such tests, the EPA test facility, and the test procedures employed will be based upon good engineering practice and meet or exceed the requirements of appendix I of the regulations.

(2) If the Administrator specifies that he will conduct such testing at the manufacturer's facility, the manufacturer shall make available instrumentation and equipment of the type required for test operations by these regulations. The Administrator may conduct such tests with his own equipment, having specifications equal to or exceeding the performance specifications of the instrumentation and equipment required in these regulations.

(3) The manufacturer may observe tests conducted by the Administrator pursuant to this section on vehicles produced by the manufacturer and may copy the data accumulated from such tests. The manufacturer may inspect any of the vehicles before and after testing by the Administrator.

(b)(1) If, based on tests conducted by the Administrator, or on other relevant information, the Administrator determines that the test facility does

not meet the requirements of appendix I (or the requirements for an alternative test procedure approved under § 205.154), the Administrator will give notice to the manufacturer in writing of his determination and the reasons underlying it.

(2) The manufacturer may, at any time within 15 days after receipt of a notice issued under paragraph (b)(1) of this section, request a hearing conducted in accordance with 5 U.S.C. 554 on the issue of whether his test facility met the requirements as specified in appendix I (or the alternative procedure). Such notice will not take effect until 15 days after its receipt by the manufacturer or, if a hearing is requested under this paragraph, until adjudication by the Administrative law judge.

(3) After any notice issued under paragraph (b)(1) of this section has taken effect, no data thereafter derived from that test facility will be acceptable for purposes of this subpart.

(4) The manufacturer may request in writing that the Administrator reconsider his determination under paragraph (b)(1) of this section based on data or information which indicates that changes have been made to the test facility and that those changes have resolved the reasons for disqualification.

(5) Within 10 working days after receipt of the manufacturer's request for reconsideration pursuant to paragraph (b)(4) of this section, the Administrator will notify the manufacturer of his determination and of the reasons underlyng it with regard to the requalification of the test facility.

(c) The Administrator will assume all reasonable costs associated with shipment of vehicles to the place designated pursuant to paragraph (a) of this section except with respect to:

(1) Any production verification testing performed at a place other than the manufacturer's facility as provided in § 205.157–2(a), or as a result of the manufacturer's not owning or having access to a test facility;

(2) Testing of a reasonable number of vehicles (i) for purposes of selective enforcement auditing under § 205.160, (ii) or if the manufacturer has failed to establish that there is a correlation between its test facility and the EPA test facility, (iii) or the Administrator has reason to believe, and provides the manufacturer with a statement of such reason, that the vehicles to be tested would fail to meet the standard prescribed in this subpart if tested at the EPA test facility even though they would meet such standard if tested at the manufacturer's test facility;

(3) Any testing performed during a period when a notice issued pursuant to paragraph (b) of this section is in effect;

(4) Any testing performed at a place other than the manufacturer's facility as a result of the manufacturer's failure to permit the Administrator to conduct or monitor testing as required by this subpart; and

(5) Testing of up to 10 percent of the manufacturer's test vehicles for a model year if the Administrator determines testing these vehicles at the EPA test site is necessary to assure that a manufacturer has acted or is acting in compliance with the Act.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57721, Dec. 28, 1982]

## § 205.160 Selective enforcement auditing (SEA) requirements.

### § 205.160–1 Test request.

(a) The Administrator will request all testing under § 205.160 by means of a test request addressed to the manufacturer.

(b) The test request will be signed by the Assistant Administrator for Enforcement or his designee. The test request will be delivered to the plant manager or other responsible official as designated by the manufacturer.

(c) The test request will specify the vehicle category, configuration or configuration subgroup selected for testing, the manufacturer's plant or storage facility from which the vehicles must be selected, and the time at which the vehicles must be selected. The test request will also provide for situations in which the selected category, configuration, or configuration subgroup is unavailable for testing. The test request may include an alternative category, configuration, or configuration subgroup designated for testing in the event that vehicles of

the first specified category, configuration, or configuration subgroup are not available for testing because the vehicles are not being manufactured at the specified plant, are not being manufactured during the specified time, or are not being stored at the specified plant or storage facility.

(d)(1) If the manufacturer projects a yearly production of fewer than 50 vehicles of the specified category, configuration or configuration subgroup to be tested, then within five (5) days of receipt of the request, the manufacturer must notify the Administrator of such low volume production. The Administrator will then provide a revised test request specifying a testing plan which imposes no greater risk of failure (5%) at the acceptable quality level (10%) than the plan in Appendix II. Upon receipt of the revised test request, the manufacturer must select and test a sample of vehicles from the category, configuration or configuration subgroup specified in the test request in accordance with this subpart and the conditions specified in the test request.

(2) If the manufacturer produces 50 or more vehicles of the specified category, configuration or configuration subgroup per year, then upon receipt of the test request, the manufacturer must select and test a sample of vehicles from the category, configuration or configuration subgroup specified in the test request in accordance with this subpart and the conditions specified in the test request.

(e)(1) Any testing conducted by the manufacturer under a test request must be initiated within the time period specified in the test request; except that initiation may be delayed for increments of 24 hours or one business day where ambient test site weather conditions, or other conditions beyond the control of the manufacturer, in that 24-hour period, do not permit testing. The manufacturer must record the conditions for this period.

(2) The manufacturer must complete noise emission testing on a minimum of ten vehicles per day unless otherwise provided by the Administrator or unless ambient test site conditions permit only the testing of a lesser number in which case the ambient test site weather conditions for that period must be recorded.

(3) The manufacturer is allowed 24 hours to ship vehicles from a sample from the assembly plant to the testing facility if the facility is not located at the plant or in close proximity to the plant. The Administrator may approve more time based upon a request by the manufacturer accompanied by a satisfactory justification.

(f) The Administrator may issue an order to the manufacturer to cease distribution in commerce of vehicles of a specified category, configuration, or configuration subgroup being manufactured at a particular facility, if:

(1) The manufacturer refuses to comply with the provisions of a test request issued by the Administrator under this section; or

(2) The manufacturer refuses to comply with any of the requirements of this section.

(g) A cease distribution order will not be issued under paragraph (f) of this section if the manufacturer's refusal is caused by conditions and circumstances outside his control which render compliance with the provisions of a test request or with any other requirements of this section impossible. Conditions and circumstances outside the control of the manufacturer include, but are not limited to, the temporary unavailability of equipment and personnel needed to conduct the required tests caused by uncontrollable factors, such as equipment breakdown or failure or illness of personnel. Failure of the manufacturer to adequately plan for and provide the equipment and personnel needed to conduct the tests do not constitute uncontrollable factors. The manufacturer must bear the burden of establishing the presence of the conditions and circumstances required by this paragraph.

(h) Any order to cease distribution will be issued only after a notice and opportunity for a hearing in accordance with 5 U.S.C. 554.

### § 205.160–2 Test sample selection and preparation.

(a) Vehicles comprising the sample which are required to be tested under a test request in accordance with this subpart must be selected consecutively

as they are produced. Before the official test, the test vehicle must not be prepared, tested, modified, adjusted, or maintained in any manner unless such preparation, tests, modifications, adjustments or maintenance are part of the manufacturer's prescribed manufacturing and inspection procedures, and are documented in the manufacturer's internal vehicle assembly and inspection procedures, are required or permitted under this subpart, or are approved in advance by the Administrator. For purposes of this section, prescribed manufacturing and inspection procedures include quality control testing and assembly procedures normally performed by the manufacturer on like products during early production if the resulting testing is not biased by this procedure. In the case of imported products, the manufacturer may perform adjustments, preparations, modification or tests normally performed at the port of entry by the manufacturer to prepare the vehicle for delivery to a dealer or customer.

(1) Equipment or fixtures necessary to conduct the test may be installed on the vehicle if such equipment or fixtures have no effect on the noise emissions of the vehicle, as determined by the measurement methodology.

(2) In the event of a vehicle malfunction (i.e., failure to start, etc.) the manufacturer may perform the maintenance that is necessary to enable the vehicle to operate in a normal manner. This maintenance must be documented and reported in the SEA report.

(3) No quality control, quality assurance testing, assembly or selection procedures may be used on the test vehicle or any portion of the test vehicle including parts and subassemblies, unless such quality control, quality assurance testing, assembly or selection procedures are used normally during the production and assembly of all other vehicles of this configuration which will be distributed in commerce, are required or permitted under this subpart or are approved in advance by the Administrator.

(4) If a vehicle is unable to complete the noise tests, the manufacturer may replace the vehicle. Any replacement vehicle must be a production vehicle of the same configuration as the replaced vehicle or a noisier configuration and will be subject to all the provisions of these regulations. Any replacement must be reported in the SEA report.

(b) The Acceptable Quality Level (AQL) is 10 percent. The appropriate sampling plans associated with the designated AQL are contained in Appendix II or the test request.

(c) The vehicles of the category, configuration or configuration subgroup selected for testing must be assembled by the manufacturer for distribution in commerce using the manufacturer's normal production process.

(d) Unless otherwise indicated in the test request, the manufacturer must initiate testing with the vehicles of the category, configuration or configuration subgroup specified in the test request which are next scheduled for production after receipt of the test request.

(e) The manufacturer must keep on hand all products in the test sample until the sample is accepted or rejected in accordance with § 205.160–6; except that vehicles actually tested and found to be in conformance with this regulation need not be kept.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57721, Dec. 28, 1982]

### § 205.160–3 [Reserved]

### § 205.160–4 Testing procedures.

(a) The manufacturer must conduct one valid test in accordance with the appropriate test procedures specified in Appendix I, on each vehicle selected for testing under this subpart.

(b) In the event a vehicle is unable to complete the noise emission test, the manufacturer may replace the vehicle. Any replacement vehicle must be a production vehicle of the same category, configuration or subgroup as the vehicle which it replaced, and it is subject to all the provisions of this subpart.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57721, Dec. 28, 1982]

### § 205.160–5 Reporting of the test results.

(a)(1) The manufacturer must submit a copy of the test report for all testing conducted pursuant to § 205.160 at the

conclusion of each 24-hour period during which testing is done.

(2) For each test conducted the manufacturer must provide the following information:

(i) Category, configuration or configuration subgroup identification where applicable;

(ii) Year, make, assembly date, and model of vehicle;

(iii) Vehicle serial number; and

(iv) Test results by serial numbers.

(b) In the case where an EPA Enforcement Officer is present during testing required by this subpart, the written reports requested in paragraph (a) of this section may be given directly to the Enforcement Officer.

(c) Within 5 days after completion of testing of an SEA, the manufacturer must submit to the Administrator a final report which will include the following:

(1) The name, location, and description of the manufacturer's noise emission test facilities which meet the specifications of Appendix I, and were utilized to conduct testing reported under this section, except, that a test facility that has been described in a previous submission under this subpart need not again be described, but must be identified as that facility.

(2) The following information for each noise emission test conducted:

(i) The individual records for the test vehicles required by § 205.161(a)(2) for all noise emission tests including for each invalid test, the reason for invalidation.

(ii) A complete description of any modification, repair, preparation, maintenance, or testing which could affect the noise emissions of the product and which was performed on the test vehicle but not performed on all other production vehicles; and,

(iii) The test results for any replaced vehicle and the reason for its replacement.

(3) A complete description of the sound data acquisition system if other than those specified in Appendix I.

(4) The following statement and endorsement:

This report is submitted pursuant to section 6 and section 13 of the Noise Control Act of 1972. To the best of _____ (company name) knowledge, all testing for which data are reported here was conducted in strict conformance with applicable regulations under 40 CFR part 205 *et seq.*, all the data reported here are a true and accurate representation of such testing, and all other information reported here is true and accurate. I am aware of the penalties associated with violations of the Noise Control Act of 1972 and the regulations thereunder. _____ (authorized representative).

(5) Additional information required by the test request.

(d) Information required to be submitted to the Administrator under this section must be sent to the following address: Director, Noise and Radiation Enforcement Division, (EN–387), U.S. Environmental Protection Agency, Washington, DC 20460.

### § 205.160–6 Passing or failing under SEA.

(a) A failing vehicle is one whose measured noise level is in excess of the applicable noise emission standard in § 205.152.

(b) The number of failing vehicles in a sample determines whether the sample passes or fails (See applicable tables in Appendix II). If the number of failing vehicles is greater than or equal to the number of Column B, the sample fails. If the number of failing vehicles is less than or equal to the number in Column A, the sample passes.

(c) Pass or failure of an SEA takes place when a decision that a vehicle is a passing or failing unit is made on the last vehicle required to make a decision under paragraph (b) of this section.

(d) If the manufacturer passes the SEA, he will not be required to perform any additional testing on subsequent vehicles to satisfy the test request.

(e) The Administrator may terminate testing earlier than required in paragraph (b) of this section, based on a request by the manufacturer, accompanied by voluntarily ceasing distribution in commerce of vehicles from the category, configuration or configuration subgroup in question, manufactured at the plant which produced the products being tested. Before reinitiating distribution in commerce of that vehicle category, configuration or configuration subgroup from that plant, the manufacturer must take the action described in § 205.160–8(a)(1) and (2).

### § 205.160–7 Continued testing.

(a) If an SEA failure occurs according to paragraph (b) of § 205.160–6, the Administrator may require that any or all vehicles of that category, configuration or configuration subgroup produced at that plant be tested before distribution in commerce.

(b) The Administrator will notify the manufacturer in writing of his intent to require continued testing of vehicles under paragraph (a) of this section.

(c) The manufacturer may request a hearing on the issues of whether the SEA was conducted properly; whether the criteria for SEA failure have been met; and the appropriateness or scope of a continued testing order. If a hearing is requested, the hearing will begin no later than 15 days after the date on which the Administrator received the hearing request. Neither the request for a hearing nor the fact that a hearing is in progress will affect the responsibility of the manufacturer to commence and continue testing required by the Administrator pursuant to paragraph (a) of this section.

(d) Any tested vehicle which demonstrates conformance with the applicable standard may be distributed into commerce.

(e) Any distribution into commerce of a vehicle which does not comply with the applicable standard is a prohibited act.

### § 205.160–8 Prohibition of distribution in commerce; manufacturer's remedy.

(a) The Administrator will permit the manufacturer to cease testing under § 205.160–7 after the manufacturer has taken the following actions:

(1) Submission of a written report to the Administrator which identifies the reason for the noncompliance of the vehicles, describes the problem and/or quality control or quality assurance remedies to be taken by the manufacturer to correct the problem.

(2) Demonstration that the specified vehicle category, configuration or configuration subgroup has passed a retest conducted in accordance with § 205.160, and the conditions specified in the test request.

(b) The manufacturer may begin testing under paragraph (a)(2) of this section upon submitting the report required by paragraph (a)(1) of this section, and may cease continued testing upon making the demonstration required by paragraph (a)(2) of this section. The Administrator may require resumption of continued testing if he determines that the manufacturer has not satisfied the requirements of paragraphs (a)(1) and (2) of this section.

(c) Any vehicle failing the prescribed noise emission tests conducted pursuant to appendix I may not be distributed in commerce until necessary adjustments or repairs have been made and the vehicle passes a retest.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57721, Dec. 28, 1982]

## § 205.162 In-use requirements.

### § 205.162–1 Warranty.

(a) The vehicle manufacturer who is required to production verify under this subpart must include in the owner's manual or in other information supplied to the ultimate purchaser the following statement:

NOISE EMISSIONS WARRANTY [RESERVED]

(b) [Reserved]

[45 FR 86708, Dec. 31, 1980, as amended at 48 FR 27040, June 13, 1983]

### § 205.162–2 Tampering.

(a) For each configuration of vehicles covered by this part, the manufacturer shall develop a list of acts which, in his judgment, constitute the removal or rendering totally or partially inoperative, other than for purposes of maintenance, repair, or replacement of noise control devices or elements of design of the vehicle.

(b) The manufacturer shall include in the owner's manual the following information:

(1) The statement:

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Federal law prohibits the following acts or causing thereof:

(1) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into

any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

(2) The statement:

Among those acts presumed to constitute tampering are the acts listed below.

Immediately following this statement, the manufacturer must include the list developed under paragraph (a) of this section.

(c) Any act included in the list prepared pursuant to paragraph (a) of this section is presumed to constitute tampering; however, in any case in which a presumed act of tampering has been committed and it can be shown that such act resulted in no increase in the noise level of the vehicle or that the vehicle still meets the noise emission standard of § 205.152, the act will not constitute tampering.

(d) The provisions of this section are not intended to preclude any State or local jurisdiction from adopting and enforcing its own prohibitions against the removal or rendering inoperative of noise control systems on vehicles subject to this part.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57721, Dec. 28, 1982]

### § 205.162–3 Instructions for maintenance, use, and repair.

(a)(1) The manufacturer must provide to the purchaser of each vehicle covered by this subpart written instructions for the proper maintenance, use, and repair of the vehicle in order to provide reasonable assurance of the elimination or minimization of noise emission degradation throughout the life of the vehicle.

(2) The purpose of the instructions is to inform purchasers and mechanics of the acts necessary to reasonably assure that degradation of noise emission level is eliminated or minimized during the life of the vehicle. Manufacturers shall prepare the instructions with this purpose in mind. The instructions shall be clear and, to the extent practicable, written in non-technical language.

(3) The instructions must not be used to secure an unfair competitive advantage. They shall not restrict replacement equipment to original equipment or restrict service to dealer service unless such manufacturer makes public the performance specifications on such equipment.

(b) For the purpose of encouraging proper maintenance, the manufacturer must provide a record or log book which shall contain a schedule for the performance of all required noise emission control maintenance. Space must be provided in this record book so that the purchaser can note what maintenance was done, by whom, where, and when.

[45 FR 86708, Dec. 31, 1980, as amended at 47 FR 57722, Dec. 28, 1982]

### § 205.163 Recall of noncomplying motorcycles; relabeling of mislabeled motorcycles.

(a) Pursuant to section 11(d)(1) of the Act, the Administrator may issue an order to the manufacturer to recall, repair, modify, or relabel any vehicles distributed in commerce which are not in compliance with this subpart.

(b) A recall order issued under this section shall be based upon a determination by the Administrator that vehicles of a specified category, configuration, or class which do not conform to the regulations or are improperly labeled have been distributed in commerce. This determination may be based on: (1) A technical analysis of the noise emission characteristics of the category, configuration, or class in question; or (2) any other relevant information, including test data.

(c) For the purpose of this section, noise emissions are to be measured by the appropriate test procedure prescribed in appendix I prior to sale or any other test which has been demonstrated to correlate with the prescribed test procedure in accordance with § 205.154.

(d) Any order to recall shall be issued only after notice and an opportunity for a hearing.

(e) All cost, including labor and parts, associated with the recall and repair or modification of noncomplying vehicles and relabeling of mislabeled vehicles under this section shall be borne by the manufacturer.

(f) This section shall not limit the discretion of the Administrator to take

any other actions which are authorized by the Act.

APPENDIX I TO SUBPARTS D AND E—MOTORCYCLE NOISE EMISSION TEST PROCEDURES

EDITORIAL NOTE: The text of appendix I follows subpart E.

## Subpart E—Motorcycle Exhaust Systems

AUTHORITY: Sec. 6 of the Noise Control Act (42 U.S.C. 4905).

SOURCE: 45 FR 86718, Dec. 31, 1980, unless otherwise noted.

### § 205.164 Applicability.

(a) Except as otherwise provided in these regulations, the provisions of this subpart apply to any motorcycle replacement exhaust system or motorcycle replacement exhaust system component which:

(1) Meets the definition of the term ''new product'' in the Act; and

(2) Is designed and marketed for use on any motorcycle subject to the provisions of subpart D of this part.

(b) The provisions of § 205.169 additionally apply to the motorcycle exhaust systems originally installed on vehicles subject to the requirements of subpart D of this part.

(c) The provisions of § 205.169(d)(3) additionally apply to motorcycle replacement exhaust systems manufactured after January 1, 1983 that are designed and marketed for use on motorcycles manufactured before January 1, 1983.

(d) Except as provided for in § 205.169, the provisions of this subpart do not apply to exhaust systems which are designed and marketed solely for use on competition motorcycles as defined in § 205.151(a)(3).

(e) The provisions of the subpart do not apply to exhaust header pipes sold as separate products.

### § 205.165 Definitions.

(a) As used in this subpart, all terms not defined herein have the meaning given them in subpart D of this part or in the Act.

(1) *Category* means a group of exhaust systems which are identical in all material aspects with respect to the parameters listed in § 205.168 of this subpart.

(2) *Exhaust header pipe* means any tube of constant diameter which conducts exhaust gas from an engine exhaust port to other exhaust system components which provide noise attenuation. Tubes with cross connections or internal baffling are not considered to be ''exhaust header pipes.''

(3) *Failing exhaust system* means that, when installed on any Federally regulated motorcycle for which it is designed and marketed, that motorcycle and exhaust system exceed the applicable standards.

(4) *Federally regulated motorcycle* means, for the purpose of this subpart, any motorcyle subject to the noise standards of subpart D of this part.

(5) *Federal standards* means, for the purpose of this subpart, the standards specified in § 205.152(a)(1), (2) and (3).

(6) [Reserved]

(7) *Stock configuration* means that no modifications have been made to the orginal equipment motorcycle that would affect the noise emissions of the vehicle when measured according to the acceleration test procedure.

(8) *Test exhaust system* means an exhaust system in Selective Enforcement Audit test sample.

(b) [Reserved]

[45 FR 86718, Dec. 31, 1980, as amended at 47 FR 57722, Dec. 28, 1982]

### § 205.166 Noise emission standards.

(a) *Noise emission standards.* (1) Exhaust systems and exhaust system components that are designed and marketed for use on any Federally regulated street motorcycle of the following and subsequent model years must be designed and built so that when installed on any such motorcycle which is in compliance with the requirements of subpart D of this part, they will not cause that motorcycle to produce noise emissions in excess of the levels indicated:

(i) Systems designed and marketed for use on street motorcycles other than those that meet the definition of § 205.151(a)(2)(ii):

| Motorcycle model year | A-weighted noise level (dB) |
|---|---|
| (A) 1983 | 83 |
| (B) 1986 | 80 |

(ii) Systems designed and marketed for street motorcycles that meet the definition of § 205.151(a)(2)(ii) (moped-type street motorcycles):

| Motorcycle model year | A-weighted noise level (dB) |
|---|---|
| (A) 1983 | 70 |

(2) Exhaust systems and exhaust system components that are designed and marketed for use on any Federally regulated off-road motorcycle of the following and subsequent model years must be designed and built so that, at the time of sale, when installed on any such motorcycle which is in compliance with the requirements of subpart D of this part, they will not cause that motorcycle to produce noise emissions in excess of the levels indicated:

(i) Systems designed and marketed for use on off-road motorcycles with engine displacements of 170 cc and lower:

| Motorcycle model year | A-weighted noise level (dB) |
|---|---|
| (A) 1983 | 83 |
| (B) 1986 | 80 |

(ii) Systems designed and marketed for use on off-road motorcycles with engine displacements greater than 170 cc:

| Motorcycle model year | A-weighted noise level (dB) |
|---|---|
| (A) 1983 | 86 |
| (B) 1986 | 82 |

(3) Exhaust systems and exhaust system components that are designed and marketed for use on any Federally regulated street motorcycle shall be designed and built so that, when installed on any such motorcycle which is in compliance with the requirements of subpart D of this part, and when both the motorcycle and the exhaust system are properly maintained and used, they will not cause that motorcycle to produce noise emissions in excess of the levels specified in paragraph (a)(1) of this section, for an Acoustical Assurance Period of one year or a distance of 6000 km (3729 mi) after the time of sale to the ultimate purchaser, whichever occurs first.

(4) Exhaust systems and exhaust system components that are designed and marketed for use on any Federally regulated off-road motorcycle must be designed and built so that, when installed on any such motorcycle which is in compliance with the requirements of subpart D of this part, and when both the motorcycle and the exhaust system are properly maintained and used, they will not cause that motorcycle to produce noise emissions in excess of the levels specified in paragraph (a)(2) of this section, for an Acoustical Assurance Period of one year or a distance of 3000 km (1865 mi) after the time of sale to the ultimate purchaser, whichever occurs first.

(5) At the time of sale to the ultimate purchaser all products must comply with the standards set forth in paragraphs (a) (1) and (2) of this section.

(b) *Measurement procedure.* (1)(i) The standards set forth in paragraph (a) of this section refer to the noise emissions as measured in accordance with the measurement methodology specified in appendix I–1 for all motorcycles except those street motorcycles meeting the definition of § 205.151(a)(2)(ii). Exhaust systems which alter a motorcycle's maximum rated RPM shall be tested using the unmodified motorcycle's maximum rated RPM to determine closing RPM or test RPM.

(ii) The standards set forth in paragraph (a) of this section for street motorcycles meeting the definition of § 205.151(a)(2)(ii) (moped-type street motorcycles) refer to noise emissions measured in accordance with the measurement methodology specified in appendix I–2.

(2) Exhaust system components sold as separate products shall be tested as part of a system made up of that part and original equipment components to complete the system.

(3) Exhaust system components sold as separate products which are incompatible with original equipment components necessary to make a complete

exhaust system, or which would not meet standards as prescribed in this subpart in such configuration, may be tested with non-original equipment components provided that the provisions of § 205.169(e)(1)(ii)(B) are carried out.

### § 205.167 Consideration of alternative test procedures.

The Administrator may approve applications from manufacturers of original equipment and replacement exhaust systems for the approval of test procedures which differ from those contained in this subpart so long as the alternative procedures have been demonstrated to correlate with the prescribed procedure. To be acceptable, alternative test procedures must be such that the test results obtained will identify all those test exhaust systems which would not comply with the noise emission standards prescribed in § 205.166 when tested in accordance with the measurement methodology specified in appendix I. After approval by the Administrator, testing conducted by manufacturers using alternative test procedures may be accepted by the Administrator for all purposes including, but not limited to, production verification testing and selective enforcement audit testing.

### § 205.168 Requirements.

### § 205.168–1 General requirements.

(a) Each manufacturer of motorcycle exhaust systems manufactured for Federally regulated motorcycles and distributed in commerce in the United States which are subject to the noise emission standards prescribed in this subpart and not exempted in accordance with subpart A, § 205.5:

(1) Must label each exhaust system in accordance with the requirements of § 205.169 of this subpart; and

(2) Must only manufacture exhaust systems which conform to the applicable noise emission standard established in § 205.166 of this regulation when installed on any Federally regulated motorcycle for which it has been designed and marketed.

(b) The manufacturer who is required to conduct testing to demonstrate compliance with a particular standard must satisfy all other provisions of this subpart applicable to that standard.

(c) Prior to distribution into commerce of exhaust systems of a specific category, the manufacturer of the exhaust system shall verify the category in accordance with this subpart.

(1) Not withstanding paragraph (a)(1) of this section, the manufacturer may distribute in commerce exhaust systems of that category for up to 90 days if weather or other conditions beyond the control of the manufacturer make testing of a category impossible and if the following conditions are met:

(i) The manufacturer performs the tests required under paragraph (d) or (e) of this section on such category as soon as conditions permit;

(ii) [Reserved]

(d) The requirements for each exhaust system category consist of:

(1) Testing in accordance with § 205.171–1 of an exhaust system selected in accordance with § 205.171–2.

(2) Compliance of the test exhaust system on a motorcycle for which it is marketed with the applicable standard when tested in accordance with appendix I; and

(e) A manufacturer is required to verify all categories of exhaust systems within his product line for each class of Federally regulated motorcycle for which it is designed and marketed. A category of a replacement exhaust system is defined by a separate combination of at least the following parameters:

(1) *Muffler/Silencer:* (i) Volume; (ii) type of absorption material; (iii) amount of absorption material; (iv) length; (v) diameter; (vi) directional flow of exhaust gas; (vii) interior construction; (viii) shell and inner construction material; (ix) number of header pipes entering muffler; and (x) specific motorcycle application.

(2) *Expansion Chamber:* (i) Volume; (ii) diameter; (iii) construction material; (iv) directional flow of exhaust gas; (v) length; and (vi) specific motorcycle application.

(3) *Spark Arrestors:* (i) Volume; (ii) construction material; (iii) directional flow of exhaust gas; (iv) length; (v) diameter, and (vi) specific motorcycle application.

(4) *Other Exhaust System Components:* (i) Volume; (ii) shape; (iii) length; (iv) diameter; (v) material; (vi) directional flow of exhaust gas; and (vii) specific motorcycle application.

(f) Exhaust system components sold as separate products shall be tested pursuant to § 205.166(b).

(g) Original equipment exhaust systems that are also sold as replacement systems for the same motorcycle configuration need not be tested under this subpart if they have been tested or represented in a test report under subpart D of this part.

(h) A manufacturer has the following alternatives if any test exhaust system is determined not to be in compliance with applicable standards:

(i) Modify the test exhaust system and demonstrate by testing that it meets applicable standards. The manufacturer must modify all production exhaust systems of the same category in the same manner as the test exhaust system before distribution in commerce.

[47 FR 57722, Dec. 28, 1982; 48 FR 27040, June 13, 1983]

### § 205.168–11 Order to cease distribution.

(a) If a category of exhaust systems is found not to comply with this subpart because it has not been verified or labeled as required by § 205.169, the Administrator may issue an order to the manufacturer to cease distribution in commerce exhaust systems of that category. This order will not be issued if the manufacturer has made a good faith attempt to properly production verify the category and can establish such good faith.

(b) Any such order shall be issued after notice and opportunity for a hearing which will be held in accordance with title 5 U.S.C. 554.

[45 FR 86718, Dec. 31, 1980, as amended at 48 FR 27040, June 13, 1983]

### § 205.169 Labeling requirements.

(a) The manufacturer of any product (including the manufacturer of newly produced motorcycles) subject to this subpart must, at the time of manufacture, affix a permanent, legible label, or mark of the type and in the manner described below, containing the information provided below, to all such exhaust systems or exhaust system components to be distributed in commerce.

(b) The labels or marks shall be affixed in such a manner that they cannot be removed without destroying or defacing them, and must not be applied to any part which is easily detached from such product.

(c) The label or mark shall be in a readily visible position when the exhaust system or exhaust system component is installed on all motorcycles for which it is designed and marketed.

(d) All required language shall be lettered in the English language in block letters and numerals in a color that contrasts with its background.

(e) The label or mark must contain the following information:

(1) For exhaust systems subject to the noise emission standards of § 205.166:

(i) The label heading: Motorcycle Exhaust System Noise Emission Control Information;

(ii)(A) For original equipment and replacement exhaust system, the following statement:

This (manufacturer's name) exhaust system (serial number) meets EPA noise emission requirements of (noise emission standard) dBA for the following motorcycles: (list of model specific codes). Installation of this exhaust system on motorcycle models not specified may violate Federal law.

(B) For exhaust system components designed and marketed for motorcycles, and tested in accordance with § 205.168 as a constituent of a complete exhaust system comprising non-original equipment components (other than itself), as provided for in § 205.166(b)(3), the following statement:

This (manufacturer's name) (type of component) (serial number), when installed with a legal (type of component), meets EPA noise emission requirements of (noise emission standard) dBA for the following motorcycles: (list of model specific codes). Installation of this exhaust system components on motorcycle models not specified may violate Federal law.

(iii) The model specific code must be the same as used by the motorcycle manufacturer and described in § 205.158(a)(6).

(2) For exhaust systems designed solely for use on competition motorcycles (as defined by § 205.151(a)(3) and so designated and labeled by the manufacturer), the statement:

This product is designed for use on closed course competition motorcycles only and does not conform to U.S. EPA noise emission standards. Used on motorcycles subject to EPA noise regulations constitutes tampering and is a violation of Federal law unless it can be shown that such use does not cause the motorcycle to exceed applicable Federal standards.

(3) For exhaust systems designed solely for use on motorcyles manufactured before January 1, 1982, the statement:

This product is designed for use on pre-1982 model year motorcycles only and does not conform to U.S. EPA noise emission standards. Use on motorcycles subject to EPA noise regulations constitutes tampering and is a violation of Federal law unless it can be shown that such use does not cause the motorcycle to exceed applicable Federal standards.

(4) For replacement exhaust systems manufactured in the United States solely for use outside the U.S. and not conforming to the noise emissions standards of this regulation, the statement: ''For Export Only.''

[45 FR 86718, Dec. 31, 1980, as amended at 47 FR 57722, Dec. 28, 1982]

### § 205.170 Testing by the Administrator.

(a)(1) In order for the Administrator to determine whether such exhaust systems or a manufacturer's test facility conform to applicable regulations, the Administrator may require that exhaust systems to be tested pursuant to the Act be submitted to him, at such place and time as he reasonably designates. He may designate the quantity of exhaust systems and the duration of time he reasonably requires for the purpose of conducting tests in accordance with test procedures described in appendix I. The manner in which the Administrator conducts such tests, the EPA test facility, and the test procedures employed will be based upon good engineering practice and meet or exceed the requirements of appendix I.

(2) If the Administrator specifies that he will conduct such testing at the manufacturer's facility, the manufacturer shall make available instrumentation and equipment of the type required for test operators by these regulations. The Administrator may conduct such tests with his own equipment, having specifications equal to or exceeding the performance specifications of the instrumentation and equipment required in these regulations.

(3) The manufacturer may observe tests conducted by the Administrator pursuant to this section on exhaust systems produced by the manufacturer and may copy the data accumulated from such tests. The manufacturer may inspect any of the exhaust systems before and after testing by the Administrator.

(b)(1) If, based on tests conducted by the Administrator or on other relevant information, the Administrator determines that the test facility does not meet the requirements of appendix I or the requirements for an alternative test procedure approved under § 205.154, the Administrator will give notice to the manufacturer in writing of his determination and the reasons underlying it.

(2) The manufacturer may, at any time within 15 days after receipt of a notice issued under paragraph (b)(1) of this section, request a hearing conducted in accordance with 5 U.S.C. 554 on the issue of whether his test facility met the requirements. Such notice will not take effect until 15 days after its receipt by the manufacturer, or, if a hearing is requested under this paragraph, until adjudication by the administrative law judge.

(3) After any notice issued under paragraph (b)(1) of this section has taken effect, no data thereafter derived from that test facility will be acceptable for purposes of this subpart.

(4) The manufacturer may request in writing that the Administrator reconsider his determination under paragraph (b)(1) of this section based on data or information which indicates that changes have been made to the test facility and that such changes have resolved the reasons for disqualification.

(5) Within 10 working days after receipt of the manufacturer's request for reconsideration pursuant to paragraph (b)(4) of this section, the Administrator

will notify the manufacturer of his determination and the reasons underlying it with regard to the requalification of the test facility.

(c) The Administrator will assume all reasonable costs associated with shipment of exhaust systems to the place designated pursuant to paragraph (a) of this section except with respect to:

(1) [Reserved]

(2) Testing of a reasonable number of exhaust systems (i) for purposes of selective enforcement auditing under § 205.171, or (ii) if the manufacturer has failed to establish that there is a correlation between its test facility and the EPA test facility, or (iii) the Administrator has reason to believe, and provides the manufacturer with a statement of such reason, that the exhaust systems to be tested would fail to meet the standard prescribed in this subpart if tested at the EPA test facility, even though they would meet such standard if tested at the manufacturer's test facility;

(3) Any testing performed during a period when a notice of non- conformance of the manufacturer's test facility issued pursuant to paragraph (b) of this section is in effect;

(4) Any testing performed at a place other than the manufacturer's facility as a result of the manufacturer's failure to permit the Administrator to conduct or monitor testing as required by this subpart; and

(5) In addition to any exhaust systems included in paragraphs (c) (2), (3), or (4) of this section, testing of up to 10 percent of the manufacturer's exhaust systems for a model year if the Administrator determines testing these exhaust systems at the EPA test site is necessary to assure that a manufacturer has acted or is acting in compliance with the Act.

(Secs. 11 and 13 of the Noise Control Act (42 U.S.C. 4910, 4912); 42 U.S.C. 4905; 86 Stat. 1237 and secs. 6, 10, 11, 13, Pub. L. 92–574, 86 Stat. 1234 (42 U.S.C. 4905, 4909, 4910, 4912))

[45 FR 86718, Dec. 31, 1980; 46 FR 4918, Jan. 19, 1981, as amended at 47 FR 57722, Dec. 28, 1982; 49 FR 26738, June 29, 1984]

## § 205.171 Selective enforcement auditing (SEA) requirements.

### § 205.171–1 Test request.

(a) The Administrator will request all testing under § 205.171 by means of a test request addressed to the manufacturer.

(b) The test request will be signed by the Assistant Administrator for Enforcement or his designee. The test request will be delivered to the plant manager or other responsible official as designated by the manufacturer.

(c) The test request will specify the exhaust system category, model and model year of motorcycle selected for testing, the manufacturer's plant or storage facility from which the exhaust systems must be selected, the method of selection and the time at which the exhaust systems must be selected. The test request will also provide for situations in which the selected exhaust system is unavailable for testing. The test request may include an alternative exhaust system category designated for testing in the event that exhaust systems of the first specified category are not available for testing because the exhaust systems are not being manufactured at the specified plant or are not being manufactured during the specified time or are not being stored at the specified plant or storage facility.

(d)(1) If the manufacturer projects a yearly production of fewer than 50 exhaust systems of the specified category to be tested, then, within five (5) days of receipt of the request, the manufacturer must notify the Administrator of such low volume production. The Administrator will then provide a revised test request specifying a testing plan which imposes no greater risk of failure (5%) at the acceptable quality level (10%) than the plan in appendix II. Upon receipt of the revised test request, the manufacturer must select and test a sample of exhaust systems from the category specified in the test request in accordance with this subpart and the conditions specified in the test request.

(2) If the manufacturer produces 50 or more of the specified category, then,

upon receipt of the test request, the manufacturer must select and test a sample of exhaust systems for the category specified in the test request in accordance with this subpart and the conditions specified in the test request.

(e)(1) Any testing conducted by the manufacturer under a test request must be initiated within the time period specified in the test request; except that initiation may be delayed for increments of 24 hours or one business day where ambient test site weather conditions, or other conditions beyond the control of the manufacturer, in that 24-hour period do not permit testing. The manufacturer must record the conditions for this period.

(2) The manufacturer must complete noise emission testing on a minimum of ten exhaust systems per day unless otherwise provided by the Administrator or unless ambient test site conditions permit only the testing of a lesser number, in which event the ambient test site weather conditions for that period must be recorded.

(3) The manufacturer is allowed 24 hours to ship exhaust systems from a sample from the assembly plant to the testing facility if the facility is not located at the plant or in close proximity to the plant. The Administrator may approve more time based upon a request by the manufacturer accompanied by a satisfactory justification.

(f) The Administrator may issue an order to the manufacturer to cease distribution in commerce of exhaust systems of a specified category being manufactured at a particular facility if:

(1) The manufacturer refuses to comply with the provisions of a test request issued by the Administrator under this section; or

(2) The manufacturer refuses to comply with any of the requirements of this section.

(g) A cease distribution order will not be issued under paragraph (f) of this section if the manufacturer's refusal is caused by conditions and circumstances outside his control which render compliance with the provisions of a test request or with any other requirements of this section impossible. Conditions and circumstances outside the control of the manufacturer include, but are not limited to, the temporary unavailability of equipment and personnel needed to conduct the required tests, caused by uncontrollable factors such as equipment breakdown or failure or illness of personnel. Failure of the manufacturer to adequately plan for and provide the equipment and personnel needed to conduct the tests does not constitute uncontrollable factors. The manufacturer must bear the burden of establishing the presence of the conditions and circumstances required by this paragraph.

(h) Any order to cease distribution will be issued only after notice and opportunity for a hearing in accordance with 5 U.S.C. 554.

### § 205.171–2 Test exhaust system sample selection and preparation.

(a)(1) Exhaust systems comprising the sample which are required to be tested under a test request in accordance with this subpart must be selected consecutively as they are produced.

(2) Test motorcycles and test exhaust systems to be used for testing of exhaust systems must be of the subject class which has been assembled using the manufacturer's normal production processes, in stock configuration including exhaust system, as sold or offered for sale in commerce.

(3) Before the official test, the test motorcycle and test exhaust system must not be prepared, tested, modified, adjusted, or maintained in any manner unless such preparation, tests, modifications, adjustments or maintenance are part of the original equipment manufacturer's prescribed manufacturing and inspection procedures, and are documented in the manufacturer's internal motorcycle assembly and inspection procedures, or are required or permitted under this subpart, or are approved in advance by the Administrator.

(4) Equipment or fixtures necessary to conduct the test may be installed on the motorcycle, if such equipment or fixtures shall have no effect on the noise emissions of the motorcycle as determined by the measurement methodology.

(5) In the event of a motorcycle malfunction (i.e., failure to start, etc.) maintenance that is necessary may be performed to enable the vehicle to

operate in a normal manner. This maintenance must be documented and reported in the final report prepared and submitted in accordance with this subpart.

(6) No quality control, quality assurance testing, assembly or selection procedures may be used on the test vehicle or any portion thereof, including parts and subassemblies, that will not normally be used during the production and assembly of all other motorcycles of that class which will be distributed in commerce, unless such procedures are required or permitted under this subpart or are approved in advance by the Administrator.

(b) The Acceptable Quality Level (AQL) is 10 percent. The appropriate sampling plans associated with the designated AQL are contained in appendix II or the test request.

(c) The exhaust systems of the category selected for testing must be assembled by the manufacturer for distribution in commerce using the manufacturer's normal production process.

(d) Unless otherwise indicated in the test request, the manufacturer must initiate testing with the exhaust systems of the category specified in the test request which are next scheduled for production after receipt of the test request.

(e) The manufacturer must keep on hand all products in the test sample until the sample is accepted or rejected in accordance with §205.171–8; except that exhaust systems actually tested and found to be in conformance with this regulation need not be kept.

[45 FR 86718, Dec. 31, 1980, as amended at 47 FR 57723, Dec. 28, 1982]

### §205.171–3 Test motorcycle sample selection.

A test motorcycle to be used for selective enforcement audit testing of exhaust systems must be a motorcycle of the subject class which has been assembled using the manufacturer's normal production process, in stock configuration including exhaust system, and sold or offered for sale in commerce.

### §205.171–6 Testing procedures.

(a) The manufacturer of the exhaust system must conduct one valid test in accordance with the appropriate test procedure specified in appendix I for each exhaust system selected for testing under this subpart.

(b) No maintenance may be performed on the test exhaust system except as provided by §205.171–2. In the event an exhaust system is unable to complete the noise emission test, the manufacturer may replace the exhaust system. Any replacement exhaust system must be a production exhaust system of the same category as the exhaust system which it replaced, and it is subject to all the provisions of this subpart.

[45 FR 86718, Dec. 31, 1980, as amended at 47 FR 57723, Dec. 28, 1982]

### §205.171–7 Reporting of the test results.

(a)(1) The manufacturer must submit a copy of the test report for all testing conducted pursuant to §205.171 at the conclusion of each 24-hour period during which testing is done.

(2) For each test conducted, the manufacturer must provide the following information:

(i) Category identification where applicable;

(ii) Year, manufacturing date, serial number and model of exhaust system;

(iii) Year, make serial number, and model of test motorcycle; and

(iv) Test results by serial numbers.

(b) In the case where an EPA Enforcement Officer is present during testing required by this subpart, the written reports requested in paragraph (a) of this section may be given directly to the Enforcement Officer.

(c) Within 5 days after completion of an SEA, the manufacturer must submit to the Administrator a final report which will include the following:

(1) The name, location, and description of the manufacturer's noise emission test facilities which meet the specifications of appendix I and where utilized to conduct testing reported under this section, except, that a test facility that has been described in a previous submission under this subpart need not again be described, but must be identified as that facility.

(2) The following information for each noise emission test conducted:

(i) The individual records required by §205.172 (a)(2) for all noise emission

tests including for each invalid test, the reason for invalidation;

(ii) A complete description of any modification, repair, preparation, maintenance, or testing, which could affect the noise emissions of the product and which was performed on the test exhaust system but not performed on all other production exhaust systems;

(iii) The test results for any replacement exhaust system and the reason for its replacement.

(3) A complete description of the sound data acquisition system if other than that specified in appendix I.

(4) The following statement and endorsement:

This report is submitted pursuant to section 6 and section 13 of the Noise Control Act of 1972. To the best of (company name) knowledge, all testing for which data is reported here was conducted in strict conformance with applicable regulations under 40 CFR Part 205 *et seq.*, all the data reported here are a true and accurate representation of such testing, and all other information reported here is true and accurate. I am aware of the penalties associated with violations of the Noise Control Act of 1972 and the regulations thereunder. (authorized representative).

(5) Additional information required by the test request.

(d) Information required to be submitted to the Administrator under this section must be sent to the following address: Director, Noise and Radiation Enforcement Division, (EN–387), U.S. Environmental Protection Agency, Washington, DC 20460.

### § 205.171–8 Passing or failing under SEA.

(a) A failing exhaust system is one which, when installed on any motorcycle which is in compliance with the requirements of subpart D and for which it is designed and marketed, together with such motorcycle produces a measured noise level in excess of the applicable noise emission standard in § 205.166.

(b) The number of failing vehicles in a sample determines whether the sample passes or fails (See applicable tables in appendix II). If the number of failing vehicles is greater than or equal to the number in Column B, the sample fails. If the number of failing vehicles is less than or equal to the number in Column A, the sample passes.

(c) Pass or failure of a SEA takes place when a decision that an exhaust system is a passing or failing unit is made on the last exhaust system required to make a decision under paragraph (b) of this section.

(d) If the manufacturer passes the SEA, he will not be required to perform any additional testing on subsequent exhaust systems to satisfy the test request.

(e) The Administrator may terminate testing earlier than required in paragraph (b) of this section, based on a request by the manufacturer, accompanied by voluntarily ceasing distribution in commerce of exhaust systems from the category in question, manufactured at the plant which produced the exhaust systems being tested. Before reinitiating distribution in commerce of that exhaust system category from that plant, the manufacturer must take the action described in § 205.171–10(a)(1) and (2).

### § 205.171–9 Continued testing.

(a) If an SEA failure occurs according to paragraph (b) of § 205.171–8, the Administrator may require that any or all exhaust systems of that category produced at that plant be tested before distribution in commerce.

(b) The Administrator will notify the manufacturer in writing of his intent to require continued testing of exhaust systems under paragraph (a) of this section.

(c) The manufacturer may request a hearing on the issues of whether the SEA was conducted properly; whether the criteria for SEA failure have been met; and the appropriateness or scope of a continued testing order. If a hearing is requested, the hearing will begin no later than 15 days after the date on which the Administrator received the hearing request. Neither the request for a hearing nor the fact that a hearing is in progress will affect the responsibility of the manufacturer to commence and continue testing required by the Administrator pursuant to paragraph (a) of this section.

(d) Any tested exhaust system which demonstrates conformance with the applicable standard may be distributed into commerce.

(e) Any distribution into commerce of an exhaust system which does not comply with the applicable standard is a prohibited act.

**§ 205.171–10 Prohibition on distribution in commerce; manufacturer's remedy.**

(a) The Administrator will permit the manufacturer to cease testing under § 205.171–9 after the manufacturer has taken the following actions:

(1) Submission of a written report to the Administrator which identifies the reason for the noncompliance of the exhaust systems, describes the problem and describes the proposed quality control or quality assurance remedies to be taken by the manufacturer to correct the problem.

(2) Demonstration that the specified exhaust system category has passed a retest conducted in accordance with § 205.171 and the conditions specified in the test request.

(b) The manufacturer may begin testing under paragraph (a)(2) of this section upon submitting the report, required by paragraph (a)(1) of this section any may cease continued testing upon making the demonstration required by paragraph (a)(2) of this section. The Administrator may require resumption of continued testing if he determines that the manufacturer has not satisfied the requirements of paragraphs (a)(1) and (2) of this section.

(c) Any exhaust system failing the noise emission tests conducted pursuant to Appendix I may not be distributed into commerce until necessary adjustment or repairs have been made and the exhaust system passes a retest.

[45 FR 86718, Dec. 31, 1980, as amended at 47 FR 57723, Dec. 28, 1982]

**§ 205.172 Maintenance of records; submittal of information.**

(a) Except as otherwise provided in regulation, the manufacturer of any new exhaust system subject to any of the standards or procedures prescribed in this subpart must establish, maintain and retain the following adequately organized and indexed records:

(1) General records:

(i) Identification and description by category parameters of all exhaust systems in the manufacturer's product line;

(ii) A description of any procedures other than those contained in this subpart used to perform noise emission tests on any test exhaust system;

(iii) A record of the calibration of the acoustical instrumentation as is described in appendix I;

(iv) A record of the date of manufacture of each exhaust system subject to this subpart, keyed to the serial number.

(2) Individual records for test exhaust systems:

(i) A complete record of all noise emission tests performed for Production Verification and Selective Enforcement Audit (except tests performed by EPA directly), including all individual worksheets and other documentation or exact copies relating to each test;

(ii) A record of the information recorded as described in Appendix I; and

(iii) A record and description of all repairs, maintenance and other servicing which were performed before successful testing of the exhaust system pursuant to these regulations and which could affect the noise emission of the exhaust system, giving the date and time of the maintenance or service, the reason for it, the person authorizing it, and the names of supervisory personnel responsible for the conduct of the maintenance or service.

(3) A properly filed production verification report following the format prescribed by the Administrator in § 205.168–3 fulfills the requirements of paragraphs (a)(1)(i) and (ii) of this section.

(4) All records required to be maintained under this subpart must be retained by the manufacturer for a period of three (3) years from the production verification date. Records may be retained as hard copy or alternatively reduced to microfilm, punch cards, etc., depending on the record retention procedures of the manufacturer; however, when an alternative method is used, all information contained in the hard copy must be contained in the copy made by the alternative method.

(b) The manufacturer must, upon request, submit to the Administrator the following information with regard to new exhaust system production:

(1) Number of exhaust systems, by category, scheduled for production for the time period designated in the request.

(2) Number of exhaust systems, by category, produced during the time period designated in the request.

(c) The reporting requirements of this regulation will no longer be effective after five (5) years from the last effective date of this regulation. However, the requirements will remain in effect if the Administrator is taking appropriate steps to repromulgate or modify the reporting requirements at that time.

## § 205.173 In-use requirements.

### § 205.173–1 Warranty.

(a) The exhaust system manufacturer must include in the information supplied to the ultimate purchaser pursuant to § 205.173–4, the following statement:

NOISE EMISSION WARRANTY

[The manufacturer] warrants that this exhaust system, at time of sale, meets all applicable U.S. E.P.A. Federal noise standards. This warranty extends to the first person who buys this exhaust system for purposes other than resale, and to all subsequent buyers. Warranty claims should be direct to _____. (Manufacturer shall fill in this blank with his name, address and telephone number.)

(b) [Reserved]

(c) All information must be sent to:

Director, Noise and Radiation Enforcement Division (EN–387), Environmental Protection Agency, Washington, DC 20460.

[45 FR 86718, Dec. 31, 1980, as amended at 47 FR 57723, Dec. 28, 1982]

### § 205.173–2 Tampering.

The manufacturer must include the following statement pursuant to § 205.173–4 with each product of that category the manufacturer distributes into commerce:

TAMPERING PROHIBITION

Federal law prohibits any modification to this exhaust system which causes the motorcycle to exceed the Federal noise standard. Use of the motorcycle with such a modified exhaust system is also prohibited.

Acts likely to constitute tampering include removal or puncturing the muffler, baffles, header pipes, or any other component which conducts exhaust gases.

[45 FR 86718, Dec. 31, 1980, as amended at 47 FR 57723, Dec. 28, 1982]

### § 205.173–3 Warning statement.

The manufacturer must include the following statement pursuant to § 205.173–4 with each product of that category the manufacturer distributes into commerce:

Warning: This product should be checked for repair or replacement if the motorcycle noise has increased significantly through use. Otherwise, the owner may become subject to penalties under state and local ordinances.

[45 FR 86718, Dec. 31, 1980, as amended at 47 FR 57723, Dec. 28, 1982]

### § 205.173–4 Information sheet.

The manufacturer must include the Noise Emissions Warranty statement, Tampering Prohibition statement and the Warning statement with each product. All three statements must be printed on a white sheet or card at least 8½″×11″. Each statement must cover no more than ⅓ of the sheet or card. No other printing must be on the sheet. The statements must be printed in black ink; the statement headings must be in capital letters in a minimum size type of 12 point (pica type) or its equal; and the text of the statement must be a minimum size type of 10 point (elite type) or its equal. The sheet or card must be placed with the exhaust system inside any packaging. If there is no packaging, the sheet or card must be affixed to the exhaust system so that it will not be accidentally detached in shipping.

## § 205.174 Remedial orders.

The Administrator may issue appropriate remedial orders to a manufacturer if products are distributed into commerce not in compliance with the regulations of this subpart. Potential

orders are stop sale orders, orders to cease distribution, relabel, replace or recall, or any other orders appropriate in the specific circumstances. A remedial order will be issued only after notice and opportunity for a hearing in accordance with 5 U.S.C. 554.

## APPENDIX I TO SUBPARTS D AND E—MOTORCYCLE NOISE EMISSION TEST PROCEDURESAPPENDIX I–1 TO SUBPARTS D AND E—TEST PROCEDURE FOR STREET AND OFF-ROAD MOTORCYCLES

(a) *Instrumentation.* Proper usage of all test instrumentation is essential to obtain valid measurements. Operating manuals or other literature furnished by the instrument manufacturer must be referred to for both recommended operation of the instrument and precautions to be observed. The following instrumentation must be used, where applicable:

(1) A sound level measurement system which meets the type S1A requirements of American National Standard Specification for Sound Level Meters, ANSI S1.4–1971. As an alternative to making direct measurements using a sound level meter, a microphone or sound level meter may be used with a magnetic tape recorder and/or a graphic level recorder or indicating instrument provided that the system meets the performance requirements of ANSI S1.4–1971. The sound level measurement system must be calibrated at least annually to insure that the system meets the performance requirements of ANSI S1.4–1971.

(2) An acoustic calibrator with an accuracy of within ±0.5 dB. The calibrator must be checked annually to verify that its output is within the specified accuracy.

(3)(i) An engine speed measurement system having the following characteristics:

(A) Steady-state accuracy of within ±3% of actual engine speed in the range of 45% to 100% of the engine speed (RPM) where peak net brake power (maximum rated RPM) is developed; and

(B) Response characteristics such that, when closing RPM is indicated under an acceleration as described below, actual engine speed is no more than 3 percent (of closing RPM) greater than the specified closing RPM.

(ii) The vehicle tachometer may be used to ascertain:

(A) The approach RPM provided it meets the specifications in paragraph (a)(3)(i)(A).

(B) The closing RPM provided it meets the specifications in paragraphs (a)(3)(i)(A) and (B).

(iii) Indirect engine speed measurement systems, such as systems which determine engine speed from vehicle speed measurement, may be used provided the specifications of paragraph (a)(1)(i) are met.

(4) An anemometer with steady-state accuracy of within ±10% at 20 km/h (12.4 mph).

(5) A microphone wind screen which does not affect microphone response more than ±0.5 dB for frequencies of 20–4000 Hz or ±1.0 dB for frequencies of 4000–10,000 Hz, taking into account the orientation of the microphone.

(b) *Test site.* (1) The measurement area within the test site must meet the following requirements and be laid out as described:

(i) The following points must be established:

(A) Microphone target point—a reference point on the vehicle path;

(B) End point—a point on the vehicle path 7.5 ± 0.3m (24.6 ± 1.0 ft) beyond the microphone target point, and

(C) Microphone location point—a point 15± 0.3m (49.2 ± 1.0 ft) from the microphone target point on a normal to the vehicle path through the microphone target point.

(ii) The microphone must be:

(A) Positioned at the microphone location point 1.2 ± 0.1 m (3.9 ± 0.3 ft) above the ground plane; and

(B) Oriented in a plane perpendicular to the vehicle path, and at an angle for which the microphone was calibrated to have the flatest response characteristics over the frequency range of 100 Hz to 10,000 Hz when measured with respect to the motorcycle source.

(iii) The surface of the ground within at least the triangular area formed by the microphone location and the points 15 ± 0.3m (49.2 ±1.0 ft.) prior to and 15 ± 0.3 m (49.2 ± 1.0 ft.) beyond the microphone target point must be flat (+ 5 cm (2.0 in)) and level (grade not more than 0.5% along vehicle path), have a concrete or sealed asphalt surface, and be free from snow, soil or other extraneous material.

(iv) The vehicle path must be relatively smooth and of sufficient length for safe acceleration, deceleration and stopping of the motorcycle.

(2) The test site must be flat, open space free of large sound-reflecting surfaces (other than the ground), such as parked vehicles, sign-boards, buildings or hillsides located within a 30 ± 0.3 m (98.4 ± 1.0 ft) radius of the microphone location and the following points on the vehicle path (see Figure 1):

(i) The microphone location point;

(ii) A point 15 ± 0.3 m (49.2 ± 1.0 ft.) before the microphone target point; and

(iii) A point 15 ± 0.3 m (49.2 ± 1.0 ft) beyond the microphone target point.

(c) *Measurement procedure.*

(1) To establish the acceleration point, the end point must be approached in second gear from the reverse of the intended test direction at a constant engine speed of 50% of maximum rated RPM or closing RPM less ten percent (of maximum rated RPM), whichever is lower, (±2.5% of observed reading). When the front of the motorcycle

reaches the end point (approached from the reverse direction), the throttle must be smoothly and fully opened to accelerate the motorcycle past the microphone target point under wide open throttle. When the motorcycle reaches closing RPM the throttle must be smoothly and fully closed. An ignition disable device may be used to turn off the engine at closing RPM in lieu of closing the throttle manually. The location of the front of the motorcycle at the time of throttle closure is the acceleration point for the test runs. The test runs must be made in the opposite direction. A sufficient number of trial runs must be made to assure accurate establishment of the acceleration point.

(2) Closing RPM must be determined according to the motorcycle engine displacement, as follows (see Figure 2):

| Displacement (cc) | Closing RPM (Fraction of maximum rated RPM—percent) |
|---|---|
| 0 to 175 | 95 |
| 176 to 675 | 109 to 0.08×(engine displacement in cc) |
| 676 and above | 55 |

(3) The distance from the acceleration point to the end point must be at least 10 m (32.8 ft). If this distance is less than 10 m (32.8 ft) by the procedure specified in paragraph (c)(1), above, third gear, if the motorcycle is so equipped, must be used. If the distance is still less than 10 m (32.8 ft), fourth gear, if the motorcycle is so equipped, must be used, and so on. If closing RPM is reached before the vehicle travels 10 m (32.8 ft), with the vehicle in its highest gear, the throttle must be opened less rapidly, but in such a manner that full throttle and closing RPM are attained at the end point.

(4) If the motorcycle is equipped with an automatic transmission, the procedure specified in paragraph (c)(1), must be followed except that the lowest selectable range must be employed, and the procedure specified in paragraph (c)(3) must be followed using the next selectable higher range, if necessary, and if the vehicle is so equipped. If closing RPM is reached before the vehicle travels 10 m (32.8 ft.), the throttle must be opened less rapidly, but in such a manner that full throttle and closing RPM are attained at the end point.

(5) Throttle opening must be controlled to avoid excessive wheel slip or lift-off.

(6) To conduct a sound measurement, the motorcycle must proceed along the vehicle path in the forward direction in second gear (or higher gear as applicable under paragraph (c)(3)) at a constant engine speed of 50% of maximum rated RPM or at closing RPM less ten percent (of maximum rated RPM), whichever is lower (± 2.5 percent of observed reading). When the front of the vehicle reaches the acceleration point, the throttle must be smoothly and fully opened. Full acceleration must continue until closing RPM is reached, which must occur within ± 1.0 m (3.3 ft.) of the end point, and at which time the throttle must be smoothly and fully closed. An ignition disable device may be used to turn off the engine at closing RPM in lieu of closing the throttle manually.

(7) A sufficient number of preliminary runs must be conducted before the testing to familiarize the rider with the test procedure and operating conditions of the vehicle. The engine temperature must be within the normal operating range prior to each run.

(d) *Measurements.* (1) The sound level meter must be set for fast response and for the A-weighting network. The microphone wind screen must be used. The sound level meter must be calibrated with the acoustic calibrator as often as is necessary throughout testing to maintain the accuracy of the measurement system.

(2) The sound level meter must be observed throughout the acceleration period. The highest sound level obtained for the run must be recorded.

(3) Measurements must be made until at least four readings from each side are within 2 dB of each other. The noise level for each side is the average of the four which are within 2 dB of each other. The noise level reported must be for that side of the motorcycle having the highest noise level.

(4) While making sound level measurements, not more than one person other than the rider and the observer reading the meter may be within 15 m (49.2 ft) of the vehicle or microphone, and that person must be directly behind the observer reading the meter, on a line through the microphone and the observer.

(5) The ambient noise level (including wind effects) at the test site due to sources other than the motorcycle being measured must be at least 10 dB lower than the noise level at the microphone location produced by the motorcycle under test.

(6) Wind speed at the test site during tests must be less than 20 km/h (12.4 mph).

(e) *Required data.* For each valid test, the following data must be recorded:

(1) Motorcycle type, serial number, model year, and date of manufacture.

(2) Names of persons conducting test.

(3) Test location.

(4) Wind speed and ambient noise level measured on the same day as the test and representative of conditions during the test.

(5) Motorcycle engine displacement, maximum rated RPM, and closing RPM.

(6) The gear used for testing if other than second gear; or type of transmission and description of testing if motorcycle is equipped with automatic transmission.

(7) Description of the sound level meter including type, serial number, and calibration date.

(8) Description of the external acoustic calibrator including type, serial number, and calibration date.

(9) Description of the tachometer or engine speed measurement system used for conducting the test.

(10) Maximum noise level for each pass on each side of the motorcycle including invalid readings and reasons for invalidation.

(11) Reported noise level.

(12) Other information as appropriate to completely describe testing conditions and procedure.

APPENDIX I–2 TO SUBPARTS D AND E—TEST PROCEDURE FOR STREET MOTORCYCLES THAT MEET THE DEFINITION OF §205.151(A)(2)(II) (MOPED-TYPE STREET MOTORCYCLES)

(a) *Instrumentation.* Proper usage of all test instrumentation is essential to obtain valid measurements. Operating manuals or other literature furnished by the instrument manufacturer must be referred to for both recommended operation of the instrument and precautions to be observed. The following instrumentation must be used, where applicable:

(1) A sound level measurement system which meets the type SIA requirements of American National Standard Specification for Sound Level Meters, ANSI S1.4–1971. As an alternative to making direct measurements using a sound level meter, a microphone or sound level meter may be used with a magnetic tape recorder and/or a graphic level recorder or indicating instrument provided that the system meets the performance requirements of ANSI S1.4–1971. The sound level measurement system must be calibrated at least annually to insure that the system meets the performance requirements of ANSI S1.4–1971.

(2) An acoustic calibrator with an accuracy of within ±0.5 dB. The calibrator must be checked annually to verify that its output is within the specified accuracy.

(3) An anemometer with steady-state accuracy of within ±10% at 20 km/h (12.4 mph).

(4) A microphone wind screen which does not affect microphone response more than ±0.5 dB for frequencies of 20–4000 Hz or ±1.0 dB for frequencies of 4000–10,000 Hz, taking into account the orientation of the microphone.

(b) *Test site.* (1) The measurement area within the test site must meet the following requirements and be laid out as described:

(i) The following points must be established:

(A) Microphone target point—a reference point on the vehicle path;

(B) End point—a point on the vehicle path 7.5±0.3 m (24.6±1.0 ft) beyond the microphone target point; and

(C) Microphone location point—a point 15±0.3 m (49.2±1.0 ft) from the microphone target point on a normal to the vehicle path through the microphone target point. Alternately, the microphone location point may be a point 7.5±0.3 m (24.6±1.0 ft) from the microphone target point provided that the sound level reported is adjusted as provided in this appendix under paragraph (d)(3).

(ii) The microphone must be:

(A) Positioned at the microphone location point 1.2±0.1 m (3.9±0.3 ft) above the ground plane; and

(B) Oriented in a plane perpendicular to the vehicle path, and at an angle for which the microphone was calibrated to have the flattest response characteristics over the frequency range of 100 Hz to 10,000 Hz when measured with respect to the motorcycle source.

(iii) The surface of the ground within at least the triangular area formed by the microphone location and the points 15±0.3 m (49.2±1 ft) prior to and 15±0.3 m beyond the microphone target point must be flat (±5 cm (2.0 in)) and level (grade not more than 0.5% along vehicle path), have a concrete or sealed asphalt surface, and be free from snow, soil or other extraneous material.

(iv) The vehicle path must be relatively smooth and of sufficient length for safe acceleration, deceleration and stopping of the motorcycle.

(2) The test site must be a flat, open space free of large sound-reflecting surfaces (other than the ground), such as parked vehicles, signboards, buildings or hillsides located within a 30±0.3 m (98.4±1.0 ft) radius of the microphone location and the following points on the vehicle path (see Figure 1):

(i) The microphone location point;

(ii) A point 15±0.3 m (49.2±1 ft) before the microphone target point; and

(iii) A point 15±0.3 m (49.2±1 ft) beyond the microphone target point.

(c) *Measurement procedure.* (1) The combined weight of the test rider and test equipment used on the motorcycle must not be more than 80 kg (176 lb) nor less than 75 kg (165 lb). Weights shall be placed on the motorcycle saddle behind the rider to compensate for any difference between the actual driver/equipment load and the required 75 kg (165 lb) minimum.

(2) The motorcycle must approach the microphone target point with the throttle fully open and in the highest gear. The motorcycle must start such that maximum speed is reached before the vehicle is within 7.5 m of the microphone target point. The motorcycle must continue along the vehicle path with fully open throttle and at maximum speed past the end point, at which time the throttle must be closed.

(3) If the motorcycle is equipped with an automatic transmission, the procedure of paragraph (1), above, must be followed except

that the highest selectable range shall be employed.

(d) *Measurements.* (1) The sound level meter must be set for fast response and for the A-weighting network. The microphone wind screen must be used. The sound level meter must be calibrated with the acoustic calibrator as often as is necessary throughout testing to maintain the accuracy of the measurement system.

(2) The sound level meter must be observed throughout the passby period. The highest noise level obtained for the run must be recorded.

(3) At least three measurements shall be made for each side of the motorcycle. Measurements must be made until at least three readings from each side are within 2 dB of each other. The noise level for each side must be the average of the three. The noise level reported must be for that side of the motorcycle having the highest noise level. If the microphone location point is 7.5 m from the vehicle path as allowed in this appendix under paragraph (b)(1)(i)(c), the noise level must be adjusted by subtracting 6 dB prior to being reported.

(4) While making noise level measurements, not more than one person other than the rider and the observer reading the meter may be within 15 m (49.2 ft) of the vehicle or microphone, and that person must be directly behind the observer reading the meter, on a line through the microphone and the observer.

(5) The ambient sound level (including wind effects) at the test site due to sources other than the motorcycle being measured must be no greater than 60 dB if the microphone is located 15 m from the vehicle path or 66 dB if the microphone is located 7.5 m from the vehicle path as allowed in this appendix under paragraph (b)(1)(i)(c).

(6) Wind speed at the test site during tests must be less than 20 km/h (12.4 mph).

(e) *Required data.* For each valid test, the following data must be recorded:

(1) Motorcycle type, serial number, model year, and date of manufacture.

(2) Names of persons conducting test.

(3) Test location.

(4) Wind speed and ambient noise level measured on the same day as the test and representative of conditions during the test.

(5) Description of the sound level meter including type, serial number, and calibration date.

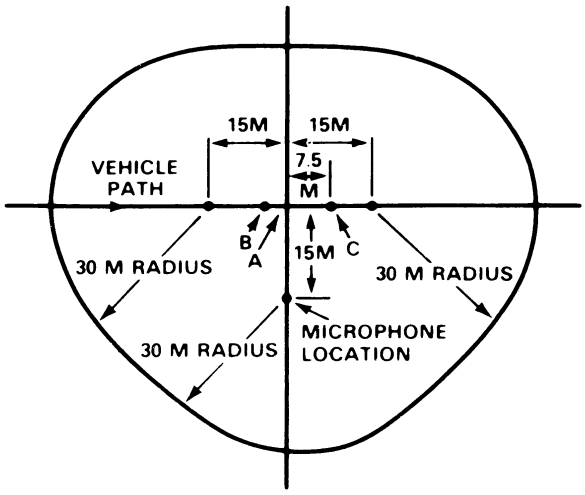
(6) Description of the external acoustic calibrator including type, serial number, and calibration date.

(7) Maximum noise level for each pass on each side of the motorcycle including invalid readings and reasons for invalidation.

(8) Reported noise level.

(9) Other information as appropriate to completely describe testing conditions and procedure.

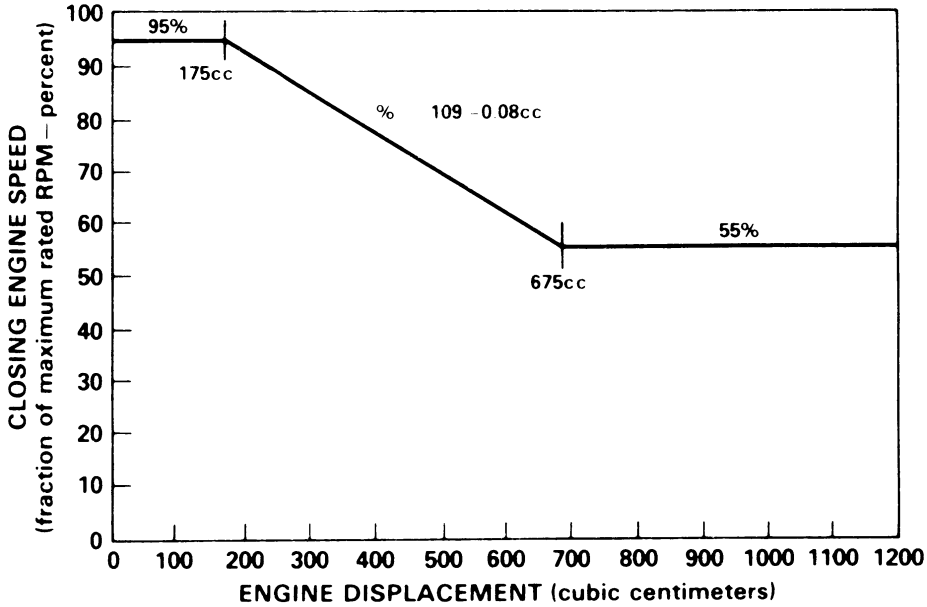
FIGURE 1 — TEST MEASUREMENT AREA




A – MICROPHONE TARGET POINT
B – ACCELERATION POINT (VARIABLE)
C – END POINT

TEST MEASUREMENT AREA

FIGURE 2 — CLOSING RPM



APPENDIX II TO SUBPART E—SAMPLING TABLES

TABLE 1—MODEL YEAR PRODUCTION VOLUME OF 50–99 VEHICLES

| Cumulative number of tests | Number of failing vehicles | |
|---|---|---|
| | Column A | Column B |
| 1 | ..... | ..... |
| 2 | ..... | ..... |
| 3 | ..... | 3 |
| 4 | ..... | 3 |
| 5 | ..... | 3 |
| 6 | ..... | 3 |
| 7 | 0 | 3 |
| 8 | 0 | 4 |
| 9 | 0 | 4 |
| 10 | 0 | 4 |
| 11 | 1 | 4 |
| 12 | 1 | 4 |
| 13 | 1 | 5 |
| 14 | 1 | 5 |
| 15 | 2 | 5 |
| 16 | 2 | 5 |
| 17 | 2 | 5 |
| 18 | 2 | 5 |
| 19 | 2 | 5 |
| 20 | 4 | 5 |

TABLE 2—MODEL YEAR PRODUCTION VOLUME OF 100–199 VEHICLES

| Cumulative number of tests | Number of failing vehicles | |
|---|---|---|
| | Column A | Column B |
| 1 | ..... | ..... |
| 2 | ..... | ..... |
| 3 | ..... | 3 |
| 4 | ..... | 3 |
| 5 | ..... | 3 |
| 6 | ..... | 3 |
| 7 | 0 | 4 |
| 8 | 0 | 4 |
| 9 | 0 | 4 |
| 10 | 0 | 4 |
| 11 | 1 | 4 |
| 12 | 1 | 5 |
| 13 | 1 | 5 |
| 14 | 1 | 5 |
| 15 | 1 | 5 |
| 16 | 2 | 5 |
| 17 | 2 | 5 |
| 18 | 2 | 5 |
| 19 | 2 | 5 |
| 20 | 4 | 5 |

TABLE 3—MODEL YEAR PRODUCTION VOLUME OF 200–399 VEHICLES

| Cumulative number of tests | Number of failing vehicles | |
|---|---|---|
| | Column A | Column B |
| 1 | ..... | ..... |
| 2 | ..... | ..... |
| 3 | ..... | 3 |
| 4 | ..... | 3 |
| 5 | ..... | 3 |
| 6 | ..... | 3 |
| 7 | 0 | 4 |
| 8 | 0 | 4 |

TABLE 3—MODEL YEAR PRODUCTION VOLUME OF 200–399 VEHICLES—Continued

| Cumulative number of tests | Number of failing vehicles | |
|---|---|---|
| | Column A | Column B |
| 9 | 0 | 4 |
| 10 | 0 | 4 |
| 11 | 0 | 5 |
| 12 | 1 | 5 |
| 13 | 1 | 5 |
| 14 | 1 | 5 |
| 15 | 1 | 5 |
| 16 | 2 | 5 |
| 17 | 2 | 5 |
| 18 | 2 | 5 |
| 19 | 2 | 5 |
| 20 | 4 | 5 |

TABLE 4—MODEL YEAR PRODUCTION VOLUME OF 400 OR MORE VEHICLES

| Cumulative number of tests | Number of failing vehicles | |
|---|---|---|
| | Column A | Column B |
| 1 | ..... | ..... |
| 2 | ..... | ..... |
| 3 | ..... | 3 |
| 4 | ..... | 3 |
| 5 | ..... | 3 |
| 6 | ..... | 4 |
| 7 | 0 | 4 |
| 8 | 0 | 4 |
| 9 | 0 | 4 |
| 10 | 0 | 4 |
| 11 | 0 | 5 |
| 12 | 1 | 5 |
| 13 | 1 | 5 |
| 14 | 1 | 5 |
| 15 | 1 | 5 |
| 16 | 2 | 5 |
| 17 | 2 | 5 |
| 18 | 2 | 5 |
| 19 | 2 | 5 |
| 20 | 4 | 5 |

# PART 209—RULES OF PRACTICE GOVERNING PROCEEDINGS UNDER THE NOISE CONTROL ACT OF 1972

## Subpart A—Rules of Practice Governing Hearings for Orders Issued Under Section 11(d) of the Noise Control Act

Sec.
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209.2 Use of number and gender.
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209.4 Issuance of complaint.
209.5 Complaint.
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209.7 Effective date of order in complaint.
209.8 Submission of a remedial plan.
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209.10 Approval of plan, implementation.
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209.16 Late intervention.
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209.18 Administrative law judge.
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209.20 Conferences.
209.21 Primary discovery (exchange of witness lists and documents).
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209.28 Record.
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209.31 Appeal from the decision of the administrative law judge.
209.32 Review of the administrative law judge's decision in absence of appeal.
209.33 Decision on appeal or review.
209.34 Reconsideration.
209.35 Conclusion of hearing.
209.36 Judicial review.

AUTHORITY: Sec. 11, Noise Control Act of 1972 (42 U.S.C. 4910) and additional authority as specified.

SOURCE: 43 FR 34132, Aug. 3, 1978, unless otherwise noted.

## Subpart A—Rules of Practice Governing Hearings for Orders Issued Under Section 11(d) of the Noise Control Act

### §209.1 Scope.

These rules of practice govern all proceedings conducted in the issuance of an order under section 11(d) of the Noise Control Act of 1972, 42 U.S.C. 4910.

### §209.2 Use of number and gender.

In these rules of practice, words in the singular number apply to the plural and words in the masculine gender apply to the feminine and vice versa.

### §209.3 Definitions.

All terms not defined in this section shall have the meaning given them in the Act.

(a) *Act* means the Noise Control Act of 1972 (42 U.S.C. 4901 *et seq.*).

(b) *Administrative law judge* means an administrative law judge appointed under 5 U.S.C. 3105 (see also 5 CFR part 930, as amended by 37 FR 16787). ''Administrative law judge'' is synonymous with ''hearing examiner'' as used in Title 5 of the United States Code.

(c) *Administrator* means the Administrator of the Environmental Protection Agency or his or her delegate.

(d) *Agency* means the U.S. Environmental Protection Agency.

(e) *Complainant* means the Agency acting through any person authorized by the Administrator to issue a complaint to alleged violators of the Act. The complainant shall not be the judicial officer or the Administrator.

(f) *Hearing clerk* means the hearing clerk of the Environmental Protection Agency.

(g) *Intervener* means a person who files a motion to be made a party under §209.15 or §209.16, and whose motion is approved.

(h) *Party* means the Environmental Protection Agency, the respondent(s) and any interveners.

(i) *Person* means any individual, corporation, partnership, or association, and includes any officer, employee, department, agency or instrumentality of the United States, a State, or any political subdivision of a State.

(j) *Respondent* means any person against whom a complaint has been issued under this subpart.

(k) *Environmental Appeals Board* means the Board within the Agency described in §1.25 of this title. The Administrator delegates authority to the Environmental Appeals Board to issue final decisions in appeals filed under this part. An appeal directed to the Administrator, rather than to the Environmental Appeals Board, will not be considered. This delegation of authority to the Environmental Appeals Board does not preclude the Environmental Appeals Board from referring an appeal or a motion filed under this part to the Administrator for decision when the Environmental Appeals Board, in its discretion, deems it appropriate to do so. When an appeal or motion is referred to the Administrator, all parties shall be so notified and the rules in this part referring to the Environmental Appeals Board shall

be interpreted as referring to the Administrator.

[43 FR 34132, Aug. 3, 1978, as amended at 57 FR 5344, Feb. 13, 1992]

### § 209.4 Issuance of complaint.

If the complainant has reason to believe that a person has violated any provision of the Act or the regulations, he or she may institute a proceeding for the issuance of a remedial order by issuing a complaint.

### § 209.5 Complaint.

(a) *Contents.* The complaint shall include (1) specific reference to each provision of the Act or regulations which respondent is alleged to have violated; (2) a brief statement of the factual basis for alleging each violation; (3) the proposed order issued under section 11(d) of the Act to remedy the violation, signed by the Assistant Administrator for Enforcement, with notice that the order shall be effective 20 days after service of the complaint unless respondent requests a hearing under § 209.6; (4) notice of respondent's right to request a hearing on any material fact or issue of law contained in the complaint, or on the appropriateness of the proposed order; and (5) a statement of whether the respondent must submit a remedial plan pursuant to § 209.8.

(b) *Amendment of the complaint.* At any time prior to the filing of an answer, the complainant may amend the complaint as a matter of right. Respondent shall have twenty (20) additional days from the date of service of the amended complaint to file an answer. At any time after the filing of an answer, the complaint may be amended upon motion granted by the administrative law judge.

(c) *Withdrawal of the complaint.* Where, on the basis of new information or evidence, the complainant concludes that no violation of the Act or the regulations has been committed by the respondent or that the issuance of the complaint was otherwise inappropriate, the complainant may withdraw the complaint without prejudice at any stage in the proceeding.

(d) *Service of complaint.* (1) Service of the complaint shall be made on the respondent personally (or on his or her representative), or by certified mail, return receipt requested.

(2) Service upon a domestic or foreign corporation or upon a partnership or another unincorporated association which is subject to suit under a common name shall be made by personal service or certified mail, return receipt requested, directed to an officer or partner, a managing or general agent, or any other agent authorized by appointment or by Federal or State law to receive service of process.

(3) Proof of service of the complaint shall be made by affidavit of the person making personal service, or by properly executed return receipt.

### § 209.6 Answer.

(a) *General.* Where respondent (1) contests any material fact alleged in the complaint to constitute a violation of the Act or regulations; or (2) contends that the remedial order proposed in the complaint is inappropriate to the violation; or (3) contends that he or she is entitled to judgment as a matter of law, he or she shall file a written answer with the complainant. Any answer must be filed with the complainant within twenty (20) days after service of the complaint. Initiation of informal conferences with the Agency under § 209.19 does not add to the twenty (20) day period. The time period in which to file an answer may be extended by the Administrator upon motion.

(b) *Contents of the answer.* The answer shall clearly and directly admit, deny or explain each of the factual allegations contained in the complaint with regard to which respondent has any knowledge. Whenever an allegation is denied, the answer shall state briefly the facts upon which the denial is based. The answer shall also state (1) whether a hearing is requested, (2) the facts respondent intends to place at issue, and (3) the circumstances or arguments which are alleged to constitute the grounds of defense.

(c) *Hearing upon the issues.* A hearing upon the issues raised by the complaint and answer shall be held upon written demand of respondent.

(d) *Failure to plead specifically.* A respondent's failure to plead specifically

to any material factual allegation contained in the complaint shall constitute an admission of such allegation.

(e) *Amendment of the answer.* The respondent may amend the answer upon motion granted by the administrative law judge.

### § 209.7 Effective date of order in complaint.

(a) The order in the complaint is effective and binding on respondent 20 days after service of the complaint, unless respondent requests a hearing pursuant to § 209.6. If the respondent does not request a hearing, the order is then a final order of the Agency.

(b) Respondent may file a motion with the complainant to vacate the final order, reopen the proceedings and request a hearing after the order is effective. This motion must be filed within twenty (20) days after the effective date of the order. The motion shall state the reasons respondent failed to file a timely answer, and provide the information required by § 209.6(b). The Administrator may, in his or her discretion and for good cause shown, grant the motion.

### § 209.8 Submission of a remedial plan.

(a) The Administrator may require the respondent to submit a remedial plan. Notice of this requirement and the due date will be given in the complaint. If the respondent requests a hearing, the remedial plan required by the complaint need not be submitted. The final order may include a requirement that the respondent submit a remedial plan.

(b) A respondent may always submit a remedial plan voluntarily in pursuit of informal settlement.

(Sec. 13, Noise Control Act (42 U.S.C. 4912))

### § 209.9 Contents of a remedial plan.

(a) The Administrator will specify the requirements of the remedial plan. This may include, but is not limited to, the following information:

(1) A detailed description of the products covered by the remedial order, including the category and/or configuration if applicable, and the make, model year and model number, if applicable.

(2) A detailed description of the present location of the products, including a list of those in possession of the products and, if necessary, how the respondent intends to contact the persons in possession and retrieve the products.

(3) Any appropriate remedies the respondent would propose as an alternative to the specific remedies proposed by the Administrator.

(4) A detailed plan for implementing the remedies, both those proposed by the Administrator and those proposed by the respondent.

(5) A detailed account of the costs of implementing each of the proposed plans.

(b) Remedial plans shall be submitted to Director, Noise Enforcement Division (EN–387), Environmental Protection Agency, 401 M Street SW., Washington, DC 20460.

(Sec. 13, Noise Control Act (42 U.S.C. 4912))

### § 209.10 Approval of plan, implementation.

(a) If the Administrator finds that the remedial plan is designed to remedy the noncompliance effectively, he or she will so notify the respondent in writing. If the remedial plan is not approved, the Administrator will provide the respondent with written notice of the disapproval and the reasons for the disapproval. The Administrator may give the respondent an opportunity to revise the plan, or the Administrator may revise the plan.

(b) The respondent shall commence implementation of the approved plan upon receipt of notice from the Administrator that the remedial plan has been approved, or revised by the Administrator and then approved.

(Sec. 13, Noise Control Act (42 U.S.C. 4912))

### § 209.11 Filing and service.

(a) After an answer containing a written demand for a hearing has been filed, an original and two copies of all documents or papers required or permitted to be filed under these rules of practice shall be filed with the hearing clerk.

(b) When a party files with the hearing clerk any pleadings, any additional issues for consideration at the hearing, or any written testimony, documents, papers, exhibits, or materials, proposed

to be introduced into evidence or papers filed in connection with any appeal, it shall serve copies upon all other parties. A certificate of service shall be provided on or accompany each document or paper filed with the hearing clerk. Documents to be served upon the Director of the Noise Enforcement Division shall be mailed to: Director, Noise Enforcement Division, U.S. Environmental Protection Agency (EN–387), 401 M Street SW., Washington, DC 20460.

(c) Service by mail is complete upon mailing. Filing is completed when the document reaches the hearing clerk. It shall be timely if mailed within the time allowed for filing as determined by the postmark.

### § 209.12 Time.

(a) In computing any period of time prescribed or allowed by these rules of practice, the day of the act or event from which the designated period of time begins to run shall not be included, except as otherwise provided. Saturdays, Sundays, and Federal legal holidays shall be included in computing any period allowed for the filing of any document or paper, except that when a period expires on a Saturday, Sunday, or Federal legal holiday, the period shall be extended to include the next following business day.

(b) A prescribed period of time within which a party is required or permitted to do an act shall be computed from the time of service, except that when service is accomplished by mail, 3 days shall be added.

### § 209.13 Consolidation.

The Administrator or the administrative law judge may consolidate two or more proceedings to be held under this section for resolving one or more issues whenever it appears that such consolidation will expedite or simplify consideration of such issues. Consolidation shall not affect the right of any party to raise any issues that could otherwise have been raised.

### § 209.14 Motions.

(a) All motions, except those made orally during the course of the hearing, shall be in writing, shall state the grounds with particularity, and shall set forth the relief or order sought.

(b) Within 10 days after service of any motion filed under this section or within such other time as may be fixed by the Environmental Appeals Board or the administrative law judge, as appropriate, any party may serve and file an answer to the motion. The movant shall, by leave of the Environmental Appeals Board or the administrative law judge, as appropriate, serve and file reply papers within the time set by the request.

(c) The administrative law judge shall rule upon all motions filed or made subsequent to his or her appointment and prior to the filing of his or her decision or accelerated decision, as appropriate. The Environmental Appeals Board shall rule upon all motions filed before the appointment of the administrative law judge and all motions filed after the filing of the decision of the administrative law judge or accelerated decision. Oral argument of motions will be permitted only if the administrative law judge or the Environmental Appeals Board, as appropriate, deems it necessary.

[43 FR 34132, Aug. 3, 1978, as amended at 57 FR 5344, Feb. 13, 1992]

### § 209.15 Intervention.

(a) Persons desiring to intervene in a hearing to be held under section 11(d) of the act shall file a motion setting forth the facts and reasons why they should be permitted to intervene.

(b) In passing on a motion to intervene, the following factors, among other things, shall be considered by the administrative law judge:

(1) The nature of the movant's interest including the nature and the extent of the property, financial, environmental protection, or other interest of the movant;

(2) The effect the order which may be entered in the proceeding may have on the movant's interest;

(3) The extent to which the movant's interest will be represented by existing parties or may be protected by other means;

(4) The extent to which the movant's participation may reasonably be expected to assist materially in the development of a complete record;

(5) The extent to which one movant's participation may reasonably be expected to delay the proceedings.

(c) A motion to intervene should be filed before the first prehearing conference, the initiation of correspondence under §209.20, or the setting of the time and place for the hearing, whichever occurs earliest. Motions shall be served on all parties. Any opposition to such motion must be filed within 10 days of service.

(d) All motions to be made an intervener shall be reviewed by the administrative law judge using the criteria set forth in paragraph (b) of this section and considering any opposition to such motion. The administrative law judge may, in granting such motion, limit a movant's participation to certain issues only.

(e) If the administrative law judge grants the motion with respect to any or all issues, he or she shall notify, or direct the hearing clerk to notify, the petitioner and all parties. If the administrative law judge denies the motion he or she shall notify, or direct the hearing clerk to notify, the petitioner and all parties and shall briefly state the reasons why the motion was denied.

(f) All motions to be made an intervener shall include the movant's agreement that the movant and any person he or she represents will be subject to examination and cross-examination, and will also include an agreement to make any supporting and relevant records available at the movant's own expense upon the request of the administrative law judge, on his or her own motion or the motion of any party or other intervener. If the intervener fails to comply with any of these requests, the administrative law judge may, in his or her discretion, terminate his or her status as an intervener.

### §209.16 Late intervention.

Following the expiration of the time prescribed in §209.15 for the submission of motions to intervene in a hearing, any person may file a motion with the administrative law judge to intervene in a hearing. Such a motion must contain the information and commitments required by paragraph (b) and (f) of §209.15, and, in addition, must show that there is good cause for granting the motion and must contain a statement that the movant shall be bound by agreements, arrangements, and other determinations which may have been made in the proceeding.

### §209.17 Amicus curiae.

Persons not parties to the proceedings who wish to file briefs may do so by leave of the Environmental Appeals Board or the administrative law judge, as appropriate, granted on motion. This motion shall identify the interest of the applicant and shall state the reasons why the proposed amicus brief is desirable. An amicus curiae shall be eligible to participate in any briefing following the granting of his or her motion, and shall be served with all briefs, reply briefs, motions and orders relating to issues to be briefed.

[43 FR 34132, Aug. 3, 1978, as amended at 57 FR 5344, Feb. 13, 1992]

### §209.18 Administrative law judge.

(a) *General.* The administrative law judge shall conduct a fair and impartial hearing in accordance with 5 U.S.C. 554, and shall take all necessary action to avoid delay and maintain order. He or she shall have all power consistent with Agency rule and with the Administrative Procedure Act, 5 U.S.C. 551 *et seq.*, necessary to this end, including the following:

(1) To administer oaths and affirmations;

(2) To rule upon offers of proof and receive relevant evidence;

(3) To regulate the course of the hearings and the conduct of the parties and their counsel;

(4) To hold conferences for simplification of the issues or any other proper purpose;

(5) To consider and rule upon all appropriate procedural and other motions, and to issue all necessary orders;

(6) To require the submission of testimony in written form whenever in the opinion of the administrative law judge oral testimony is not necessary for full and true disclosure of the facts.

(7) To require the filing of briefs on any matter on which he or she is required to rule;

(8) To require any party or any witness, during the course of the hearing,

to state his or her position on any relevant issue;

(9) To take depositions or cause depositions to be taken in accordance with § 209.22.

(10) To render judgments upon issues of law during the course of the hearing.

(11) To issue subpenas authorized by law.

(b) *Assignment of administrative law judge.* When an answer which contains a written demand for a hearing is filed, the administrator shall refer the proceeding to the chief administrative law judge, who shall conduct the proceeding, or assign another administrative law judge to conduct the proceeding.

(Sec. 16, Noise Control Act (42 U.S.C. 4915))

### § 209.19 Informal settlement and consent agreement.

(a) *Settlement policy.* The Agency encourages settlement of the proceeding at any time after the issuance of a complaint if settlement is consistent with the provisions and the objectives of the act and the regulations. Whether or not respondent requests a hearing, he or she may confer with complainant concerning the facts stated in the complaint or concerning the appropriateness of the proposed remedial order. The terms of any settlement agreement shall be expressed in a written consent agreement. Conferences with complainant concerning possible settlement shall not affect the 20 day time limit for filing an answer under § 209.6.

(b) *Consent agreement.* A written consent agreement signed by the complainant and respondent shall be prepared by the complainant and forwarded to the Environmental Appeals Board whenever settlement or compromise is proposed. A copy shall be served on all other parties to the proceeding, no later than the date the consent agreement is forwarded to the Environmental Appeals Board. The consent agreement shall state that, for the purpose of this proceeding, respondent (1) admits the jurisdictional allegations of the complaint; (2) admits the facts as stipulated in the consent agreement or neither admits nor denies specific factual allegations contained in the complaint; and (3) consents to the issuance of a given remedial order. The consent agreement shall include (i) the terms of the agreement; (ii) any appropriate conclusions regarding material issues of law, fact and/or discretion as well as reasons therefor; and (iii) the Environmental Appeals Board's proposed final order. The administrative law judge does not have jurisdiction over a consent agreement.

(c) *Final order.* No settlement or consent agreement shall be dispositive of any action pending under section 11(d) of the act without a final order of the Environmental Appeals Board. In preparing a final order, the Environmental Appeals Board may require that any or all of the parties to the settlement or other parties appear before it to answer inquiries relating to the proposed consent agreement. The hearing is terminated without further proceedings upon the filing of the final order with the hearing clerk.

[43 FR 34132, Aug. 3, 1978, as amended at 57 FR 5344, Feb. 13, 1992]

### § 209.20 Conferences.

(a) At the discretion of the administrative law judge, conferences may be held prior to or during any hearing. The administrative law judge shall direct the hearing clerk to notify all parties of the time and location of any such conferences. At the discretion of the administrative law judge, persons other than parties may attend. At a conference the administrative law judge may:

(1) Obtain stipulations and admissions, receive requests and order depositions to be taken, identify disputed issues of fact and law, and require or allow the submission of written testimony from any witness or party.

(2) Set a hearing schedule for as many of the following as are deemed necessary by the administrative law judge:

(i) Oral and written statements;

(ii) Submission of written testimony as required or authorized by the administrative law judge;

(iii) Oral direct and cross-examination of a witness;

(iv) Oral argument, if appropriate;

(3) Identify matters of which official notice may be taken;

(4) Consider limitation of the number of expert and other witnesses;

(5) Consider the procedure to be followed at the hearing; and

(6) Consider any other matter that may expedite the hearing or aid in the disposition of the issue.

(b) The results of any conference including all stipulations shall, if not transcribed, be summarized in writing by the administrative law judge and made part of the record.

(c) The administrative law judge, on motion or sua sponte, may request correspondence from the parties for any of the objectives set forth in this section. Copies of the administrative law judge's request and the parties' correspondence shall be served upon all parties. The administrative law judge shall include such correspondence in the record and a written summary of any stipulation or agreement reached by means of such correspondence as provided in paragraph (b) of this section.

### §209.21 Primary discovery (exchange of witness lists and documents).

(a) At a prehearing conference or within some reasonable time set by the administrative law judge prior to the hearing, each party shall make available to the other parties the names of the expert and other witnesses the party expects to call, together with a brief summary of their expected testimony and copies of all documents and exhibits which the party expects to introduce into evidence. Thereafter, witnesses, documents, or exhibits may be added and summaries of expected testimony amended upon motion by a party.

(b) The administrative law judge, may, upon motion by a party or other person, and for good cause shown, by order (1) restrict or defer disclosure by a party of the name of a witness or a narrative summary of the expected testimony of a witness, and (2) prescribe other appropriate measures to protect a witness. Any party affected by any such action shall have an adequate opportunity, once he or she learns the name of a witness and obtains the narrative summary of the witness' expected testimony, to prepare for the presentation of his or her case.

### §209.22 Other discovery.

(a) Further discovery under this section shall be undertaken only upon order of the administrative law judge or upon agreement of the parties, except as provided in §209.21. The administrative law judge shall order further discovery only after determining:

(1) That such discovery will not delay the proceeding unreasonably;

(2) That the information to be obtained is not obtainable voluntarily; and

(3) That such information is relevant to the subject matter of the hearing.

(b) The administrative law judge shall order depositions upon oral questions only upon a showing of good cause and a finding that:

(1) The information sought cannot be obtained by alternative methods; or

(2) There is a substantial reason to believe that relevant and probative evidence may otherwise not be preserved for presentation by a witness at the hearing.

(c) Any party to the proceeding may make a motion or motions for an order of discovery. The motion shall set forth:

(1) The circumstances which require the discovery;

(2) The nature of the information expected to be discovered; and

(3) The proposed time and place where it will be taken. If the administrative law judge determines the motion should be granted, he or she shall issue an order for the taking of such discovery together with the conditions and terms thereof.

(d) A person's or party's failure to comply with a discovery order may lead to the inference that the information to be discovered is adverse to the person or party who failed to provide it.

### §209.23 Trade secrets and privileged information.

In the presentation, admission, disposition, and use of evidence, the administrative law judge shall preserve the confidentiality of trade secrets and other privileged commercial and financial information. The confidential or trade secret status of any information shall not, however, preclude its being

introduced into evidence. The administrative law judge may make such orders as may be necessary to consider such evidence in camera. This may include a supplemental initial decision to consider questions of fact and conclusions regarding material issues of law, fact or discretion which arise out of that portion of the evidence which is confidential or which includes trade secrets.

### § 209.24 Default order.

(a) *Default.* Respondent may be found to be in default upon failure to comply with a prehearing or hearing ruling of the Administrator or the administrative law judge. A respondent's default shall constitute an admission of all facts alleged in the complaint and a waiver of respondent's right to a hearing on such factual allegations. The remedial order proposed is binding on respondent without further proceedings upon the issuance by the Environmental Appeals Board of a final order issued upon default.

(b) *Proposed default order.* Where the administrative law judge finds a default has occurred after a request for a hearing has been filed, the administrative law judge may render a proposed default order to be issued against the defaulting party. For the purpose of appeal pursuant to § 209.31 this order shall be deemed to be the initial decision of the administrative law judge.

(c) *Contents of a final order issued upon default.* A final order issued upon default shall include findings of fact, conclusions regarding all material issues of law, fact, or discretion, and the remedial order which is issued. An order issued by the Environmental Appeals Board upon default of respondent shall constitute a final order in accordance with the terms of § 209.33.

[43 FR 34132, Aug. 3, 1978, as amended at 57 FR 5345, Feb. 13, 1992]

### § 209.25 Accelerated decision; dismissal.

(a) The administrative law judge, upon motion of any party or sua sponte, may at any time render an accelerated decision in favor of the Agency or the respondent as to all or any part of the proceeding, without further hearing or upon such limited additional evidence such as affidavits as he or she may require, or dismiss any party with prejudice, under any of the following conditions:

(1) Failure to state a claim upon which relief can be granted, or direct or collateral estoppel;

(2) No genuine issue of material fact exists and a party is entitled to judgment as a matter of law, as to all or any part of a proceeding; or

(3) Such other reasons as are just, including failure to obey a procedural order of the administrative law judge.

(b) If under this section an accelerated decision is issued as to all the issues and claims joined in the proceedings, the decision shall be treated as the decision of the administrative law judge as provided in § 209.30.

(c) If under this section, judgment is rendered on less than all issues or claims in the proceeding, the administrative law judge shall determine what material facts exist without substantial controversy and what material facts are actually and in good faith controverted. The administrative law judge shall thereupon issue an order specifying the facts which appear without substantial controversy, and the issues and claims upon which the hearing will proceed.

### § 209.26 Evidence.

(a) The official transcripts and exhibits, together with all papers and requests filed in the proceeding, shall constitute the record. Evidence may be received at the hearing even though inadmissible under the rules of evidence applicable to judicial proceedings, provided it is relevant, competent and material and not unduly repetitious. Immaterial or irrelevant parts of an admissible document shall be segregated and excluded so far as practicable. The weight to be given evidence shall be determined by its reliability and probative value.

(b) Witnesses shall be examined orally, under oath or affirmation, except as otherwise provided in these rules of practice or by the administrative law judge. Parties shall have the right to cross-examine a witness who appears at the hearing provided that such cross-examination is not unduly repetitious.

(c) Rulings of the administrative law judge on the admissibility of evidence, the propriety of examination and cross-examination and other procedural matters shall appear in the record.

(d) Parties shall automatically be presumed to have taken exception to an adverse ruling.

### §209.27 Interlocutory appeal.

(a) An interlocutory appeal may be taken to the Environmental Appeals Board either (1) with the consent of the administrative law judge where he or she certifies on the record or in writing that the allowance of an interlocutory appeal is clearly necessary to prevent exceptional delay, expense or prejudice to any party or substantial detriment to the public interest, or (2) absent the consent of the administrative law judge, by permission of the Environmental Appeals Board.

(b) Applications for interlocutory appeal of any ruling or order of the administrative law judge may be filed with the administrative law judge within 5 days of the issuance of the ruling or order being appealed. Answers by other parties may be filed within 5 days of the service of such applications.

(c) Applications to file such appeals absent consent of the administrative law judge shall be filed with the Environmental Appeals Board within 5 days of the denial of any appeal by the administrative law judge.

(d) The Environmental Appeals Board will consider the merits of the appeal on the application and answers. No oral argument will be heard nor other briefs filed unless the Environmental Appeals Board directs otherwise.

(e) Except under extraordinary circumstances as determined by the administrative law judge, the taking of an interlocutory appeal will not stay the hearing.

[43 FR 34132, Aug. 3, 1978, as amended at 57 FR 5345, Feb. 13, 1992]

### §209.28 Record.

(a) Hearings shall be reported and transcribed verbatim, stenographically or otherwise, and the original transcript shall be part of the record and the sole official transcript. Copies of the record shall be filed with the hearing clerk and made available during Agency business hours for public inspection. Any person who desires a copy of the record of the hearing or any part of it shall be entitled to it upon payment of the cost.

(b) The official transcripts and exhibits, together with all papers and requests filed in the proceeding, shall constitute the record.

### §209.29 Proposed findings, conclusions.

(a) Within 20 days of the filing of the record with the hearing clerk as provided in §209.28, or within such longer time as may be fixed by the administrative law judge, any party may submit for the consideration of the administrative law judge proposed findings of fact, conclusions of law, and a proposed rule or order, together with briefs in support of it. Such proposals shall be in writing, shall be served upon all parties, and shall contain adequate references to the record and authorities relied on.

(b) The record shall show the administrative law judge's ruling on the proposed findings and conclusions except when the administrative law judge's order disposing of the proceedings otherwise informs the parties of the action taken by him or her thereon.

### §209.30 Decision of the administrative law judge.

(a) The administrative law judge shall issue and file with the hearing clerk his or her decision as soon as practicable after the period for filing proposed findings as provided for in §209.29 has expired.

(b) The administrative law judge's decision shall become the decision of the Environmental Appeals Board (1) when no notice of intention to appeal as described in §209.31 is filed, 30 days after its issuance, unless in the interim the Environmental Appeals Board shall have taken action to review or stay the effective date of the decision; or (2) when a notice of intention to appeal is filed but the appeal is not perfected as required by §209.31, 5 days after the period allowed for perfection of an appeal has expired unless within that 5 day period, the Environmental Appeals Board

has taken action to review or stay the effective date of the decision.

(c) The administrative law judge's decision shall include a statement of findings and conclusions, as well as the reasons or basis therefore, upon all the material issues of fact or law presented on the record and an appropriate rule or order. The decision shall be supported by a preponderance of the evidence and based upon a consideration of the whole record.

(d) At any time prior to issuing his or her decision, the administrative law judge may reopen the proceeding for the reception of further evidence.

[43 FR 34132, Aug. 3, 1978, as amended at 57 FR 5345, Feb. 13, 1992]

### § 209.31 Appeal from the decision of the administrative law judge.

(a) Any party to a proceeding may appeal the administrative law judge's decision to the Environmental Appeals Board: Provided, That within 10 days after the administrative law judge's decision is issued, the party files a notice of intention to appeal, and within 30 days of the decision the party files an appeal brief.

(b) When an appeal is taken from the decision of the administrative law judge, any party may file a brief with respect to such appeal. The brief shall be filed within 20 days of the date of the filing of the appellant's brief.

(c) Any brief filed under this section shall contain, in the order indicated:

(1) A subject index of the matter in the brief, with page references, and a table of cases (alphabetically arranged), textbooks, statutes, and other material cited, with page references thereto;

(2) A specification of the issues which will be argued;

(3) The argument presenting clearly the points of fact and law relied upon in support of the position taken on each issue, with specific page references to the record and the legal or other material relied upon; and

(4) A proposed form of rule or order for the Environmental Appeals Board's consideration if different from the rule or order contained in the administrative law judge's decision.

(d) Briefs shall not exceed 40 pages without leave of the Environmental Appeals Board.

(e) The Environmental Appeals Board may allow oral argument in its discretion.

[43 FR 34132, Aug. 3, 1978, as amended at 57 FR 5345, Feb. 13, 1992]

### § 209.32 Review of the administrative law judge's decision in absence of appeal.

(a) If, after the expiration of the period for taking an appeal under § 209.31, no notice of intention to appeal the decision of the administrative law judge has been filed, or if filed, not perfected, the hearing clerk shall so notify the Environmental Appeals Board.

(b) The Environmental Appeals Board, upon receipt of notice from the hearing clerk that no notice of intention to appeal has been filed, or if filed, not perfected pursuant to § 209.31, may, on its own motion, within the time limits specified in § 209.30(b), review the decision of the administrative law judge. Notice of the Environmental Appeals Board's intention to review the decision of the administrative law judge shall be given to all parties and shall set forth the scope of such review and the issues which shall be considered and shall make provision for filing of briefs.

[57 FR 5345, Feb. 13, 1992]

### § 209.33 Decision on appeal or review.

(a) Upon appeal from or review of the administrative law judge's decision, the Environmental Appeals Board shall consider such parts of the record as are cited or as may be necessary to resolve the issues presented and, in addition shall to the extent necessary or desirable exercise all the powers which the Environmental Appeals Board could have exercised if it had presided at the hearing.

(b) The Environmental Appeals Board shall render a decision as expeditiously as possible. The Environmental Appeals Board shall adopt, modify, or set aside the findings, conclusions, and rule or order contained in the decision of the administrative law judge and

shall set forth in its decision a statement of the reasons or bases for its action. The Environmental Appeals Board's decision shall be the final order in the proceeding.

(c) In those cases where the Environmental Appeals Board determines that it should have further information or additional views of the parties as to the form and content of the rule or order to be issued, the Environmental Appeals Board, in its discretion, may withhold final action pending the receipt of such additional information or views, or may remand the case to the administrative law judge.

[57 FR 5345, Feb. 13, 1992]

### §209.34 Reconsideration.

Within five (5) days after service of the Environmental Appeals Board's decision, any party may file a petition for reconsideration of such decision, setting forth the relief desired and the grounds in support thereof. Petitions for reconsideration under this provision shall be directed to, and decided by, the Environmental Appeals Board. Petitions for reconsideration directed to the Administrator, rather than to the Environmental Appeals Board, will not be considered, except in cases that the Environmental Appeals Board has referred to the Administrator's pursuant to §209.3(k) and in which the Administrator has issued the final order. Any petition filed under this subsection must be confined to new questions raised by the decision or final order and upon which the petitioner had no opportunity to argue before the administrative law judge or the Environmental Appeals Board. Any party desiring to oppose a petition shall file an answer thereto within five (5) days after service of the petition. The filing of a petition for reconsideration shall not operate to stay the effective date of the decision or order.

[57 FR 5345, Feb. 13, 1992]

### §209.35 Conclusion of hearing.

(a) If no appeal has been taken from the administrative law judge's decision before the period for taking an appeal under §209.31 has expired, and the period for review by the Environmental Appeals Board on its own motion under §209.30 has expired, and the Environmental Appeals Board does not move to review such decision, the hearing will be deemed to have ended at the expiration of all periods allowed for such appeal and review.

(b) If an appeal of the administrative law judge's decision is taken under §209.31, or if, in the absence of such appeal, the Environmental Appeals Board moves to review the decision of the administrative law judge under §209.32, the hearing will be deemed to have ended upon the rendering of a final decision by the Environmental Appeals Board.

[57 FR 5346, Feb. 13, 1992]

### §209.36 Judicial review.

(a) The Administrator hereby designates the general counsel, Environmental Protection Agency as the officer upon whom copy of any petition for judicial review shall be served. That officer shall be responsible for filing in the court the record on which the order of the Environmental Appeals Board is based.

(b) Before forwarding the record to the court, the Agency shall advise the petitioner of the costs of preparing it and as soon as payment to cover fees is made shall forward the record to the court.

[43 FR 34132, Aug. 3, 1978, as amended at 57 FR 5346, Feb. 13, 1992]

## PART 210—PRIOR NOTICE OF CITIZEN SUITS

Sec.
210.1 Purpose.
210.2 Service of notice.
210.3 Contents of notice.

AUTHORITY: Sec. 12, Noise Control Act, (Pub. L. 92–574, 86 Stat. 1234).

SOURCE: 39 FR 36011, Oct. 7, 1974, unless otherwise noted.

### §210.1 Purpose.

Section 12 of the Noise Control Act authorizes any person to commence a civil action on his own behalf to enforce the Act or to enforce certain requirements promulgated pursuant to the Act. The purpose of this part is to prescribe procedures governing the manner of giving notices as required by

subsection 12(b) of the Act (Pub. L. 92–574, 86 Stat. 1234) as a prerequisite to the commencement of such actions.

### § 210.2 Service of notice.

(a) Notice of intent to file suit pursuant to section 12(a)(1) of the Act shall be served upon an alleged violator of a noise control requirement issued under the Act in the following manner:

(1) If the alleged violator is a private individual or a corporation, service of notice shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the owner or managing agent of the equipment, plant, facility, vehicle, or activity alleged to be in violation. A copy of the notice shall be mailed to the Administrator of the Environmental Protection Agency, the Regional Administrator of the Environmental Protection Agency for the region in which such violation is alleged to have occurred; and in the case of a violation of a noise control requirement under section 611 of the Federal Aviation Act, to the Administrator of the Federal Aviation Administration, and the Regional Administrator of the Federal Aviation Administration for the region in which such violation is alleged to have occurred. If the alleged violator is a corporation, a copy of such notice also shall be mailed to the registered agent, if any, of such corporation in the State in which such violation is alleged to have occurred.

(2) If the alleged violator is a State or local government entity, service of notice shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the head of such agency. A copy of such notice shall be mailed to the Administrator of the Environmental Protection Agency, the Regional Administrator of the Environmental Protection Agency for the region in which such violation is alleged to have occurred; and in the case of a violation of a noise control requirement under section 611 of the Federal Aviation Act, to the Administrator of the Federal Aviation Administration, and the Regional Administrator of the Federal Aviation Administration for the region in which such violation is alleged to have occurred.

(3) If the alleged violator is a Federal agency, service of notice shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the head of such agency. A copy of such notice shall be mailed to the Administrator of the Environmental Protection Agency, the Regional Administrator of the Environmental Protection Agency for the region in which such violation is alleged to have occurred, the Attorney General of the United States; and in the case of a violation of a noise control requirement under section 611 of the Federal Aviation Act, to the Administrator of the Federal Aviation Administration, and the Regional Administrator of the Federal Aviation Administration for the region in which such violation is alleged to have occurred.

(b) Service of notice of intent to file suit pursuant to section 12(a)(2)(A) of the Act shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the Administrator, Environmental Protection Agency, Washington, DC 20460. A copy of such notice shall be mailed to the Attorney General of the United States.

(c) Service of notice of intent to file suit pursuant to section 12(a)(2)(B) of the Act shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the Administrator, Federal Aviation Administration, Washington, DC. A copy of such notice shall be mailed to the Attorney General of the United States, and to the Administrator of the Environmental Protection Agency.

(d) Notice given in accordance with the provisions of this part shall be deemed to have been served on the date of receipt. If service was accomplished by mail, the date of receipt will be deemed to be the date noted on the return receipt card.

### § 210.3 Contents of notice.

(a) *Violation of noise control requirement.* Notice regarding an alleged violation of a noise control requirement shall include sufficient information to permit the recipient to identify the specific standard or regulation alleged

to have been violated, the activity alleged to constitute a violation, the person or persons responsible for the alleged violation, the location of the alleged violation, the date or dates of such violation and the full name, address, and telephone number of the person giving notice.

(b) *Failure to act.* Notice regarding an alleged failure of the Administrator of the Environmental Protection Agency to perform any act or duty under the Noise Control Act which is not discretionary with such Administrator or notice regarding an alleged failure of the Administrator of the Federal Aviation Administration to perform any act or duty under section 611 of the Federal Aviation Act which is not discretionary with such Administrator shall identify the statutory provision which requires such act or creates such duty, shall describe with reasonable specificity the action taken or not taken by such Administrator which is alleged to constitute a failure to perform such act or duty, and shall state the full name, address, and telephone number of the person 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 person giving the notice.

# PART 211—PRODUCT NOISE LABELING

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APPENDIX A TO PART 211—COMPLIANCE AUDIT TESTING REPORT

SOURCE: 44 FR 56127, Sept. 28, 1979, unless otherwise noted.

## Subpart A—General Provisions

AUTHORITY: Sec. 8, Noise Control Act of 1972, (42 U.S.C. 4907), and other authority as specified.

### § 211.101 Applicability.

The provisions of subpart A apply to all products for which regulations are published under part 211 and manufactured after the effective date of this regulation, unless they are made inapplicable by product-specific regulations.

### § 211.102 Definitions.

(a) All terms that are not defined in this subpart will have the meaning given them in the Act.

(b) *Act* means the Noise Control Act of 1972 (Pub. L. 92–574, 86 Stat. 1234).

(c) *Administrator* means the Administrator of the Environmental Protection Agency or his authorized representative.

(d) *Agency* means the United States Environmental Protection Agency.

(e) *Acoustic descriptor* means the numeric, symbolic, or narrative information describing a product's acoustic properties as they are determined according to the test methodology that the Agency prescribes.

(f) *Export exemption* means an exemption from the prohibitions of section 10(a) (3) and (4) of the Act; this type of exemption is granted by statute under section 10(b)(2) of the Act for the purpose of exporting regulated products.

(g) *National security exemption* means an exemption from the prohibitions of section 10(a) (3) and (5) of the Act, which may be granted under section 10(b)(1) of the Act in cases involving national security.

(h) *Product* means any noise-producing or noise-reducing product for which regulations have been promulgated under part 211; the term includes ''test product''.

(i) *Regulations published under this part* means all subparts to part 211.

(j) *Testing exemption* means an exemption from the prohibitions of section 10(a) (1), (2), (3), and (5) of the Act, which may be granted under section 10(b)(1) of the Act for research, investigations, studies, demonstrations, or training, but not for national security.

(k) *Test product* means any product that must be tested according to regulations published under part 211.

**§ 211.103 Number and gender.**

In this part, words in the singular will be understood to include the plural, and words in the masculine gender will be understood to include the feminine, and vice versa, as the case may require.

**§ 211.104 Label content.**

The following data and information must be on the label of all products for which regulations have been published under this part:

(a) The term ''Noise Rating'' if the product produces noise, or the term ''Noise Reduction Rating'' if the product reduces noise;

(b) The acoustic rating descriptor that is determined according to procedures specified in the regulations that will be published under this part;

(c) Comparative acoustic rating information, which EPA will specify in the regulations published under this part;

(d) A product manufacturer identification consisting of: (1) The Company name, and (2) The City and State of the principal office;

(e) A product model number or type identification;

(f) The phrase ''Federal law prohibits removal of this label prior to purchase'';

(g) The U.S. Environmental Protection Agency logo, as shown in Figure 1;

(h) The phrase ''Label Required by U.S. EPA regulation 40 CFR part 211, subpart ———.''

FIGURE 1

**§ 211.105 Label format.**

(a) Unless specified otherwise in other regulations published under this part, the format of the label must be as shown in Figure 2. The label must include all data and information required under § 211.104.

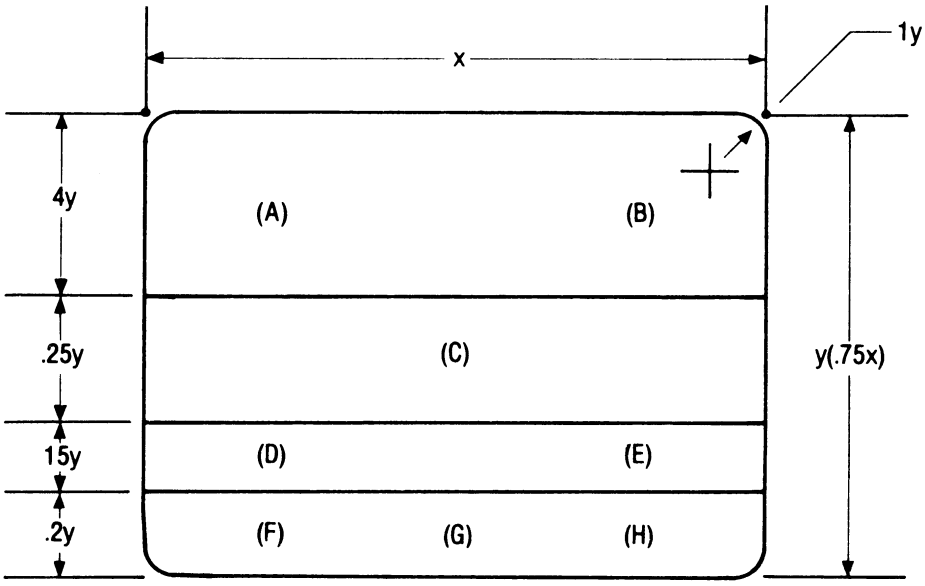


FIGURE - 2

(b) Unless EPA specifies otherwise in regulations published under this part, the required data and information specified in §211.104 (a) through (h) must be located in the following areas of the prescribed label (see Figure 2 of this section):

(1) Section 211.104 (a)—Area A.
(2) Section 211.104 (b)—Area B.
(3) Section 211.104 (c)—Area C.
(4) Section 211.104 (d)—Area D.
(5) Section 211.104 (e)—Area E.
(6) Section 211.104 (f)—Area F.
(7) Section 211.104 (g)—Area G.
(8) Section 211.104 (h)—Area H.

### §211.106 Graphical requirements.

(a) *Color.* Unless EPA requires otherwise, the product manufacturer or supplier must determine the colors used for the label background, borders, and all included letters, numerals, and figures. However, the colors on the label must contrast sufficiently with each other and with any information or material surrounding the label so that the label and the information within it are clearly visible and legible.

(b) *Label Size.* The prescribed label must be sized as specified in regulations published under this part.

(c) *Character Style.* Except when specified otherwise in this part, all letters and numerals that appear on the prescribed label must be Helvetica Medium.

(d) *Character Size.* All letters and numerals that appear on the prescribed label must be sized as specified in regulations published under this part.

### §211.107 Label type and location.

The prescribed label must be of the type and in the location specified in regulations published under this part.

### §211.108 Sample label.

Examples of labels conforming to the requirements of §§211.104, 211.105, and 211.106 are presented in Figure 3.

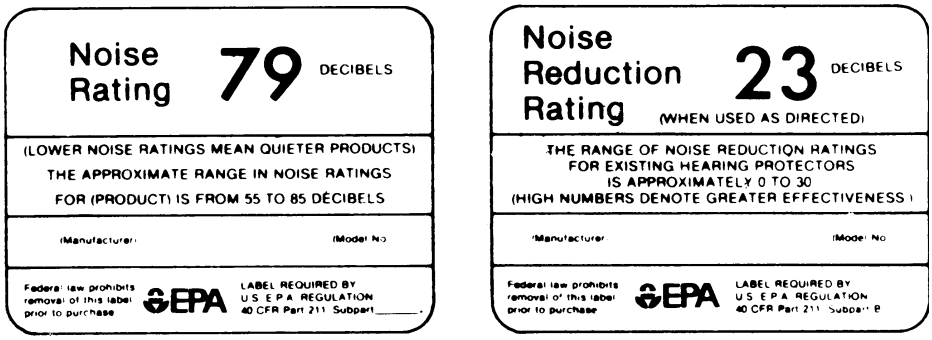


Figure - 3

**§ 211.109 Inspection and monitoring.**

(a) Any inspecting or monitoring activities that EPA conducts under this part with respect to the requirements set out in regulations published under this part, will be for the purpose of determining:

(1) Whether test products are being selected and prepared for testing in accordance with the provisions of the regulations;

(2) Whether test product testing is being conducted according to the provisions of those regulations; and

(3) Whether products that are being produced and distributed into commerce comply with the provisions of those regulations.

(b) The Director of the Noise Enforcement Division may request that a manufacturer who is subject to this part admit an EPA Enforcement Officer during operating hours to any of the following:

(1) Any facility or site where any product to be distributed into commerce is manufactured, assembled, or stored;

(2) Any facility or site where the manufacturer performed or performs any tests conducted under this part or any procedures or activities connected with those tests;

(3) Any facility or site where any test product is located.

(c)(1) Once an EPA Enforcement Officer has been admitted to a facility or site, that officer will not be authorized to do more than the following:

(i) Inspect and monitor the manufacture and assembly, selection, storage, preconditioning, noise testing, and maintenance of test products, and to verify the correlation or calibration of test equipment;

(ii) Inspect products before they are distributed in commerce;

(iii) Inspect and make copies of any records, reports, documents, or information that the manufacturer must maintain or provide to the Administrator under the Act or under any provision of this part;

(iv) Inspect and photograph any part or aspect of any product and any components used in manufacturing the product that is reasonably related to the purpose of this entry; and

(v) Obtain from those in charge of the facility or site any reasonable assistance that he may request to enable him to carry out any function listed in this section.

(2) The provisions of this section apply whether the facility or site is owned or controlled by the manufacturer, or by someone who acts for the manufacturer.

(d) For the purposes of this section:

(1) An ''EPA Enforcement Officer'' is an employee of the EPA Office of Enforcement. When he arrives at a facility or site, he must display the credentials that identify him as an employee of the EPA and a letter signed by the Director of the Noise Enforcement Division designating him to make the inspection.

(2) Where test product storage areas or facilities are concerned, ''operating hours'' means all times during which personnel, other than custodial personnel, are at work in the vicinity of the area or facility and have access to it.

(3) Where other facilities or areas are concerned, ''operating hours'' means all times during which products are being manufactured or assembled; or all times during which products are being tested or maintained; or records are being compiled; or when any other procedure or activity related to labeling, selective enforcement auditing, or product manufacture or assembly being carried out.

(4) ''Reasonable assistance'' means providing timely and unobstructed access to test products or to products and records that are required by this part, and the means for copying those records or the opportunity to test the test products.

(e) The manufacturer must admit an EPA Enforcement Officer who presents a warrant authorizing entry to a facility or site. If the EPA officer does not have the warrant, he may enter a facility or site only if the manufacturer consents.

(1) It is not a violation of this regulation or the Act if anyone refuses to allow an officer without a warrant to enter the site.

(2) The Administrator or his designee may proceed *ex parte* (without the other party's knowledge) to obtain a warrant whether or not the manufacturer has refused entry to an EPA Enforcement Officer.

(Secs. 11 and 13, Pub. L. 92–574, 86 Stat. 1242, 1244 (42 U.S.C. 4910, 4912))

[44 FR 56127, Sept. 28, 1979, as amended at 47 FR 57716, Dec. 28, 1982]

## § 211.110 Exemptions.

### § 211.110–1 Testing exemption.

(a) A new product intended to be used solely for research, investigations, studies, demonstrations or training, and so labeled or marked on the outside of the container and on the produce itself, shall be exempt from the prohibitions of sections 10(a), (1), (2), (3), and (5) of the Act.

(b) No request for a testing exemption is required.

(c) For purposes of section 11(d) of the Act, any testing exemption shall be void ab initio with respect to each new product, originally intended for research, investigations, studies, demonstrations, or training, but distributed in commerce for other uses.

[47 FR 57716, Dec. 28, 1982]

### § 211.110–2 National security exemptions.

(a) A new product which is produced to conform with specifications developed by national security agency, and so labeled or marked on the outside of the container and on the product itself, shall be exempt from the prohibitions of sections 10(a), (1), (2), (3), and (5) of the Act.

(b) No request for a national security exemption is required.

(c) For purposes of section 11(d) of the Act, any national security exemption shall be void ab initio with respect to each new product, originally intended for a national security agency, but distributed in commerce for other uses.

[47 FR 57716, Dec. 28, 1982]

### § 211.110–3 Export exemptions.

(a) A new product intended solely for export, and which has satisfied the requirements of other applicable regulations of this part, will be exempt from the prohibitions of section 10(a) (3) and (4) of the Act.

(b) Requests for an export exemption are not required.

(c) For purposes of section 11(d) of the Noise Control Act, the Administrator may consider any export exemption under section 10(b)(2) void from the beginning if a new product, intended only for export, is distributed in commerce in the United States.

(Sec. 10(b)(2), Pub. L. 92–574, 86 Stat. 1242 (42 U.S.C. 4909(b)(2)))

[44 FR 56127, Sept. 28, 1979, as amended at 47 FR 57716, Dec. 28, 1982]

## § 211.111 Testing by the Administrator.

(a)(1) To determine whether products conform to applicable regulations under this part, the Administrator may require that any product that is to be tested under applicable regulations in this part, or any other products that

are regulated under this part, be submitted to him, at a place and time that he designates, to conduct tests on them in accordance with the test procedures described in the regulations.

(2) The Administrator may specify that he will conduct the testing at the facility where the manufacturer conducted required testing. The Administrator will conduct the tests with his own equipment.

(b)(1) If, from the tests conducted by the Administrator, or other relevant information, the Administrator determines that the test facility used by the manufacturer(s) does not meet the requirements of this part for conducting the test required by this part, he will notify the manufacturer(s) in writing of his determination and the reasons for it.

(2) After the Administrator has notified the manufacturer, EPA will not accept any data from the subject test facility for the purposes of this part, and the Administrator may issue an order to the manufacturer(s) to cease to distribute in commerce products that come from the product categories in question. However, any such order shall be issued only after an opportunity for a hearing. Notification of this opportunity may be included in a notification under paragraph (b)(1) of this section. A manufacturer may request that the Administrator grant a hearing. He must make this request no later than fifteen (15) days (or any other period the Administrator allows) after the Administrator has notified the manufacturer that he intends to issue an order to cease to distribute.

(3) A manufacturer may request in writing that the Administrator reconsider his determination in paragraph (b)(1) of this section, if he can provide data or information which indicates that changes have been made to the test facility, and that those changes have remedied the reason for disqualification.

(4) The Administrator will notify a manufacturer of his decision concerning requalifying the test facility within 10 days of the time the manufacturer requested reconsideration under paragraph (b)(3) of this section.

(c)(1) The Administrator will assume all reasonable costs associated with shipment of products to the place designated pursuant to paragraph (a) of this section, except with respect to:

(i) [Reserved]

(ii) Testing of a reasonable number of products for purposes of compliance audit testing under the Section titled Compliance Audit Testing of the product-specific Subpart, or if the manufacturer has failed to establish that there is a correlation between his test facility and the EPA test facility or the Administrator has reason to believe, and provides the manufacturer with a statement or reasons, that the products to be tested would fail to meet their verification level if tested at the EPA test facility, but would meet the level if tested at the manufacturer's test facility;

(iii) Any testing performed during a period when a notice issued under paragraph (b) of this section, is in effect; and

(iv) Any testing performed at place other than the manufacturer's facility as a result of the manufacturer's failure to permit the Administrator to conduct or monitor testing as required by this part.

(Secs. 11 and 13, Pub. L. 92–574, 86 Stat. 1243 (42 U.S.C. 4910, 4912))

[44 FR 56127, Sept. 28, 1979, as amended at 47 FR 57716, Dec. 28, 1982]

## Subpart B—Hearing Protective Devices

AUTHORITY: Sec. 8, Pub. L. 92–574, 86 Stat. 1241 (42 U.S.C. 4907), and additional authority as specified.

SOURCE: 44 FR 56139, Sept. 28, 1979, unless otherwise noted.

### § 211.201 Applicability.

Unless this regulation states otherwise, the provisions of this subpart apply to all hearing protective devices manufactured after the effective date of this regulation. (See § 211.203(m) for definition of ''hearing protective device.'')

### § 211.202 Effective date.

Manufacturers of hearing protectors must comply with the requirements set

forth in this part for all hearing protective devices manufactured on or after September 27, 1980.

**§ 211.203 Definitions.**

(a) As used in subpart B, all terms not defined here have the meaning given them in the Act or in subpart A of Part 211.

(b) *ANSI Z24.22–1957.* A measurement procedure published by the American National Standards Institute (ANSI) for obtaining hearing protector attenuation values at nine of the one-third octave band center frequencies by using pure tone stimuli presented to ten different test subjects under anechoic conditions.

(c) *ANSI S3.19–1974.* A revision of the ANSI Z24.22–1957 measurement procedure using one-third octave band stimuli presented under diffuse (reverberant) acoustic field conditions.

(d) *Carrying Case.* The container used to store reusable hearing protectors.

(e) *Category.* A group of hearing protectors which are identical in all aspects to the parameters listed in § 211.210–2(c).

(f) *Claim.* An assertion made by a manufacturer regarding the effectiveness of his product.

(g) *Custom-molded device.* A hearing protective device that is made to conform to a specific ear canal. This is usually accomplished by using a moldable compound to obtain an impression of the ear and ear canal. The compound is subsequently permanently hardened to retain this shape.

(h) *Dispenser.* The permanent (intended to be refilled) or disposable (discarded when empty) container designed to hold more than one complete set of hearing protector(s) for the express purpose of display to promote sale or display to promote use or both.

(i) *Disposable Device.* A hearing protective device that is intended to be discarded after one period of use.

(j) *Ear Insert Device.* A hearing protective device that is designed to be inserted into the ear canal, and to be held in place principally by virtue of its fit inside the ear canal.

(k) *Ear Muff Device.* A hearing protective device that consists of two acoustic enclosures which fit over the ears and which are held in place by a spring-like headband to which the enclosures are attached.

(l) *Headband.* The component of hearing protective device which applies force to, and holds in place on the head, the component which is intended to acoustically seal the ear canal.

(m) *Hearing Protective Device.* Any device or material, capable of being worn on the head or in the ear canal, that is sold wholly or in part on the basis of its ability to reduce the level of sound entering the ear. This includes devices of which hearing protection may not be the primary function, but which are nonetheless sold partially as providing hearing protection to the user. This term is used interchangeably with the terms, ''hearing protector'' and ''device.''

(n) *Impulsive Noise.* An acoustic event characterized by very short rise time and duration.

(o) *Label.* That item, as described in this regulation, which is inscribed on, affixed to or appended to a product, its packaging, or both for the purpose of giving noise reduction effectiveness information appropriate to the product.

(p) *Manufacturer.* As stated in the Act ''means any person engaged in the manufacturing or assembling of new products, or the importing of new products for resale, or who acts for, and is controlled by, any such person in connection with the distribution of such products.''

(q) *Noise Reduction Rating (NRR).* A single number noise reduction factor in decibels, determined by an empirically derived technique which takes into account performance variation of protectors in noise reducing effectiveness due to differing noise spectra, fit variability and the mean attenuation of test stimuli at the one-third octave band test frequencies.

(r) *Octave Band Attenuation.* The amount of sound reduction determined according to the measurement procedure of § 211.206 for one-third octave bands of noise.

(s) *Over-the-Head Position.* The mode of use of a device with a headband, in which the headband is worn such that it passes over the user's head. This is contrast to the behind-the-head and under-the-chin positions.

(t) *Package.* The container in which a hearing protective device is presented for purchase or use. The package in some cases may be the same as the carrying case.

(u) *Primary Panel.* The surface that is considered to be the front surface or that surface which is intended for initial viewing at the point of ultimate sale or the point of distribution for use.

(v) *Spectral uncertainty.* Possible variation in exposure to the noise spectra in the workplace. (To avoid the underprotection that would result from these variations relative to the assumed ''Pink Noise'' used to determine the NRR, an extra three decibel reduction is included when computing the NRR.)

(w) *Tag.* Stiff paper, metal or other hard material that is tied or otherwise affixed to the packaging of a protector.

(x) *Test Facility.* For this subpart, a laboratory that has been set up and calibrated to conduct ANSI Std S3.19–1974 tests on hearing protective devices. It must meet the applicable requirements of these regulations.

(y) *Test Hearing Protector.* A hearing protector that has been selected for testing to verify the value to be put on the label, or which has been designated for testing to determine compliance of the protector with the labeled value.

(z) *Test Request.* A request submitted to the manufacturer by the Administrator that will specify the hearing protector category, and test sample size to be tested according to § 211.212–1, and other information regarding the audit.

(aa) *Random Incident Field.* A sound field in which the angle of arrival of sound at a given point in space is random in time.

(bb) *Real-Ear Protection at Threshold.* The mean value in decibels of the occluded threshold of audibility (hearing protector in place) minus the open threshold of audibility (ears open and uncovered) for all listeners on all trials under otherwise identical test conditions.

(cc) *Reverberation Time.* The time that would be required for the mean-square sound pressure level, originally in a steady state, to fall 60 dB after the source is stopped.

## § 211.204 Hearing protector labeling requirements.

All provisions of subpart A apply to this subpart except as otherwise noted.

### § 211.204–1 Information content of primary label.

The information to appear on the primary label must be according to § 211.104 of subpart A except as stated here and shown in Figure 1 of § 211.204–2:

(a) Area A must state ''Noise Reduction Rating.''

(b)(1) Area B must state the value of the Noise Reduction Rating (NRR) in decibels for that model hearing protector. The value stated on the label must be no greater than the NRR value determined by using the computation method of § 211.207 of this subpart.

(2) For devices with headbands that are intended for use with the headband in different positions, the worst case NRR must be specified. The top of Area B must state the position(s) associated with that NRR. The other positions and the respective NRRs must be included with the supporting information specified in § 211.204–4.

(c) Area C must contain the statement ''The range of Noise Reduction Ratings for existing hearing protectors is approximately 0 to 30 (higher numbers denote greater effectiveness).''

(d) At the bottom of Area A–B, there must be the phrase ''(When used as directed).''

[44 FR 56127, Sept. 28, 1979, as amended at 45 FR 8275, Feb. 6, 1980]

### § 211.204–2 Primary label size, print and color.

The primary label characteristics are the same as those specified in §§ 211.105 and 211.106 of subpart A except as stated here.

(a) The label must be no smaller than 3.8 centimeters by 5.0 centimeters (cm) (approximately 1.5 inches by 2.0 inches).

(b) The minimum type face size for each area shall be as follows, based upon a scale of 72 points=1 inch:

(1) Area A—2.8 millimeters (mm) or 8 point.

(2) Area B—7.6 mm or 22 point for the Rating; —1.7 mm or 5 point for ''Decibels''.

(3) Area A–B—1.5 mm or 4 point.
(4) Area C—1.5 mm or 4 point.
(5) Area D—0.7 mm or 2 point.
(6) Area E—0.7 mm or 2 point.
(7) Area F—0.7 mm or 2 point.
(8) Area H—0.7 mm or 2 point.

These type face sizes apply to the 3.8 cm x 5.0 cm label; type face sizes for larger labels must be in the same approximate proportion to the label as those specified for the 3.8 cm x 5.0 cm label.

(c) The use of upper and lower case letters and the general appearance of the label must be similar to the example in Figure (1).

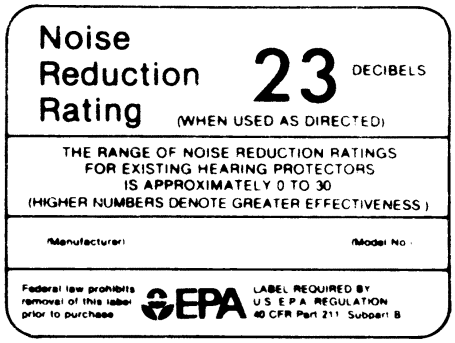


Figure - 1

(d) The color of the label must be as specified in subpart A.

[44 FR 56127, Sept. 28, 1979, as amended at 45 FR 8275, Feb. 6, 1980]

### § 211.204–3 Label location and type.

(a) The manufacturer labeling the product for ultimate sale or use selects the type of label and must locate it as follows:

(1) Affixed to the device or its carrying case; and

(2) Affixed to primary panel of the product packaging if the label complying with § 211.204–3(a)(1) is not visible at the point of ultimate purchase or the point of distribution to users.

(b) Labeling with a minimum sized label will occur as follows:

(1) If the protector is individually packaged and so displayed at the point of ultimate purchase or distribution to the prospective user, the package must be labeled as follows:

(i) If the primary panel of the package has dimensions greater than 3.8 × 5.0 cm (approximately 1½ × 2 in) the label must be presented on the primary panel.

(ii) If the primary panel of the package is equal to or smaller than 3.8 × 5.0 centimeters, a label at least 3.8 × 5.0 centimeters must be affixed to the package by means of a tag.

(2) If the protector is displayed at the point of ultimate purchase or distribution to prospective users in a permanent or disposable bulk container or dispenser, even if the protector is individually packaged within the dispenser and labeled as above, the container or dispenser itself must be labeled. The label must be readily visible to the ultimate purchaser or prospective user.

### § 211.204–4 Supporting information.

The following minimum supporting information must accompany the device in a manner that insures its availability to the prospective user. In the case of bulk packaging and dispensing, such supporting information must be affixed to the bulk container or dispenser in the same manner as the label, and in a readily visible location.

(a) The mean attenuation and standard deviation values obtained for each test frequency according to § 211.206, and the NRR calculated from those values. For ''muff'' type protectors with various use positions, the positions providing higher NRR values shall be identified, and their associated NRR values listed in bold type.

(b) The following statement, example and cautionary note: ''The level of noise entering a person's ear, when hearing protector is worn as directed, is closely approximated by the difference between the A-weighted environmental noise level and the NRR.

Example

1. The environmental noise level as measured at the ear is 92 dBA.
2. The NRR is (value on label) decibels (dB).
3. The level of noise entering the ear is approximately equal to [92 dB(A)—NRR] dB(A).

CAUTION: For noise environments dominated by frequencies below 500 Hz the C-weighted environmental noise level should be used.''

(c) The month and year of production, which may be in the form of a serial number or a code in those instances where the records specified in § 211.209(a)(1)(iv) are maintained;

(d) The following statement: ''Improper fit of this device will reduce its effectiveness in attenuating noise. Consult the enclosed instructions for proper fit'';

(e) Instructions as to the proper insertion or placement of the device; and

(f) The following statement: ''Although hearing protectors can be recommended for protection against the harmful effects of impulsive noise, the Noise Reduction Rating (NRR) is based on the attenuation of *continuous* noise and may not be an accurate indicator of the protection attainable against *impulsive* noise such as gunfire.''

[44 FR 56127, Sept. 28, 1979, as amended at 45 FR 8275, Feb. 6, 1980]

### § 211.205 Special claims.

(a) Any manufacturer wishing to make claims regarding the acoustic effectiveness of a device, other than the Noise Reduction Rating, must be prepared to demonstrate the validity of such claims.

(b) [Reserved]

[44 FR 56139, Sept. 28, 1979, as amended at 47 FR 57716, Dec. 28, 1982]

### § 211.206 Methods for measurement of sound attenuation.

### § 211.206–1 Real ear method.

(a) The value of sound attenuation to be used in the calculation of the Noise Reduction Rating must be determined according to the ''Method for the Measurement of Real-Ear Protection of Hearing Protectors and Physical Attenuation of Earmuffs.'' This standard is approved as the American National Standards Institute Standard (ANSI STD) S3.19–1974. The provisions of this standard, with the modifications indicated below, are included by reference in this section. Copies of this standard may be obtained from: American National Standards Institute, Sales Department, 1430 Broadway, New York, New York 10018.

(b) For the purpose of this subpart only, sections 1, 2, 3 and appendix A of the standard, as modified below, shall be applicable. These sections describe the ''Real Ear Method.'' Other portions of the standard are not applicable in this section.

(1) The sound field characteristics described in paragraph 3.1.1.3 are ''required.''

(2) Sections 3.3.2 and 3.3.3 shall be accomplished in this order during the same testing session. Any breaks in testing should not allow the subject to engage in any activity that may cause a Temporary Threshold Shift.

(3) Section 3.3.3.1(1) shall not apply. Only ''Experimenter fit'' described in Section 3.3.3.1(2) is permitted.

(4) Section 3.3.3.3 applies to all devices except custom-molded devices. When testing custom-molded devices, each test subject must receive his own device molded to fit his ear canal.

[44 FR 56139, Sept. 28, 1979, as amended at 45 FR 8275, Feb. 6, 1980]

### § 211.206–2 Alternative test data.

(a) In lieu of testing according to § 211.206–1, manufacturers may use the latest available test data obtained according to ANSI STD Z24.22–1957 or ANSI STD S3.19–1974 to determine the mean attenuation and standard deviation for each test frequency and the NRR calculated from those values. Manufacturers whose data is based on the ANSI STD Z24.22–1957 measurement procedure must state in the supporting information required by § 211.204–4 that the mean attenuation and standard deviation values used to calculate the NRR are based on ANSI STD Z24.22–1957.

(b) Manufacturers who initially use available data based on ANSI STD Z24.22–1957 must retest within one year of the effective date of this regulation (by September 27, 1981) the affected categories of hearing protectors in accordance with § 211.206–1 of the regulation, and must relabel those categories as necessary.

(c) Manufacturers who use available data based on ANSI STD S3.19–1974 are not required to retest the affected categories of hearing protectors.

(d) If a manufacturer has both ANSI STD S3.19–1974 test data and ANSI STD Z24.22–1957 test data on a hearing protector category, that manufacturer

must use the data obtained according to ANSI STD S3.19–1974.

[45 FR 8275, Feb. 6, 1980]

### §§ 211.206–3—211.206–10 Alternative test methods. [Reserved]

### § 211.207 Computation of the noise reduction rating (NRR).

Calculate the NRR for hearing protective devices by substituting the average attenuation values and standard deviations for the pertinent protector category for the sample data used in steps #6 and #7 in Figure 2. The values of −.2, 0, 0, 0, −.2, −.8, −3.0 in Step 2 and −16.1, −8.6, −3.2, 0, +1.2, +1.0, −1.1 in Step 4 of Figure 2 represent the standard ''C''- and ''A''-weighting relative response corrections applied to any sound levels at the indicated octave band center frequencies. (NOTE: The manufacturer may label the protector at values lower than indicated by the test results and this computation procedure, e.g. lower NRR from lower attenuation values. (Ref. § 211.211(b).)

FIGURE 2—COMPUTATION OF THE NOISE REDUCTION RATING

| Octave band center frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 3000 | 4000 | 6000 | 8000 |
|---|---|---|---|---|---|---|---|---|---|
| 1 Assumed Pink noise (dB) | 100 | 100 | 100 | 100 | 100 | ..... | 100 | ..... | 100 |
| 2 "C" weighting corrections (dB) | −.2 | 0 | 0 | 0 | −.2 | ..... | −.8 | ..... | −3.0 |
| 3 Unprotected ear "C"-weighted level (dB) | 99.8 | 100 | 100 | 100 | 99.8 | ..... | 99.2 | ..... | 97.0 |
| (The seven logarithmically added "C"-weighted sound pressure levels of Step #3 equal;107.9 dS) | | | | | | | | | |
| 4 "A"-weighting corrections (dB) | −16.1 | −8.6 | −3.2 | 0 | +1.2 | ..... | +1.0 | ..... | −1.1 |
| 5 Unprotected ear "A"-weighted level (step ι1-step ι4) (dB) | 83.9 | 91.4 | 96.8 | 100 | 101.2 | ..... | 101 | ..... | 98.9 |
| 6 Average attenuation in dB at frequency | 21 | 22 | 23 | 29 | 41 | ..... | (43+47)/2=45 | ..... | (41+36)/2=38.5 |
| 7 Standard deviation in dB at frequency | 3.7 | 3.3 | 3.8 | 4.7 | 3.3 | ..... | (3.3+3.4)=6.7 | ..... | (6.1+6.5)=12.6 |
| | ×2 | ×2 | ×2 | ×2 | ×2 | ..... | ..... | ..... | ..... |
| | 7.4 | 6.6 | 7.6 | 9.4 | 6.6 | ..... | ..... | ..... | ..... |
| 8 Step ι5-(step ι6-step ι7) develops the protected ear "A" weighted levels (dB) | 70.3 | 76.0 | 81.4 | 80.4 | 66.8 | ..... | 62.7 | ..... | 73.0 |
| (The seven logarithmically added "A"-weighted sound pressure levels of Step ι8 using this sample data=85.1 dB) | | | | | | | | | |

9 NRR=Step ι3—Step ι8—3 dB*; =107.9 dB—85.1 dB—3 dB*; =19.8 dB (or 20) (Round values ending in .5 to next lower whole number).

*Spectral uncertainty (as defined in § 211.203).

The value for #3 is constant. Use Logarithmic mathematics to determine the combined value of protected ear levels (Step #8) which is used in Step #9 to exactly derive the NRR; or use the following table as a substitute for logarithmic mathematics to determine the value of Step #8 and thus very closely approximate the NRR.

| Difference between any two sound pressure levels being combined (dB) | Add this level to the higher of the two levels (dB) |
|---|---|
| 0 to less than 1.5 | 3 |
| 1.5 to less than 4.5 | 2 |
| 4.5 to 9 | 1 |
| Greater than 9 | 0 |

### § 211.208 Export provisions.

(a) The outside of each package or container containing a hearing protective device intended solely for export must be so labeled or marked. This will include all packages or containers that are used for shipping, transporting, or dispersing the hearing protective device along with any individual packaging.

(b) In addition, the manufacturer of a hearing protective device intended solely for export is subject to the export exemption requirements of § 211.110–3 of subpart A.

(Sec. 10(b)(2), Pub. L. 92–574, 86 Stat. 1242 (42 U.S.C. 4909(b)(2)))

### § 211.210 Requirements.

### § 211.210–1 General requirements.

(a) Every hearing protector manufactured for distribution in commerce in the United States, and which is subject to this regulation:

(1) Must be labeled at the point of ultimate purchase or distribution to the prospective user according to the requirements of § 211.204 of this subpart; and

(2) Must meet or exceed the mean attenuation values determined by the procedure in § 211.206 and explained in § 211.211(b).

(b) Manufacturers who distribute protectors in commerce to another manufacturer for packaging for ultimate purchase or use must provide to that manufacturer the mean attenuation values and standard deviations at each of the one-third octave band center frequencies as determined by the test procedure in § 211.206. He must also provide the Noise Reduction Rating calculated according to § 211.207.

(Sec. 13, Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

[44 FR 56139, Sept. 28, 1979, as amended at 45 FR 8275, Feb. 6, 1980; 47 FR 57716, Dec. 28, 1982]

### § 211.210–2 Labeling requirements.

(a)(1) A manufacturer responsible for labeling must satisfy the requirements of this subpart for a category of hearing protectors before distributing that category of hearing protectors in commerce.

(2) A manufacturer may apply to the Administrator for an extension of time to comply with the labeling requirements for a category of protectors before he distributes any protectors in commerce. The Administrator may grant the manufacturer an extension of up to 20 days from the date of distribution. The manufacturer must provide reasonable assurance that the protectors equal or exceed their mean attenuation values, and that labeling requirements will be satisfied before the extension expires. Requests for extension should go to the Administrator, U.S. Environment Protection Agency, Washington, DC 20460. The Administrator must respond to a request within 2 business days. Responses may be either written or oral.

(3) A manufacturer, receiving hearing protectors through the chain of distribution that were labeled by a previous manufacturer, may use that previous manufacturer's data when labeling the protectors for ultimate sale or use, but is responsible for the accuracy of the information on the label. The manufacturer may elect to retest the protectors.

(b) Labeling requirements regarding each hearing protector category in a manufacturer's product line consist of:

(1) Testing hearing protectors according to § 211.206 and the hearing protectors must have been assembled by the manufacturer's normal production process; and it must have been intended for distribution in commerce.

(c) Each category of hearing protectors is determined by the combination

of at least the following parameters. Manufacturers may use additional parameters as needed to create and identify additional categories of protectors.

(1) *Ear muffs.* (i) Head band tension (spring constant);

(ii) Ear cup volume or shape;

(iii) Mounting of ear cup on head band;

(iv) Ear cushion;

(v) Material composition.

(2) *Ear inserts.* (i) Shape;

(ii) Material composition.

(3) *Ear caps.* (i) Head band tension (spring constant);

(ii) Mounting of plug on head band;

(iii) Shape of plug;

(iv) Material composition.

If an ear insert or ear cap is manufactured in more than one size (small, medium, large, etc.) each size does not constitute a separate category and is not required to be separately label verified. However, each size must be used when conducting the required test to determine the labeled values for the specified category.

[44 FR 56139, Sept. 28, 1979, as amended at 47 FR 57717, Dec. 28, 1982]

### § 211.211 Compliance with labeling requirement.

(a) All hearing protective devices manufactured after the effective date of this regulation, and meeting the applicability requirements of § 211.201, must be labeled according to this subpart, and must comply with the Labeled Values of mean attenuation.

(b) A manufacturer must take into account both product variability and test-to-test variability when labeling his devices in order to meet the requirements of paragraph (a) of this section. A specific category is considered when the attenuation value at the tested one-third octave band is equal to or greater than the Labeled Value, or mean attenuation value, stated in the supporting information required by § 211.204–4, for that tested frequency. The attenuation value must be determined according to the test procedures of § 211.206. The Noise Reduction Rating for the label must be calculated using the Labeled Values of mean attenuation that will be included in the supporting information required by § 211.204–4.

[47 FR 57717, Dec. 28, 1982]

### § 211.212 Compliance audit testing.

#### § 211.212–1 Test request.

(a) The Administrator will request all testing under this section by means of a test request addressed to the manufacturer.

(b) The test request will be signed by the Assistant Administrator for Enforcement or his designee. The test request will be delivered by an EPA Enforcement Officer or sent by certified mail to the plant manager or other responsible official as designated by the manufacturer.

(c) In the test request, the Administrator must specify the following:

(1) The hearing protector category selected for testing;

(2) The manufacturer's plant or storage facility from which the protectors must be selected;

(3) The selection procedure the manufacturer will use to select test protectors;

(4) The test facility where the manufacturer is required to have the protectors tested;

(5) The number of protectors to be forwarded to the designated test facility and the number of those protectors which must be tested by the facility.

(6) The time period allowed for the manufacturer to initiate testing; and

(7) Any other information that will be necessary to conduct testing under this section.

(d) The test request may provide for situations in which the selected category is unavailable for testing. It may include an alternative category to be selected for testing in the event that protectors of the first specified category are not available because the protectors are not being manufactured at the specified plant, at the specified time, and are not being stored at the specified plant or storage facility.

(e)(1) Any testing conducted by the manufacturer under a test request must commence within the period specified within the test request. The Administrator may extend the time period on request by the manufacturer, if

a test facility is not available to conduct the testing.

(2) The manufacturer must complete the required testing within one week following commencement of the testing.

(3) The manufacturer will be allowed 1 calendar week to send test hearing protectors from the assembly plant to the testing facility. The Administrator may approve more time based upon a request by the manufacturer. The request must be accompanied by a satisfactory justification.

(f) Failure to comply with any of the requirements of this section will not be considered a violation of these regulations if conditions and circumstances outside the control of the manufacturer render it impossible for him to comply. These conditions and circumstances include, but are not limited to, the temporary unavailability of equipment and personnel needed to conduct the required tests. The manufacturer bears the burden of establishing the presence of the conditions and circumstances.

(Sec. 13. Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

[44 FR 56139, Sept. 28, 1979, as amended at 45 FR 8275, Feb. 6, 1980; 47 FR 57717, Dec. 28, 1982]

### §211.212–2 Test hearing protector selection.

(a) The test request will specify the number of test protectors which will be selected for testing from the number of protectors delivered to the test facility in accordance with §211.212–1(c)(5). The remainder may be used as replacement protectors if replacement is necessary. The test request will also specify that the protectors be selected from the next batch scheduled for production after receipt of the test request.

(b) If random selection is specified, it must be achieved by sequentially numbering all the protectors in the group and then using a table of random numbers to select the test hearing protectors. The manufacturer may use an alternative random selection plan when it is approved by the Administrator.

(c) Each test protector of the category selected for testing must have been assembled, by the manufacturer, for distribution in commerce using the manufacturer's normal production process.

(d) At their discretion, EPA Enforcement Officers, rather than the manufacturer, may select the protectors designated in the test request.

(e) The manufacturer must keep on hand the test protectors designated for testing until such time as the category is determined to be in compliance. Hearing protectors actually tested and found to be in compliance with these regulations may be distributed in commerce.

(Sec. 13, Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

[44 FR 56139, Sept. 28, 1979, as amended at 45 FR 8275, Feb. 6, 1980]

### §211.212–3 Test hearing protector preparation.

The manufacturer must select the test hearing protector according to §211.212–2 before the official test, and must comply with the test protector preparation requirements described in this subpart:

(a) A test hearing protector selected according to §211.212–2 must not be tested, modified, or adjusted in any manner before the official test unless the adjustments, modifications and/or tests are part of the manufacturer's prescribed manufacturing and inspection procedures.

(b) Quality controls, testing, assembly or selection procedures must not be, used on the completed protector or any portion of the protector, including parts, that will not normally be used during the production and assembly of all other protectors of that category to be distributed in commerce.

[47 FR 57717, Dec. 28, 1982]

### §211.212–4 Testing procedures.

(a) The manufacturer must conduct one valid test according to the test procedures specified in §211.206 for each hearing protector selected for testing under §211.212–2.

(b) The manufacturer must not repair or adjust the test hearing protectors once compliance testing has been initiated. In the event a hearing protector is unable to complete the test, the manufacturer may replace the protector. Any replacement protector will be

of the same category as the protector being replaced. It will be selected from the remaining designated test protectors and will be subject to all the provisions of these regulations. Any replacement and the reason for replacement must be reported in the compliance audit test report.

(Sec. 13, Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

### § 211.212–5 Reporting of test results.

(a)(1) The manufacturer must submit to the Administrator a copy of the Compliance Audit Test report for all testing conducted under § 211.212. It must be submitted within 5 days after completion of testing. A suggested compliance audit test report form is included as appendix B.

(2) The manufacturer must provide the following test information:

(i) Category identification;

(ii) Production date, and model of hearing protector;

(iii) The name and location of the test facility used;

(iv) The completed data sheet in the form specified for all tests including, for each invalid test, the reason for invalidation; and

(v) The reason for the replacement where a replacement protector was necessary.

(3) The manufacturer must provide the following statement and endorsement:

This report is submitted under section 8 and section 13 of the Noise Control Act of 1972. All testing, for which data are reported here, was conducted in strict conformance with applicable regulations under 40 CFR Part 211 et seq. All the data reported are true and accurate representations of this testing. All other information reported here is, to the best of (company name) and (test laboratory name) knowledge, true and accurate. I am aware of the penalties associated with violation of the Noise Control Act of 1972 and the regulations published under it. (authorized representative)

If the testing is conducted by an outside laboratory the manufacturer must require an authorized representative of the laboratory to cosign both the statement and the endorsement.

(b) In the case where an EPA Enforcement Officer is present during testing required by this subpart, the written reports required in paragraph (a) of this section may be given directly to the Enforcement Officer.

(c) The reporting requirements of this regulation will no longer be effective after five (5) years from the date of publication; however, the requirements will remain in effect if the Administrator is taking appropriate steps to repromulgate or modify the reporting requirements at that time.

(Sec. 13, Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

### § 211.212–6 Determination of compliance.

(a) A category will be in compliance with these requirements if the results of the test conducted under the test request show that:

(1) The mean attenuation value, at each one-third octave band center frequency as determined from the Compliance Audit Test values plus 3 dB(A), is equal to or greater than the mean attenuation value at the same one-third octave band as stated in the Supporting Information required by § 211.204–4; and

(2) The Noise Reduction Rating, when calculated from the mean attenuation values determined by Compliance Audit Testing, equals or exceeds the Noise Reduction Rating as stated on the label required by § 211.204.

(b) If a category is not in compliance, as determined in paragraph (a) of this section, the manufacturer must satisfy the continued testing requirements of § 211.212–7, and the relabeling requirements of § 211.212–8 before further distributing hearing protectors of that category in commerce.

(Sec. 13, Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

[44 FR 56139, Sept. 28, 1979, as amended at 47 FR 57717, Dec. 28, 1982]

### § 211.212–7 Continued compliance testing.

If a category is not in compliance as determined under § 211.212–6, the manufacturer must satisfy the requirements of paragraph (a) or (b) of this section.

(a) The manufacturer must continue to conduct additional tests until the mean attenuation values from the last

test at each octave band equal or exceed the lowest attenuation values obtained from all previous compliance tests.

(b) Upon approval by the Administrator, the manufacturer may relabel at a lower level in compliance with §211.212–8 in lieu of testing under paragraph (a) of this section. The manufacturer must obtain approval by showing that the relabeled values adequately take into account results achieved from the Compliance Audit Testing and product variability. The Administrator is to exercise his discretion in light of factors including the prior compliance record of the manufacturer, the adequacy of the proposed new labeling value, the amount of deviation of test results from the labeled values, and any other relevant information.

(c) When the manufacturer can show that the non-compliance under §211.212–6 was caused by a quality control failure and that the failure has been remedied, he may, with the Administrator's approval, conduct an additional test and relabel using the mean attenuation values no higher than those obtained in that test.

(d) The manufacturer may request a hearing on the issue of whether the compliance audit testing was conducted properly and whether the criteria for non-compliance in §211.212–6 have been met; and the appropriateness or scope of a continued testing order. In the event that a hearing is requested, the hearing shall begin no later than 15 days after the date on which the Administrator received the hearing request. Neither the request for a hearing, nor the fact that a hearing is in progress, shall affect the responsibility of the manufacturer to commence and continue testing required by the Administrator pursuant to paragraph (a) of this section.

(Sec. 13, Pub. L. 92–574, 86 Stat. 1244 (42 U.S.C. 4912))

[44 FR 56139, Sept. 28, 1979, as amended at 45 FR 8275, Feb. 6, 1980]

### §211.212–8 Relabeling requirements.

(a) Any manufacturer who is found to not conform with §211.212–6, and who has met the requirement of §211.212–7, must relabel all protectors of the specified category already in his possession according to §211.211 before distributing them in commerce. The manufacturer shall relabel at values no greater than any mean attenuation values received from Compliance Audit Testing. Any manufacturer who proceeds with §211.212–7(a) or (b) must relabel his product line with the lowest mean attenuation value at each octave band received from testing; or he may take into account product variability under §211.211(b) and label with a lower mean attenuation value than the worst case values obtained from Compliance Audit Testing.

(b) [Reserved]

(Sec. 10(a)(3), Pub. L. 92–574, 86 Stat. 1242 (42 U.S.C. 4909(a)(3)))

### §211.213 Remedial orders for violations of these regulations.

(a) The Administrator may issue an order under section 11(d)(1) of the Act when any person is in violation of these regulations.

(b) A remedial order will be issued only after the violator has been notified of the violation and given an opportunity for a hearing according to section 554 of title 5 of the United States Code.

(c) All costs associated with a remedial order shall be borne by the violator.

(Sec. 11(d) Pub. L. 92–574, 86 Stat. 1243 (42 U.S.C. 4910(d)))

### §211.214 Removal of label.

Section 10(a)(4) of the Act prohibits any person from removing, prior to sale, any label required by this subpart, by either physical removal or defacing or any other physical act making the label and its contents not accessible to the ultimate purchaser prior to sale.

(Sec. 10(a)(4), Pub. L. 92–574, 86 Stat. 1242 (42 U.S.C. 4909(a)(4)))

## APPENDIX A TO PART 211—COMPLIANCE AUDIT TESTING REPORT

*Data Sheet*

Company name: _____
Address: _____
Test laboratory: _____
Address: _____
Model number of hearing protector: _____
Category designation: _____

Production date: _____

*Test Results—Frequency, Mean Attenuation, and Standard Deviation*

125 _____
250 _____
500 _____
1000 _____
2000 _____
3150 _____
4000 _____
6300 _____
8000 _____
Noise Reduction Rating: _____

If replacement hearing protector was necessary to conduct test, reason for replacement:

This report is submitted under sections 8 and 13 of the Noise Control Act of 1972. All testing, for which data are reported here, was conducted in strict conformance with applicable regulations under 40 CFR Part 211, et seq. All the data reported here are true and accurate representations of this testing. All other information reported here is, to the best of (company name) and (test laboratory name) knowledge, true and accurate. I am aware of the penalties associated with violation of the Noise Control Act of 1972 and the regulations published under it.

_____

(Authorized representative of company)

_____

(Authorized representative of test laboratory)

[44 FR 56139, Sept. 28, 1979. Redesignated at 47 FR 57717, Dec. 28, 1982]

# SUBCHAPTER H—OCEAN DUMPING

## PART 220—GENERAL

Sec.
220.1 Purpose and scope.
220.2 Definitions.
220.3 Categories of permits.
220.4 Authorities to issue permits.

AUTHORITY: 33 U.S.C. 1412 and 1418.

SOURCE: 42 FR 2468, Jan. 11, 1977, unless otherwise noted.

### § 220.1 Purpose and scope.

(a) *General.* This subchapter H establishes procedures and criteria for the issuance of permits by EPA pursuant to section 102 of the Act. This subchapter H also establishes the criteria to be applied by the Corps of Engineers in its review of activities involving the transportation of dredged material for the purpose of dumping it in ocean waters pursuant to section 103 of the Act. Except as may be authorized by a permit issued pursuant to this subchapter H, or pursuant to section 103 of the Act, and subject to other applicable regulations promulgated pursuant to section 108 of the Act:

(1) No person shall transport from the United States any material for the purpose of dumping it into ocean waters;

(2) In the case of a vessel or aircraft registered in the United States or flying the United States flag or in the case of a United States department, agency, or instrumentality, no person shall transport from any location any material for the purpose of dumping it into ocean waters; and

(3) No person shall dump any material transported from a location outside the United States:

(i) Into the territorial sea of the United States; or

(ii) Into a zone contiguous to the territorial sea of the United States, extending to a line twelve nautical miles seaward from the base line from which the breadth of the territorial sea is measured, to the extent that it may affect the territorial sea or the territory of the United States.

(b) *Relationship to international agreements.* In accordance with section 102(a) of the Act, the regulations and criteria included in this subchapter H apply the standards and criteria binding upon the United States under the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter to the extent that application of such standards and criteria do not relax the requirements of the Act.

(c) *Exclusions*—(1) *Fish wastes.* This subchapter H does not apply to, and no permit hereunder shall be required for, the transportation for the purpose of dumping or the dumping in ocean waters of fish wastes unless such dumping occurs in:

(i) Harbors or other protected or enclosed coastal waters; or

(ii) Any other location where the Administrator finds that such dumping may reasonably be anticipated to endanger health, the environment or ecological systems.

(2) *Fisheries resources.* This subchapter H does not apply to, and no permit hereunder shall be required for, the placement or deposit of oyster shells or other materials for the purpose of developing, maintaining or harvesting fisheries resources; provided, such placement or deposit is regulated under or is a part of an authorized State or Federal program certified to EPA by the agency authorized to enforce the regulation, or to administer the program, as the case may be; and provided further, that the National Oceanic and Atmospheric Administration, the U.S. Coast Guard, and the U.S. Army Corps of Engineers concur in such placement or deposit as it may affect their responsibilities and such concurrence is evidenced by letters of concurrence from these agencies.

(3) *Vessel propulsion and fixed structures.* This subchapter H does not apply to, and no permit hereunder shall be required for:

(i) Routine discharges of effluent incidental to the propulsion of vessels or the operation of motor-driven equipment on vessels; or

(ii) Construction of any fixed structure or artificial island, or the intentional placement of any device in ocean waters or on or in the submerged

land beneath such waters, for a purpose other than disposal when such construction or such placement is otherwise regulated by Federal or State law or made pursuant to an authorized Federal or State program certified to EPA by the agency authorized to enforce the regulations or to administer the program, as the case may be.

(4) *Emergency to safeguard life at sea.* This subchapter H does not apply to, and no permit hereunder shall be required for, the dumping of material into ocean waters from a vessel or aircraft in an emergency to safeguard life at sea to the extent that the person owning or operating such vessel or aircraft files timely reports required by § 224.2(b).

### § 220.2 Definitions.

As used in this subchapter H:

(a) *Act* means the Marine Protection, Research, and Sanctuaries Act of 1972, as amended (33 U.S.C. 1401);

(b) *FWPCA* means the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251);

(c) *Ocean* or *ocean waters* means those waters of the open seas lying seaward of the baseline from which the territorial sea is measured, as provided for in the Convention on the Territorial Sea and the Contiguous Zone (15 UST 1606; TIAS 5639); this definition includes the waters of the territorial sea, the contiguous zone and the oceans as defined in section 502 of the FWPCA.

(d) *Material* means matter of any kind or description, including, but not limited to, dredged material, solid waste, incinerator residue, garbage, sewage, sewage sludge, munitions, radiological, chemical, and biological warfare agents, radioactive materials, chemicals, biological and laboratory waste, wreck or discarded equipment, rock, sand, excavation debris, industrial, municipal, agricultural, and other waste, but such term does not mean sewage from vessels within the meaning of section 312 of the FWPCA. Oil within the meaning of section 311 of the FWPCA shall constitute ''material'' for purposes of this subchapter H only to the extent that it is taken on board a vessel or aircraft for the primary purpose of dumping.

(e) *Dumping* means a disposition of material: *Provided*, That it does not mean a disposition of any effluent from any outfall structure to the extent that such disposition is regulated under the provisions of the FWPCA, under the provisions of section 13 of the River and Harbor Act of 1899, as amended (33 U.S.C. 407), or under the provisions of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011), nor does it mean a routine discharge of effluent incidental to the propulsion of, or operation of motor-driven equipment on, vessels: *Provided further*, That it does not mean the construction of any fixed structure or artificial island nor the intentional placement of any device in ocean waters or on or in the submerged land beneath such waters, for a purpose other than disposal, when such construction or such placement is otherwise regulated by Federal or State law or occurs pursuant to an authorized Federal or State program; And provided further, That it does not include the deposit of oyster shells, or other materials when such deposit is made for the purpose of developing, maintaining, or harvesting fisheries resources and is otherwise regulated by Federal or State law or occurs pursuant to an authorized Federal or State program.

(f) *Sewage Treatment Works* means municipal or domestic waste treatment facilities of any type which are publicly owned or regulated to the extent that feasible compliance schedules are determined by the availability of funding provided by Federal, State, or local governments.

(g) *Criteria* means the criteria set forth in part 227 of this subchapter H.

(h) *Dredged Material Permit* means a permit issued by the Corps of Engineers under section 103 of the Act (see 33 CFR 209.120) and any Federal projects reviewed under section 103(e) of the Act (see 33 CFR 209.145).

(i) Unless the context otherwise requires, all other terms shall have the meanings assigned to them by the Act.

### § 220.3 Categories of permits.

This § 220.3 provides for the issuance of general, special, emergency, interim and research permits for ocean dumping under section 102 of the Act.

(a) *General permits.* General permits may be issued for the dumping of certain materials which will have a minimal adverse environmental impact and are generally disposed of in small quantities, or for specific classes of materials that must be disposed of in emergency situations. General permits may be issued on application of an interested person in accordance with the procedures of part 221 or may be issued without such application whenever the Administrator determines that issuance of a general permit is necessary or appropriate.

(b) *Special permits.* Special permits may be issued for the dumping of materials which satisfy the Criteria and shall specify an expiration date no later than three years from the date of issue.

(c) *Emergency permits.* For any of the materials listed in § 227.6, except as trace contaminants, after consultation with the Department of State with respect to the need to consult with parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter that are likely to be affected by the dumping, emergency permits may be issued to dump such materials where there is demonstrated to exist an emergency requiring the dumping of such materials, which poses an unacceptable risk relating to human health and admits of no other feasible solution. As used herein, ''emergency'' refers to situations requiring action with a marked degree of urgency, but is not limited in its application to circumstances requiring immediate action. Emergency permits may be issued for other materials, except those prohibited by § 227.5, without consultation with the Department of State when the Administrator determines that there exists an emergency requiring the dumping of such materials which poses an unacceptable risk to human health and admits of no other feasible solution.

(d) *Interim permits.* Prior to April 23, 1978, interim permits may be issued in accordance with subpart A of part 227 to dump materials which are not in compliance with the environmental impact criteria of subpart B of part 227, or which would cause substantial adverse effects as determined in accordance with the criteria of subpart D or E of part 227 or for which an ocean disposal site has not been designated on other than an interim basis pursuant to part 228 of this subchapter H; provided, however, no permit may be issued for the ocean dumping of any materials listed in § 227.5, or for any of the materials listed in § 227.6, except as trace contaminants; provided further that the compliance date of April 23, 1978, does not apply to the dumping of wastes by existing dumpers when the Regional Administrator determines that the permittee has exercised his best efforts to comply with all requirements of a special permit by April 23, 1978, and has an implementation schedule adequate to allow phasing out of ocean dumping or compliance with all requirements necessary to receive a special permit by December 31, 1981, at the latest. No interim permit will be granted for the dumping of waste from a facility which has not previously dumped wastes in the ocean from a new facility, or for the dumping of an increased amount of waste from the expansion or modification of an existing facility, after the effective date of these regulations (except when the facility is operated by a municipality now dumping such wastes). No interim permit will be issued for the dumping of any material in the ocean for which an interim permit had previously been issued unless the applicant demonstrates that he has exercised his best efforts to comply with all provisions of the previously issued permits. Interim permits shall specify an expiration date no later than one year from the date of issue.

(e) *Research permits.* Research permits may be issued for the dumping of any materials, other than materials specified in § 227.5 or for any of the materials listed in § 227.6 except as trace contaminants, unless subject to the exclusion of § 227.6(g), into the ocean as part of a research project when it is determined that the scientific merit of the proposed project outweighs the potential environmental or other damage that may result from the dumping. Research permits shall specify an expiration date no later than 18 months from the date of issue.

(f) *Permits for incineration at sea.* Permits for incineration of wastes at sea will be issued only as research permits or as interim permits until specific criteria to regulate this type of disposal are promulgated, except in those cases where studies on the waste, the incineration method and vessel, and the site have been conducted and the site has been designated for incineration at sea in accordance with the procedures of § 228.4(b). In all other respects the requirements of parts 220 through 228 apply.

[42 FR 2468, Jan. 11, 1977; 43 FR 1071, Jan. 6, 1978]

### § 220.4 Authorities to issue permits.

(a) *Determination by Administrator.* The Administrator, or such other EPA employee as he may from time to time designate in writing, shall issue, deny, modify, revoke, suspend, impose conditions on, initiate and carry out enforcement activities and take any and all other actions necessary or proper and permitted by law with respect to general, special, emergency, interim, or research permits.

(b) *Authority delegated to Regional Administrators.* Regional Administrators, or such other EPA employees as they may from time to time designate in writing, are delegated the authority to issue, deny, modify, revoke, suspend, impose conditions on, initiate and carry out enforcement activities, and take any and all other actions necessary or proper and permitted by law with respect to special and interim permits for:

(1) The dumping of material in those portions of the territorial sea which are subject to the jurisdiction of any State within their respective Regions, and in those portions of the contiguous zone immediately adjacent to such parts of the territorial sea; and in the oceans with respect to approved waste disposal sites designated pursuant to part 228 of this subchapter H, and

(2) Where transportation for dumping is to originate in one Region and dumping is to occur at a location within another Region's jurisdiction conferred by order of the Administrator, the Region in which transportation is to originate shall be responsible for review of the application and shall prepare the technical evaluation of the need for dumping and alternatives to ocean dumping. The Region having jurisdiction over the proposed dump site shall take all other actions required by this subchapter H with respect to the permit application, including without limitation, determining to issue or deny the permit, specifying the conditions to be imposed, and giving public notice. If both Regions do not concur in the disposition of the permit application, the Administrator will make the final decision on all issues with respect to the permit application, including without limitation, issuance or denial of the permit and the conditions to be imposed.

(c) *Review of Corps of Engineers Dredged Material Permits.* Regional Administrators have the authority to review, to approve or to disapprove or to propose conditions upon Dredged Material Permits for ocean dumping of dredged material at locations within the respective Regional jurisdictions. Regional jurisdiction to act under this paragraph (c) of § 220.4 is determined by the Administrator in accordance with § 228.4(e).

## PART 221—APPLICATIONS FOR OCEAN DUMPING PERMITS UNDER SECTION 102 OF THE ACT

Sec.
221.1 Applications for permits.
221.2 Other information.
221.3 Applicant.
221.4 Adequacy of information in application.
221.5 Processing fees.

AUTHORITY: 33 U.S.C. 1412 and 1418.

SOURCE: 42 FR 2470, Jan. 11, 1977, unless otherwise noted.

### § 221.1 Applications for permits.

Applications for general, special, emergency, interim and research permits under section 102 of the Act may be filed with the Administrator or the appropriate Regional Administrator, as the case may be, authorized by § 220.4 to act on the application. Applications shall be made in writing and shall contain, in addition to any other material which may be required, the following:

(a) Name and address of applicant;

(b) Name of the person or firm transporting the material for dumping, the name of the person(s) or firm(s) producing or processing all materials to be transported for dumping, and the name or other identification, and usual location, of the conveyance to be used in the transportation and dumping of the material to be dumped, including information on the transporting vessel's communications and navigation equipment;

(c) Adequate physical and chemical description of material to be dumped, including results of tests necessary to apply the Criteria, and the number, size, and physical configuration of any containers to be dumped;

(d) Quantity of material to be dumped;

(e) Proposed dates and times of disposal;

(f) Proposed dump site, and in the event such proposed dump site is not a dump site designated in this subchapter H, detailed physical, chemical and biological information relating to the proposed dump site and sufficient to support its designation as a site according to the procedures of part 228 of this subchapter H;

(g) Proposed method of releasing the material at the dump site and means by which the disposal rate can be controlled and modified as required;

(h) Identification of the specific process or activity giving rise to the production of the material;

(i) Description of the manner in which the type of material proposed to be dumped has been previously disposed of by or on behalf of the person(s) or firm(s) producing such material;

(j) A statement of the need for the proposed dumping and an evaluation of short and long term alternative means of disposal, treatment or recycle of the material. Means of disposal shall include without limitation, landfill, well injection, incineration, spread of material over open ground; biological, chemical or physical treatment; recovery and recycle of material within the plant or at other plants which may use the material, and storage. The statement shall also include an analysis of the availability and environmental impact of such alternatives; and

(k) An assessment of the anticipated environmental impact of the proposed dumping, including without limitation, the relative duration of the effect of the proposed dumping on the marine environment, navigation, living and non-living marine resource exploitation, scientific study, recreation and other uses of the ocean.

### §221.2 Other information.

In the event the Administrator, Regional Administrator, or a person designated by either to review permit applications, determines that additional information is needed in order to apply the Criteria, he shall so advise the applicant in writing. All additional information requested pursuant to this §221.2 shall be deemed part of the application and for purposes of applying the time limitation of §222.1, the application will not be considered complete until such information has been filed.

### §221.3 Applicant.

Any person may apply for a permit under this subchapter H even though the proposed dumping may be carried on by a permittee who is not the applicant; provided however, that the Administrator or the Regional Administrator, as the case may be, may, in his discretion, require that an application be filed by the person or firm producing or processing the material proposed to be dumped. Issuance of a permit will not excuse the permittee from any civil or criminal liability which may attach by virtue of his having transported or dumped materials in violation of the terms or conditions of a permit, notwithstanding that the permittee may not have been the applicant.

### §221.4 Adequacy of information in application.

No permit issued under this subchapter H will be valid for the transportation or dumping of any material which is not accurately and adequately described in the application. No permittee shall be relieved of any liability which may arise as a result of the transportation or dumping of material which does not conform to information provided in the application solely by

virtue of the fact that such information was furnished by an applicant other than the permittee.

### § 221.5 Processing fees.

(a) A processing fee of $1,000 will be charged in connection with each application for a permit for dumping in an existing dump site designated in this subchapter H.

(b) A processing fee of an additional $3,000 will be charged in connection with each application for a permit for dumping in a dump site other than a dump site designated in this subchapter H.

(c) Notwithstanding any other provision of this § 221.5, no agency or instrumentality of the United States or of a State or local government will be required to pay the processing fees specified in paragraphs (a) and (b) of this section.

## PART 222—ACTION ON OCEAN DUMPING PERMIT APPLICATIONS UNDER SECTION 102 OF THE ACT

Sec.

222.1 General.
222.2 Tentative determinations.
222.3 Notice of applications.
222.4 Initiation of hearings.
222.5 Time and place of hearings.
222.6 Presiding Officer.
222.7 Conduct of public hearing.
222.8 Recommendations of Presiding Officer.
222.9 Issuance of permits.
222.10 Appeal to adjudicatory hearing.
222.11 Conduct of adjudicatory hearings.
222.12 Appeal to Administrator.
222.13 Computation of time.

AUTHORITY: 33 U.S.C. 1412 and 1418.

SOURCE: 42 FR 2471, Jan. 11, 1977, unless otherwise noted.

### § 222.1 General.

Decisions as to the issuance, denial, or imposition of conditions on general, special, emergency, interim and research permits under section 102 of the Act will be made by application of the criteria of parts 227 and 228. Final action on any application for a permit will, to the extent practicable, be taken within 180 days from the date a complete application is filed.

### § 222.2 Tentative determinations.

(a) Within 30 days of the receipt of his initial application, an applicant shall be issued notification of whether his application is complete and what, if any, additional information is required. No such notification shall be deemed to foreclose the Administrator or the Regional Administrator, as the case may be, from requiring additional information at any time pursuant to § 221.2.

(b) Within 30 days after receipt of a completed permit application, the Administrator or the Regional Administrator, as the case may be, shall publish notice of such application including a tentative determination with respect to issuance or denial of the permit. If such tentative determination is to issue the permit, the following additional tentative determinations will be made:

(1) Proposed time limitations, if any;

(2) Proposed rate of discharge from the barge or vessel transporting the waste;

(3) Proposed dumping site; and

(4) A brief description of any other proposed conditions determined to be appropriate for inclusion in the permit in question.

### § 222.3 Notice of applications.

(a) *Contents.* Notice of every complete application for a general, special, interim, emergency and research permit shall, in addition to any other material, include the following:

(1) A summary of the information included in the permit application;

(2) Any tentative determinations made pursuant to paragraph (b) of § 222.2;

(3) A brief description of the procedures set forth in § 222.5 for requesting a public hearing on the application including specification of the date by which requests for a public hearing must be filed;

(4) A brief statement of the factors considered in reaching the tentative determination with respect to the permit and, in the case of a tentative determination to issue the permit, the reasons for the choice of the particular permit conditions selected; and

(5) The location at which interested persons may obtain further information on the proposed dumping, including copies of any relevant documents.

(b) *Publication*—(1) *Special, interim and research permits.* Notice of every complete application for special, interim and research permits shall be given by:

(i) Publication in a daily newspaper of general circulation in the State in closest proximity to the proposed dump site; and

(ii) Publication in a daily newspaper of general circulation in the city in which is located the office of the Administrator or the Regional Administrator, as the case may be, giving notice of the permit application.

(2) *General permits.* Notice of every complete application for a general permit or notice of action proposed to be taken by the Administrator to issue a general permit, without an application, shall be given by publication in the FEDERAL REGISTER.

(3) *Emergency permits.* Notice of every complete application for an emergency permit shall be given by publication in accordance with paragraphs (b)(1)(i) and (ii) of this section; *Provided, however,* That no such notice and no tentative determination in accordance with § 222.2 shall be required in any case in which the Administrator determines:

(i) That an emergency, as defined in paragraph (c) of § 220.3 exists;

(ii) That the emergency poses an unacceptable risk relating to human health;

(iii) That the emergency admits of no other feasible solution; and

(iv) That the public interest requires the issuance of an emergency permit as soon as possible.

Notice of any determination made by the Administrator pursuant to this paragraph (b)(3) shall be given as soon as practicable after the issuance of the emergency permit by publication in accordance with paragraphs (b)(1)(i) and (ii) and with paragraphs (a), (c) through (i) of this section.

(c) *Copies of notice sent to specific persons.* In addition to the publication of notice required by paragraph (b) of this section, copies of such notice will be mailed by the Administrator or the Regional Administrator, as the case may be, to any person, group or Federal, State or local agency upon request. Any such request may be a standing request for copies of such notices and shall be submitted in writing to the Administrator or to any Regional Administrator and shall relate to all or any class of permit applications which may be acted upon by the Administrator or such Regional Administrator, as the case may be.

(d) *Copies of notice sent to States.* In addition to the publication of notice required by paragraph (b) of this section, copies of such notice will be mailed to the State water pollution control agency and to the State agency responsible for carrying out the Coastal Zone Management Act, if such agency exists, for each coastal State within 500 miles of the proposed dumping site.

(e) *Copies of notice sent to Corps of Engineers.* In addition to the publication of notice required by paragraph (b) of this section, copies of such notice will be mailed to the office of the appropriate District Engineer of the U.S. Army Corps of Engineers for purposes of section 106(c) of the Act, (pertaining to navigation, harbor approaches, and artificial islands on the outer continental shelf).

(f) *Copies of notice sent to Coast Guard.* In addition to the publication of notice required by paragraph (b) of this section, copies of such notice will be sent to the appropriate district office of the U.S. Coast Guard for review and possible suggestion of additional conditions to be included in the permit to facilitate surveillance and enforcement.

(g) *Fish and Wildlife Coordination Act.* The Fish and Wildlife Coordination Act, Reorganization Plan No. 4 of 1970, and the Act require that the Administrator or the Regional Administrator, as the case may be, consult with appropriate regional officials of the Departments of Commerce and Interior, the Regional Director of the NMFS–NOAA, and the agency exercising administrative jurisdiction over the fish and wildlife resources of the States subject to any dumping prior to the issuance of a permit under this subchapter H. Copies of the notice shall be sent to the persons noted in paragraph (g) of this section.

(h) *Copies of notice sent to Food and Drug Administration.* In addition to the publication of notice required by paragraph (b) of this section, copies of such notice will be mailed to Food and Drug Administration, Shellfish Sanitation Branch (HF–417), 200 C Street SW., Washington, DC 20204.

(i) *Failure to give certain notices.* Failure to send copies of any public notice in accordance with paragraphs (c) through (h) of this section shall not invalidate any notice given pursuant to this section nor shall such failure invalidate any subsequent administrative proceeding.

(j) *Failure of consulted agency to respond.* Unless advice to the contrary is received from the appropriate Federal or State agency within 30 days of the date copies of any public notice were dispatched to such agency, such agency will be deemed to have no objection to the issuance of the permit identified in the public notice.

### § 222.4 Initiation of hearings.

(a) In the case of any permit application for which public notice in advance of permit issuance is required in accordance with paragraph (b) of § 222.3, any person may, within 30 days of the date on which all provisions of paragraph (b) of § 222.3 have been complied with, request a public hearing to consider the issuance or denial of, or the conditions to be imposed upon, such permit. Any such request for a public hearing shall be in writing, shall identify the person requesting the hearing, shall state with particularity any objections to the issuance or denial of, or to the conditions to be imposed upon, the proposed permit, and shall state the issues which are proposed to be raised by such person for consideration at a hearing.

(b) Whenever (1) a written request satisfying the requirements of paragraph (a) of this section has been received and the Administrator or Regional Administrator, as the case may be, determines that such request presents genuine issues, or (2) the Administrator or Regional Administrator, as the case may be, determines in his discretion that a public hearing is necessary or appropriate, the Administrator or the Regional Administrator, as the case may be, will set a time and place for a public hearing in accordance with § 222.5, and will give notice of such hearing by publication in accordance with § 222.3.

(c) In the event the Administrator or the Regional Administrator, as the case may be, determines that a request filed pursuant to paragraph (a) of this section does not comply with the requirements of such paragraph (a) of this section or that such request does not present substantial issues of public interest, he shall advise, in writing, the person requesting the hearing of his determination.

### § 222.5 Time and place of hearings.

Hearings shall be held in the State in closest proximity to the proposed dump site, whenever practicable, and shall be set for the earliest practicable date no less than 30 days after the receipt of an appropriate request for a hearing or a determination by the Administrator or the Regional Administrator, as the case may be, to hold such a hearing without such a request.

### § 222.6 Presiding Officer.

A hearing convened pursuant to this subchapter H shall be conducted by a Presiding Officer. The Administrator or Regional Administrator, as the case may be, may designate a Presiding Officer. For adjudicatory hearings held pursuant to § 222.11, the Presiding Officer shall be an EPA employee who has had no prior connection with the permit application in question, including without limitation, the performance of investigative or prosecuting functions or any other functions, and who is not employed in the Enforcement Division or any Regional enforcement office.

[42 FR 2471, Jan. 11, 1977; 42 FR 6583, Feb. 3, 1977]

### § 222.7 Conduct of public hearing.

The Presiding Officer shall be responsible for the expeditious conduct of the hearing. The hearing shall be an informal public hearing, not an adversary proceeding, and shall be conducted so as to allow the presentation of public comments. When the Presiding Officer determines that it is necessary or appropriate, he shall cause a suitable record, which may include a verbatim

transcript, of the proceedings to be made. Any person may appear at a public hearing convened pursuant to §222.5 whether or not he requested the hearing, and may be represented by counsel or any other authorized representative. The Presiding Officer is authorized to set forth reasonable restrictions on the nature or amount of documentary material or testimony presented at a public hearing, giving due regard to the relevancy of any such information, and to the avoidance of undue repetitiveness of information presented.

### §222.8 Recommendations of Presiding Officer.

Within 30 days following the adjournment of a public hearing convened pursuant to §222.5, or within such additional period as the Administrator or the Regional Administrator, as the case may be, may grant to the Presiding Officer for good cause shown, and after full consideration of the comments received at the hearing, the Presiding Officer will prepare and forward to the Administrator or to the Regional Administrator, as the case may be, written recommendations relating to the issuance or denial of, or conditions to be imposed upon, the proposed permit and the record of the hearing, if any. Such recommendations shall contain a brief statement of the basis for the recommendations including a description of evidence relied upon. Copies of the Presiding Officer's recommendations shall be provided to any interested person on request, without charge. Copies of the record will be provided in accordance with 40 CFR Part 2.

[42 FR 2471, Jan. 11, 1977; 42 FR 6583, Feb. 3, 1977]

### §222.9 Issuance of permits.

(a) Within 30 days following receipt of the Presiding Officer's recommendations or, where no hearing has been held, following the close of the 30-day period for requesting a hearing as provided in §222.4, the Administrator or the Regional Administrator, as the case may be, shall make a determination with respect to the issuance, denial, or imposition of conditions on, any permit applied for under this Subchapter H and shall give notice to the applicant and to all persons who registered their attendance at the hearing by providing their name and mailing address, if any, by mailing a letter stating the determination and stating the basis therefor in terms of the Criteria.

(b) Any determination to issue or deny any permit after a hearing held pursuant to §222.7 shall take effect no sooner than:

(1) 10 days after notice of such determination is given if no request for an adjudicatory hearing is filed in accordance with §222.10(a); or

(2) 20 days after notice of such determination is given if a request for an adjudicatory hearing is filed in accordance with paragraph (a) of §222.10 and the Administrator or the Regional Administrator, as the case may be, denies such request in accordance with paragraph (c) of §222.10; or

(3) The date on which a final determination has been made following an adjudicatory hearing held pursuant to §222.11.

(c) The Administrator or Regional Administrator, as the case may be, may extend the term of a previously issued permit pending the conclusion of the proceedings held pursuant to §§222.7 through 222.9.

(d) A copy of each permit issued shall be sent to the appropriate District Office of the U.S. Coast Guard.

### §222.10 Appeal to adjudicatory hearing.

(a) Within 10 days following the receipt of notice of the issuance or denial of any permit pursuant to §222.9 after a hearing held pursuant to §222.7, any interested person who participated in such hearing may request that an adjudicatory hearing be held pursuant to §222.11 for the purpose of reviewing such determination, or any part thereof. Any such request for an adjudicatory hearing shall be filed with the Administrator or the Regional Administrator, as the case may be, and shall be in writing, shall identify the person requesting the adjudicatory hearing and shall state with particularity the objections to the determination, the basis therefor and the modification requested.

(b) Whenever a written request satisfying the requirements of paragraph (a) of this section has been received and the Administrator or Regional Administrator, as the case may be, determines that an adjudicatory hearing is warranted, the Administrator or the Regional Administrator, as the case may be, will set a time and place for an adjudicatory hearing in accordance with § 222.5, and will give notice of such hearing by publication in accordance with § 222.3.

(c) Prior to the conclusion of the adjudicatory hearing and appeal process, the Administrator or the Regional Administrator, as the case may be, in his discretion may extend the duration of a previously issued permit until a final determination has been made pursuant to § 222.11 or § 222.12.

(d) In the event the Administrator or the Regional Administrator, as the case may be, determines that a request filed pursuant to paragraph (a) of this section does not comply with the requirements of such paragraph (a) of this section or that such request does not present substantial issues of public interest, he shall advise, in writing, the person requesting the adjudicatory hearing of his determination.

(e) Any person requesting an adjudicatory hearing or requesting admission as a party to an adjudicatory hearing shall state in his written request, and shall by filing such request consent, that he and his employees and agents shall submit themselves to direct and cross-examination at any such hearing and to the taking of an oath administered by the Presiding Officer.

### § 222.11 Conduct of adjudicatory hearings.

(a) *Parties.* Any interested person may at a reasonable time prior to the commencement of the hearing submit to the Presiding Officer a request to be admitted as a party. Such request shall be in writing and shall set forth the information which would be required to be submitted by such person if he were requesting an adjudicatory hearing. Any such request to be admitted as a party which satisfies the requirements of this paragraph (a) shall be granted and all parties shall be informed at the commencement of the adjudicatory hearing of the parties involved. Any party may be represented by counsel or other authorized representative. EPA staff representing the Administrator or Regional Administrator who took action with respect to the permit application shall be deemed a party.

(b) *Filing and service.* (1) An original and two (2) copies of all documents or papers required or permitted to be filed shall be filed with the Presiding Officer.

(2) Copies of all documents and papers filed with the Presiding Officer shall be served upon all other parties to the adjudicatory hearing.

(c) *Consolidation.* The Administrator, or the Regional Administrator in the case of a hearing arising within his Region and for which he has been delegated authority hereunder, may, in his discretion, order consolidation of any adjudicatory hearings held pursuant to this section whenever he determines that consolidation will expedite or simplify the consideration of the issues presented. The Administrator may, in his discretion, order consolidation and designate one Region to be responsible for the conduct of any hearings held pursuant to this section which arise in different Regions whenever he determines that consolidation will expedite or simplify the consideration of the issues presented.

(d) *Pre-hearing conference.* The Presiding Officer may hold one or more prehearing conferences and may issue a prehearing order which may include without limitation, requirements with respect to any or all of the following:

(1) Stipulations and admissions;

(2) Disputed issues of fact;

(3) Disputed issues of law;

(4) Admissibility of any evidence;

(5) Hearing procedures including submission of oral or written direct testimony, conduct of cross-examination, and the opportunity for oral arguments;

(6) Any other matter which may expedite the hearing or aid in disposition of any issues raised therein.

(e) *Adjudicatory hearing procedures.*

(1) The burden of going forward with the evidence shall:

(i) In the case of any adjudicatory hearing held pursuant to § 222.10(b)(1), be on the person filing a request under

§ 222.10(a) as to each issue raised by the request; and

(ii) In the case of any adjudicatory hearing held pursuant to § 223.2 or pursuant to part 226, be on the Environmental Protection Agency.

(2) The Presiding Officer shall have the duty to conduct a fair and impartial hearing, to take action to avoid unnecessary delay in the disposition of proceedings, and to maintain order. He shall have all powers necessary or appropriate to that end, including without limitation, the following:

(i) To administer oaths and affirmations;

(ii) To rule upon offers of proof and receive relevant evidence;

(iii) To regulate the course of the hearing and the conduct of the parties and their counsel;

(iv) To consider and rule upon all procedural and other motions appropriate to the proceedings; and

(v) To take any action authorized by these regulations and in conformance with law.

(3) Parties shall have the right to cross-examine a witness who appears at an adjudicatory hearing to the extent that such cross-examination is necessary or appropriate for a full disclosure of the facts. In multi-party proceedings the Presiding Officer may limit cross-examination to one party on each side if he is satisfied that the cross-examination by one party will adequately protect the interests of other parties.

(4) When a party will not be unfairly prejudiced thereby, the Presiding Officer may order all or part of the evidence to be submitted in written form.

(5) Rulings of the Presiding Officer on the admissibility of evidence, the propriety of cross-examination, and other procedural matters, shall be final and shall appear in the record.

(6) Interlocutory appeals may not be taken.

(7) Parties shall be presumed to have taken exception to an adverse ruling.

(8) The proceedings of all hearings shall be recorded by such means as the Presiding Officer may determine. The original transcript of the hearing shall be a part of the record and the sole official transcript. Copies of the transcript shall be available from the Environmental Protection Agency in accordance with 40 CFR part 2.

(9) The rules of evidence shall not apply.

(f) *Decision after adjudicatory hearing.* (1) Within 30 days after the conclusion of the adjudicatory hearing, or within such additional period as the Administrator or the Regional Administrator, as the case may be, may grant to the Presiding Officer for good cause shown, the Presiding Officer shall submit to the Administrator or the Regional Administrator, as the case may be, proposed findings of fact and conclusions of law, his recommendation with respect to any and all issues raised at the hearing, and the record of the hearing. Such findings, conclusions and recommendations shall contain a brief statement of the basis for the recommendations. Copies of the Presiding Officer's proposed findings of fact, conclusions of law and recommendations shall be provided to all parties to the adjudicatory hearing on request, without charge.

(2) Within 20 days following submission of the Presiding Officer's proposed findings of fact, conclusions of law and recommendations, any party may submit written exceptions, no more than 30 pages in length, to such proposed findings, conclusions and recommendations and within 30 days following the submission of the Presiding Officer's proposed findings, conclusions and recommendations any party may file written comments, no more than 30 pages in length, on another party's exceptions. Within 45 days following the submission of the Presiding Officer's proposed findings, conclusions and recommendations, the Administrator or the Regional Administrator, as the case may be, shall make a determination with respect to all issues raised at such hearing and shall affirm, reverse or modify the previous or proposed determination, as the case may be. Notice of such determination shall set forth the determination for each such issue, shall briefly state the basis therefor and shall be given by mail to all parties to the adjudicatory hearing.

### § 222.12 Appeal to Administrator.

(a)(1) The Administrator delegates to the Environmental Appeals Board authority to issue final decisions in appeals filed under this part. An appeal directed to the Administrator, rather than to the Environmental Appeals Board, will not be considered. This delegation of authority to the Environmental Appeals Board does not preclude the Environmental Appeals Board from referring an appeal or a motion filed under this part to the Administrator for decision when the Environmental Appeals Board, in its discretion, deems it appropriate to do so. When an appeal or motion to referred to the Administrator, all parties shall be so notified and the rules in this section referring to the Environmental Appeals Board shall be interpreted as referring to the Administrator.

(2) Within 10 days following receipt of the determination of the Regional Administrator pursuant to paragraph (f)(2) of § 222.11, any party to an adjudicatory hearing held in accordance with § 222.11 may appeal such determination to the Environmental Appeals Board by filing a written notice of appeal, or the Environmental Appeals Board may, on its own initiative, review any prior determination.

(b) The notice of appeal shall be no more than 40 pages in length and shall contain:

(1) The name and address of the person filing the notice of appeal;

(2) A concise statement of the facts on which the person relies and appropriate citations to the record of the adjudicatory hearing;

(3) A concise statement of the legal basis on which the person relies;

(4) A concise statement setting forth the action which the person proposes that the Environmental Appeals Board take; and

(5) A certificate of service of the notice of appeal on all other parties to the adjudicatory hearing.

(c) The effective date of any determination made pursuant to paragraph (f)(2) of § 222.11 may be stayed by the Environmental Appeals Board pending final determination by it pursuant to this section upon the filing of a notice of appeal which satisfies the requirements of paragraph (b) of this section or upon initiation by the Environmental Appeals Board of review of any determination in the absence of such notice of appeal.

(d) Within 20 days following the filing of a notice of appeal in accordance with this section, any party to the adjudicatory hearing may file a written memorandum, no more than 40 pages in length, in response thereto.

(e) Within 45 days following the filing of a notice of appeal in accordance with this section, the Environmental Appeals Board shall render its final determination with respect to all issues raised in the appeal to the Environmental Appeals Board and shall affirm, reverse, or modify the previous determination and briefly state the basis for its determination.

(f) In accordance with 5 U.S.C. section 704, the filing of an appeal to the Environmental Appeals Board pursuant to this section shall be a prerequisite to judicial review of any determination to issue or impose conditions upon any permit, or to modify, revoke or suspend any permit, or to take any other enforcement action, under this subchapter H.

[42 FR 2471, Jan. 11, 1977, as amended at 57 FR 5346, Feb. 13, 1992]

### § 222.13 Computation of time.

In computing any period of time prescribed or allowed in this part, except unless otherwise provided, the day on which the designated period of time begins to run shall not be included. The last day of the period so computed is to be included unless it is a Saturday, Sunday, or a legal holiday in which the Environmental Protection Agency is not open for business, in which event the period runs until the end of the next day which is not a Saturday, Sunday, or legal holiday. Intermediate Saturdays, Sundays and legal holidays shall be excluded from the computation when the period of time prescribed or allowed is seven days or less.

# PART 223—CONTENTS OF PERMITS; REVISION, REVOCATION OR LIMITATION OF OCEAN DUMPING PERMITS UNDER SECTION 104(d) OF THE ACT

## Subpart A—Contents of Ocean Dumping Permits Issued Under Section 102 of the Act

Sec.
223.1 Contents of special, interim, emergency, general and research permits; posting requirements.

## Subpart B—Procedures for Revision, Revocation or Limitation of Ocean Dumping Permits Under Section 104(d) of the Act

223.2 Scope of these rules.
223.3 Preliminary determination; notice.
223.4 Request for, scheduling and conduct of public hearing; determination.
223.5 Request for, scheduling and conduct of adjudicatory hearing; determination.

AUTHORITY: Secs. 102, 104, 107, 108, Marine Protection Research, and Sanctuaries Act of 1972, as amended (33 U.S.C. 1412, 1414, 1417, 1418)

SOURCE: 42 FR 60702, Nov. 28, 1977, unless otherwise noted.

## Subpart A—Contents of Ocean Dumping Permits Issued Under Section 102 of the Act

### §223.1 Contents of special, interim, emergency, general and research permits; posting requirements.

(a) All special, interim, emergency and research permits shall be displayed on the vessel engaged in dumping and shall include the following:

(1) Name of permittee;

(2) Means of conveyance and methods and procedures for release of the materials to be dumped;

(3) The port through or from which such material will be transported for dumping;

(4) A description of relevant physical and chemical properties of the materials to be dumped;

(5) The quantity of the material to be dumped expressed in tons;

(6) The disposal site;

(7) The times at which the permitted dumping may occur and the effective date and expiration date of the permit;

(8) Special provisions which, after consultation with the Coast Guard, are deemed necessary for monitoring or surveillance of the transportation or dumping;

(9) Such monitoring relevant to the assessment of the impact of permitted dumping activities on the marine environment at the disposal site as the Administrator or Regional Administrator, as the case may be, determine to be necessary or appropriate; and

(10) Any other terms and conditions determined by the Administrator, or Regional Administrator, as the case may be, to be necessary or appropriate, including, without limitation, release procedures and requirements for the continued investigation or development of alternatives to ocean dumping.

(b) General permits shall contain such terms and conditions as the Administrator deems necessary or appropriate.

(c) Interim permits shall, in addition to the information required or permitted to be included in the permit pursuant to paragraph (a) of this section, include terms and conditions which satisfy the requirements of §§220.3(d) and 227.8.

## Subpart B—Procedures for Revision, Revocation or Limitation of Ocean Dumping Permits Under Section 104(d) of the Act

### §223.2 Scope of these rules.

(a) These rules of practice shall govern all proceedings under section 104(d) of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended (33 U.S.C. 1414(d)), to revise, revoke or limit the terms and conditions of any permit issued pursuant to section 102 of the Act. Section 104(d) provides that ''the Administrator * * * may limit or deny the issuance of permits, or he may alter or revoke partially or entirely the terms of permits issued by him under this title, for the transportation for dumping, or for the dumping, or both of specified materials or classes of materials, where he finds that such

materials cannot be dumped consistently with the criteria and other factors required to be applied in evaluating the permit application.''

(b) In the absence of specific provisions in these rules, and where appropriate, questions arising at any stage of the proceedings shall be resolved at the discretion of the Presiding Officer, the Regional Administrator, or the Administrator, as appropriate.

### § 223.3 Preliminary determination; notice.

(a) *General.* Any general, special, emergency, interim or research permit issued pursuant to section 102 of the Act shall be subject to revision, revocation or limitation, in whole or in part, as the result of a determination by the Administrator or Regional Administrator that:

(1) The cumulative impact of the permittee's dumping activities or the aggregate impact of all dumping activities at the dump site designated in the permit should be categorized as Impact Category I, as defined in § 228.10(c)(1) of this subchapter; or

(2) There has been a change in circumstances relating to the management of the disposal site designated in the permit; or

(3) The dumping authorized by the permit would violate applicable water quality standards; or

(4) The dumping authorized by the permit can no longer be carried out consistent with the criteria set forth in parts 227 and 228.

(b) *Preliminary determination.* Whenever any person authorized by the Administrator or Regional Administrator to (1) periodically review permits pursuant to section 104(d) of the Act or (2) otherwise assess the need for revision, revocation or limitation of a permit makes any of the determinations listed in paragraph (a) of this section with respect to a permit issued pursuant to section 102 of the Act, and additionally determines that revision, revocation or limitation of such permit is warranted, the Administrator or Regional Administrator, as the case may be, shall provide notification of such proposed revision, revocation or limitation to the permittee named in the permit, if any, the public, and any cognizant Federal/State agencies pursuant to paragraph (c) of this section.

(c) *Form of notification.* Notice of any proposed revision, revocation or limitation of a permit shall be sent to the permittee by certified mail, return receipt requested, and shall be published and otherwise disseminated in the manner described in § 222.3 (b) through (h).

(d) *Contents of notice.* The notice of any proposed revision, revocation or limitation of a permit issued pursuant to paragraph (b) of this section shall include, in addition to any other materials, the following:

(1) A brief description of the contents of the permit, as set forth in § 223.1;

(2) A description of the proposed revision, revocation, or limitation;

(3) A statement of the reason for such proposed revision, revocation, or limitation; and

(4) A statement that within thirty (30) days of the date of dissemination of the notice, any person may request a public hearing on the proposed revision, revocation or limitation.

### § 223.4 Request for, scheduling and conduct of public hearing; determination.

(a) *Request for hearing.* Within thirty (30) days of the date of the dissemination of any notice required by § 223.2(b), any person may request the Administrator or Regional Administrator, as appropriate, to hold a public hearing on the proposed revision, revocation or limitation by submitting a written request containing the following:

(1) Identification of the person requesting the hearing and his interest in the proceeding;

(2) A statement of any objections to the proposed revision, revocation or limitation or to any facts or reasons identified as supporting such revision, revocation or limitation; and

(3) A statement of the issues which such person proposes to raise for consideration at such hearing.

(b) *Grant or denial of hearing; notification.* Whenever (1) a written request satisfying the requirements of paragraph (a) of this section has been received, and the Administrator or Regional Administrator, as appropriate, determines that such request presents

genuine issues, or (2) the Administrator or Regional Administrator, as the case may be, determines in his discretion that a public hearing is necessary or appropriate, the Administrator or Regional Administrator, as the case may be, will set a time and place for a public hearing in accordance with paragraph (c) of this section and will give notice of such hearing by publication in accordance with § 223.3(c). In the event the Administrator or the Regional Administrator, as the case may be, determines that a request filed pursuant to paragraph (a) of this section does not comply with the requirements of paragraph (a) or that such request does not present genuine issues, he shall advise, in writing, the person requesting the hearing of his determination.

(c) *Time and place of hearing.* Any hearing authorized pursuant to this Section by the Administrator or Regional Administrator, as the case may be, shall be held in the city in which the Environmental Protection Agency Regional Office which issued the permit is located, whenever practicable, and shall be set for the earliest practicable date, but in no event less than thirty (30) days after the receipt of an appropriate request for a hearing or a determination by the Administrator or the Regional Administrator, as the case may be, to hold such a hearing without such a request.

(d) *Presiding Officer.* Any hearing convened pursuant to this part shall be conducted by a Presiding Officer, who shall be either a Regional Judicial Officer or a person having the qualifications of the members of the Environmental Appeals Board (described in 40 CFR 1.25(e)) if assigned by the Administrator or the qualifications of a Regional Judicial Officer if assigned by the Regional Administrator, as appropriate. Such person shall be an attorney who is a permanent or temporary employee of the Agency, who is not employed by the Region's or Headquarter's Water Programs Division, Surveillance and Analysis Division, or Enforcement Division, and who has had no connection with the preparation or presentation of evidence for any hearing in which he participates as Judicial Officer.

(e) *Conduct of the public hearing.* The Presiding Officer shall be responsible for the expeditious conduct of the hearing. The hearing shall be an informal public hearing, not an adversary proceeding, and shall be conducted so as to allow the presentation of public comments. When the Presiding Officer determines that it is necessary or appropriate, he shall cause a suitable record, which may include a verbatim transcript, of the proceedings to be made. Any person may appear at a public hearing convened pursuant to this section whether or not he requested the hearing, and may be represented by counsel or any other authorized representative. The Presiding Officer is authorized to set forth reasonable restrictions on the nature or amount of documentary material or testimony presented at a public hearing, giving due regard to the relevancy of any such information, and to the avoidance of undue repetitiveness of information presented.

(f) *Recommendations of Presiding Officer.* Within 30 days following the adjournment of a public hearing convened pursuant to this section or within such additional period as the Administrator or the Regional Administrator, as the case may be, may grant to the Presiding Officer for good cause shown, and after full consideration of the comments received at the hearing, the Presiding Officer will prepare and forward to the Administrator or to the Regional Administrator, as the case may be, written recommendations relating to the revision, revocation or limitation of the permit and the record of the hearing, if any. Such recommendations shall contain a brief statement of the basis therefor, including a description of evidence relied upon (1) to support any finding made pursuant to § 223.3(a); (2) to justify any proposed revision, revocation or limitation of the permit; and (3) to justify any proposed revision, revocation or limitation which differs from that set forth in the notice issued pursuant to § 223.3(b). Copies of the Presiding Officer's recommendations shall be provided to any interested person on request, without charge. Copies of the record will be provided in accordance with 40 CFR part 2.

(g) *Determination of the Administrator or Regional Administrator.* Upon receipt of the Presiding Officer's recommendations or, where no hearing has been held, upon termination of the thirty (30)-day period for requesting a hearing provided in paragraph (a) of this section, the Administrator or the Regional Administrator, as the case may be, shall make a determination with respect to the modification, revocation or suspension of the permit. Such determination shall include a description of the permit revision, revocation or limitation, the basis therefor, and the effective date. A copy of such determination shall be mailed to the permittee and each person who registered his attendance at the hearing by providing his name and mailing address.

[42 FR 60702, Nov. 28, 1977, as amended at 57 FR 5346, Feb. 13, 1992]

### § 223.5 Request for, scheduling and conduct of adjudicatory hearing; determination.

Within ten (10) days following the receipt of the Administrator's or Regional Administrator's determination issued pursuant to § 223.4(g), any person who participated in the public hearing held pursuant to § 223.4 may request that an adjudicatory hearing be held for the purpose of reviewing such determination or any part thereof. Such request shall be submitted and disposed of, and any adjudicatory hearing convened shall be conducted in accordance with the procedures set forth in §§ 222.10 (a), (b), (d), and (e) and 222.11.

## PART 224—RECORDS AND REPORTS REQUIRED OF OCEAN DUMPING PERMITTEES UNDER SECTION 102 OF THE ACT

Sec.
224.1 Records of permittees.
224.2 Reports.

AUTHORITY: 33 U.S.C. 1412 and 1418.

### § 224.1 Records of permittees.

Each permittee named in a special, interim, emergency or research permit under section 102 of the Act and each person availing himself of the privilege conferred by a general permit, shall maintain complete records of the following information, which will be available for inspection by the Administrator, Regional Administrator, the Commandant of the U.S. Coast Guard, or their respective designees:

(a) The physical and chemical characteristics of the material dumped pursuant to the permit;

(b) The precise times and locations of dumping;

(c) Any other information required as a condition of a permit by the Administrator or the Regional Administrator, as the case may be.

[42 FR 2474, Jan. 11, 1977]

### § 224.2 Reports.

(a) *Periodic reports.* Information required to be recorded pursuant to § 224.1 shall be reported to the Administrator or the Regional Administrator, as the case may be, for the periods indicated within 30 days of the expiration of such periods:

(1) For each six-month period, if any, following the effective date of the permit;

(2) For any other period of less than six months ending on the expiration date of the permit; and

(3) As otherwise required in the conditions of the permit.

(b) *Reports of emergency dumping.* If material is dumped without a permit pursuant to paragraph (c)(4) of § 220.1, the owner or operator of the vessel or aircraft from which such dumping occurs shall as soon as feasible inform the Administrator, Regional Administrator, or the nearest Coast Guard district of the incident by radio, telephone, or telegraph and shall within 10 days file a written report with the Administrator or Regional Administrator containing the information required under § 224.1 and a complete description of the circumstances under which the dumping occurred. Such description shall explain how human life at sea was in danger and how the emergency dumping reduced that danger. If the material dumped included containers, the vessel owner or operator shall immediately request the U.S. Coast Guard to publish in the local Notice to Mariners the dumping location, the type of containers, and whether the contents are toxic or explosive. Notification shall also be given to the Food

and Drug Administration, Shellfish Sanitation Branch, Washington, DC 20204, as soon as possible.

[42 FR 2474, Jan. 11, 1977]

## PART 225—CORPS OF ENGINEERS DREDGED MATERIAL PERMITS

Sec.
225.1 General.
225.2 Review of Dredged Material Permits.
225.3 Procedure for invoking economic impact.
225.4 Waiver by Administrator.

AUTHORITY: 33 U.S.C. 1412 and 1418.

SOURCE: 42 FR 2475, Jan. 11, 1977, unless otherwise noted.

### §225.1 General.

Applications and authorizations for Dredged Material Permits under section 103 of the Act for the transportation of dredged material for the purpose of dumping it in ocean waters will be evaluated by the U.S. Army Corps of Engineers in accordance with the criteria set forth in part 227 and processed in accordance with 33 CFR 209.120 with special attention to §209.120(g)(17) and 33 CFR 209.145.

### §225.2 Review of Dredged Material Permits.

(a) The District Engineer shall send a copy of the public notice to the appropriate Regional Administrator, and set forth in writing all of the following information:

(1) The location of the proposed disposal site and its physical boundaries;

(2) A statement as to whether the site has been designated for use by the Administrator pursuant to section 102(c) of the Act;

(3) If the proposed disposal site has not been designated by the Administrator, a statement of the basis for the proposed determination why no previously designated site is feasible and a description of the characteristics of the proposed disposal site necessary for its designation pursuant to part 228 of this subchapter H;

(4) The known historical uses of the proposed disposal site;

(5) Existence and documented effects of other authorized dumpings that have been made in the dumping area (e.g., heavy metal background reading and organic carbon content);

(6) An estimate of the length of time during which disposal will continue at the proposed site;

(7) Characteristics and composition of the dredged material; and

(8) A statement concerning a preliminary determination of the need for and/or availability of an environmental impact statement.

(b) The Regional Administrator will within 15 days of the date the public notice and other information required to be submitted by paragraph (a) of §225.2 are received by him, review the information submitted and request from the District Engineer any additional information he deems necessary or appropriate to evaluate the proposed dumping.

(c) Using the information submitted by the District Engineer, and any other information available to him, the Regional Administrator will within 15 days after receipt of all requested information, make an independent evaluation of the proposed dumping in accordance with the criteria and respond to the District Engineer pursuant to paragraph (d) or (e) of this section. The Regional Administrator may request an extension of this 15 day period to 30 days from the District Engineer.

(d) When the Regional Administrator determines that the proposed dumping will comply with the criteria, he will so inform the District Engineer in writing.

(e) When the Regional Administrator determines that the proposed dumping will not comply with the criteria he shall so inform the District Engineer in writing. In such cases, no Dredged Material Permit for such dumping shall be issued unless and until the provisions of §225.3 are followed and the Administrator grants a waiver of the criteria pursuant to §225.4.

### §225.3 Procedure for invoking economic impact.

(a) When a District Engineer's determination to issue a Dredged Material Permit for the dumping of dredged material into ocean waters has been rejected by a Regional Administrator upon application of the Criteria, the District Engineer may determine

whether, under section 103(d) of the Act, there is an economically feasible alternative method or site available other than the proposed dumping in ocean waters. If the District Engineer makes any such preliminary determination that there is no economically feasible alternative method or site available, he shall so advise the Regional Administrator setting forth his reasons for such determination and shall submit a report of such determination to the Chief of Engineers in accordance with 33 CFR 209.120 and 209.145.

(b) If the decision of the Chief of Engineers is that ocean dumping at the designated site is required because of the unavailability of feasible alternatives, he shall so certify and request that the Secretary of the Army seek a waiver from the Administrator of the Criteria or of the critical site designation in accordance with § 225.4.

### § 225.4 Waiver by Administrator.

The Administrator shall grant the requested waiver unless within 30 days of his receipt of the notice, certificate and request in accordance with paragraph (b) of § 225.3 he determines in accordance with this section that the proposed dumping will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. Notice of the Administrator's final determination under this section shall be given to the Secretary of the Army.

## PART 227—CRITERIA FOR THE EVALUATION OF PERMIT APPLICATIONS FOR OCEAN DUMPING OF MATERIALS

### Subpart A—General

Sec.
227.1 Applicability.
227.2 Materials which satisfy the environmental impact criteria of subpart B.
227.3 Materials which do not satisfy the environmental impact criteria set forth in subpart B.

### Subpart B—Environmental Impact

227.4 Criteria for evaluating environmental impact.
227.5 Prohibited materials.
227.6 Constituents prohibited as other than trace contaminants.
227.7 Limits established for specific wastes or waste constituents.
227.8 Limitations on the disposal rates of toxic wastes.
227.9 Limitations on quantities of waste materials.
227.10 Hazards to fishing, navigation, shorelines or beaches.
227.11 Containerized wastes.
227.12 Insoluble wastes.
227.13 Dredged materials.

### Subpart C—Need for Ocean Dumping

227.14 Criteria for evaluating the need for ocean dumping and alternatives to ocean dumping.
227.15 Factors considered.
227.16 Basis for determination of need for ocean dumping.

### Subpart D—Impact of the Proposed Dumping on Esthetic, Recreational and Economic Values

227.17 Basis for determination.
227.18 Factors considered.
227.19 Assessment of impact.

### Subpart E—Impact of the Proposed Dumping on Other Uses of the Ocean

227.20 Basis for determination.
227.21 Uses considered.
227.22 Assessment of impact.

### Subpart F—Special Requirements for Interim Permits Under Section 102 of the Act

227.23 General requirement.
227.24 Contents of environmental assessment.
227.25 Contents of plans.
227.26 Implementation of plans.

### Subpart G—Definitions

227.27 Limiting permissible concentration (LPC).
227.28 Release zone.
227.29 Initial mixing.
227.30 High-level radioactive waste.
227.31 Applicable marine water quality criteria.
227.32 Liquid, suspended particulate, and solid phases of a material.

AUTHORITY: 33 U.S.C. 1412 and 1418.

SOURCE: 42 FR 2476, Jan. 11, 1977, unless otherwise noted.

## Subpart A—General

### §227.1 Applicability.

(a) Section 102 of the Act requires that criteria for the issuance of ocean disposal permits be promulgated after consideration of the environmental effect of the proposed dumping operation, the need for ocean dumping, alternatives to ocean dumping, and the effect of the proposed action on esthetic, recreational and economic values and on other uses of the ocean. These parts 227 and 228 of this subchapter H together constitute the criteria established pursuant to section 102 of the Act. The decision of the Administrator, Regional Administrator or the District Engineer, as the case may be, to issue or deny a permit and to impose specific conditions on any permit issued will be based on an evaluation of the permit application pursuant to the criteria set forth in this part 227 and upon the requirements for disposal site management pursuant to the criteria set forth in part 228 of this subchapter H.

(b) With respect to the criteria to be used in evaluating disposal of dredged materials, this section and subparts C, D, E, and G apply in their entirety. To determine whether the proposed dumping of dredged material complies with subpart B, only §§227.4, 227.5, 227.6, 227.9, 227.10 and 227.13 apply. An applicant for a permit to dump dredged material must comply with all of subparts C, D, E, G and applicable sections of B, to be deemed to have met the EPA criteria for dredged material dumping promulgated pursuant to section 102(a) of the Act. If, in any case, the Chief of Engineers finds that, in the disposition of dredged material, there is no economically feasible method or site available other than a dumping site, the utilization of which would result in noncompliance with the criteria established pursuant to subpart B relating to the effects of dumping or with the restrictions established pursuant to section 102(c) of the Act relating to critical areas, he shall so certify and request that the Secretary of the Army seek a waiver from the Administrator pursuant to part 225.

(c) The Criteria of this part 227 are established pursuant to section 102 of the Act and apply to the evaluation of proposed dumping of materials under title I of the Act. The Criteria of this part 227 deal with the evaluation of proposed dumping of materials on a case-by-case basis from information supplied by the applicant or otherwise available to EPA or the Corps of Engineers concerning the characteristics of the waste and other considerations relating to the proposed dumping.

(d) After consideration of the provisions of §§227.28 and 227.29, no permit will be issued when the dumping would result in a violation of applicable water quality standards.

### §227.2 Materials which satisfy the environmental impact criteria of subpart B.

(a) If the applicant satisfactorily demonstrates that the material proposed for ocean dumping satisfies the environmental impact criteria set forth in subpart B, a permit for ocean dumping will be issued unless:

(1) There is no need for the dumping, and alternative means of disposal are available, as determined in accordance with the criteria set forth in subpart C; or

(2) There are unacceptable adverse effects on esthetic, recreational or economic values as determined in accordance with the criteria set forth in subpart D; or

(3) There are unacceptable adverse effects on other uses of the ocean as determined in accordance with the criteria set forth in subpart E.

(b) If the material proposed for ocean dumping satisfies the environmental impact criteria set forth in subpart B, but the Administrator or the Regional Administrator, as the case may be, determines that any one of the considerations set forth in paragraph (a)(1), (2) or (3) of this section applies, he will deny the permit application; provided however, that he may issue an interim permit for ocean dumping pursuant to paragraph (d) of §220.3 and subpart F of this part 227 when he determines that:

(1) The material proposed for ocean dumping does not contain any of the

materials listed in § 227.5 or listed in § 227.6, except as trace contaminants; and

(2) In accordance with subpart C there is a need to ocean dump the material and no alternatives are available to such dumping; and

(3) The need for the dumping and the unavailability of alternatives, as determined in accordance with subpart C, are of greater significance to the public interest than the potential for adverse effect on esthetic, recreational or economic values, or on other uses of the ocean, as determined in accordance with subparts D and E, respectively.

### § 227.3 Materials which do not satisfy the environmental impact criteria set forth in subpart B.

If the material proposed for ocean dumping does not satisfy the environmental impact criteria of subpart B, the Administrator or the Regional Administrator, as the case may be, will deny the permit application; provided however, that he may issue an interim permit pursuant to paragraph (d) of § 220.3 and subpart F of this part 227 when he determines that:

(a) The material proposed for dumping does not contain any of the materials listed in § 227.6 except as trace contaminants, or any of the materials listed in § 227.5;

(b) In accordance with subpart C there is a need to ocean dump the material; and

(c) Any one of the following factors is of greater significance to the public interest than the potential for adverse impact on the marine environment, as determined in accordance with Subpart B:

(1) The need for the dumping, as determined in accordance with subpart C; or

(2) The adverse effects of denial of the permit on recreational or economic values as determined in accordance with subpart D; or

(3) The adverse effects of denial of the permit on other uses of the ocean, as determined in accordance with subpart E.

## Subpart B—Environmental Impact

### § 227.4 Criteria for evaluating environmental impact.

This subpart B sets specific environmental impact prohibitions, limits, and conditions for the dumping of materials into ocean waters. If the applicable prohibitions, limits, and conditions are satisfied, it is the determination of EPA that the proposed disposal will not unduly degrade or endanger the marine environment and that the disposal will present:

(a) No unacceptable adverse effects on human health and no significant damage to the resources of the marine environment;

(b) No unacceptable adverse effect on the marine ecosystem;

(c) No unacceptable adverse persistent or permanent effects due to the dumping of the particular volumes or concentrations of these materials; and

(d) No unacceptable adverse effect on the ocean for other uses as a result of direct environmental impact.

### § 227.5 Prohibited materials.

The ocean dumping of the following materials will not be approved by EPA or the Corps of Engineers under any circumstances:

(a) High-level radioactive wastes as defined in § 227.30;

(b) Materials in whatever form (including without limitation, solids, liquids, semi-liquids, gases or organisms) produced or used for radiological, chemical or biological warfare;

(c) Materials insufficiently described by the applicant in terms of their compositions and properties to permit application of the environmental impact criteria of this subpart B;

(d) Persistent inert synthetic or natural materials which may float or remain in suspension in the ocean in such a manner that they may interfere materially with fishing, navigation, or other legitimate uses of the ocean.

### § 227.6 Constituents prohibited as other than trace contaminants.

(a) Subject to the exclusions of paragraphs (f), (g) and (h) of this section, the ocean dumping, or transportation for dumping, of materials containing

the following constituents as other than trace contaminants will not be approved on other than an emergency basis:

(1) Organohalogen compounds;

(2) Mercury and mercury compounds;

(3) Cadmium and cadmium compounds;

(4) Oil of any kind or in any form, including but not limited to petroleum, oil sludge, oil refuse, crude oil, fuel oil, heavy diesel oil, lubricating oils, hydraulic fluids, and any mixtures containing these, transported for the purpose of dumping insofar as these are not regulated under the FWPCA;

(5) Known carcinogens, mutagens, or teratogens or materials suspected to be carcinogens, mutagens, or teratogens by responsible scientific opinion.

(b) These constituents will be considered to be present as trace contaminants only when they are present in materials otherwise acceptable for ocean dumping in such forms and amounts in liquid, suspended particulate, and solid phases that the dumping of the materials will not cause significant undesirable effects, including the possibility of danger associated with their bioaccumulation in marine organisms.

(c) The potential for significant undesirable effects due to the presence of these constituents shall be determined by application of results of bioassays on liquid, suspended particulate, and solid phases of wastes according to procedures acceptable to EPA, and for dredged material, acceptable to EPA and the Corps of Engineers. Materials shall be deemed environmentally acceptable for ocean dumping only when the following conditions are met:

(1) The liquid phase does not contain any of these constituents in concentrations which will exceed applicable marine water quality criteria after allowance for initial mixing; provided that mercury concentrations in the disposal site, after allowance for initial mixing, may exceed the average normal ambient concentrations of mercury in ocean waters at or near the dumping site which would be present in the absence of dumping, by not more than 50 percent; and

(2) Bioassay results on the suspended particulate phase of the waste do not indicate occurrence of significant mortality or significant adverse sublethal effects due to the dumping of wastes containing the constituents listed in paragraph (a) of this section. These bioassays shall be conducted with appropriate sensitive marine organisms as defined in §227.27(c) using procedures for suspended particulate phase bioassays approved by EPA, or, for dredged material, approved by EPA and the Corps of Engineers. Procedures approved for bioassays under this section will require exposure of organisms for a sufficient period of time and under appropriate conditions to provide reasonable assurance, based on consideration of the statistical significance of effects at the 95 percent confidence level, that, when the materials are dumped, no significant undesirable effects will occur due to chronic toxicity of the constituents listed in paragraph (a) of this section; and

(3) Bioassay results on the solid phase of the wastes do not indicate occurrence of significant mortality or significant adverse sublethal effects due to the dumping of wastes containing the constituents listed in paragraph (a) of this section. These bioassays shall be conducted with appropriate sensitive benthic marine organisms using benthic bioassay procedures approved by EPA, or, for dredged material, approved by EPA and the Corps of Engineers. Procedures approved for bioassays under this section will require exposure of organisms for a sufficient period of time to provide reasonable assurance, based on considerations of statistical significance of effects at the 95 percent confidence level, that, when the materials are dumped, no significant undesirable effects will occur due either to chronic toxicity or to bioaccumulation of the constituents listed in paragraph (a) of this section; and

(4) For persistent organohalogens not included in the applicable marine water quality criteria, bioassay results on the liquid phase of the waste show that such compounds are not present in concentrations large enough to cause significant undesirable effects due either to chronic toxicity or to bioaccumulation in marine organisms after allowance for initial mixing.

(d) When the Administrator, Regional Administrator or District Engineer, as the case may be, has reasonable cause to believe that a material proposed for ocean dumping contains compounds identified as carcinogens, mutagens, or teratogens for which criteria have not been included in the applicable marine water quality criteria, he may require special studies to be done prior to issuance of a permit to determine the impact of disposal on human health and/or marine ecosystems. Such studies must provide information comparable to that required under paragraph (c)(3) of this section.

(e) The criteria stated in paragraphs (c)(2) and (3) of this section will become mandatory as soon as announcement of the availability of acceptable procedures is made in the FEDERAL REGISTER. At that time the interim criteria contained in paragraph (e) of this section shall no longer be applicable. As interim measures the criteria of paragraphs (c)(2) and (3) of this section may be applied on a case-by-case basis where interim guidance on acceptable bioassay procedures is provided by the Regional Administrator or, in the case of dredged material, by the District Engineer; or, in the absence of such guidance, permits may be issued for the dumping of any material only when the following conditions are met, except under an emergency permit:

(1) Mercury and its compounds are present in any solid phase of a material in concentrations less than 0.75 mg/kg, or less than 50 percent greater than the average total mercury content of natural sediments of similar lithologic characteristics as those at the disposal site; and

(2) Cadmium and its compounds are present in any solid phase of a material in concentrations less than 0.6 mg/kg, or less than 50 percent greater than the average total cadmium content of natural sediments of similar lithologic characteristics as those at the disposal site; and

(3) The total concentration of organohalogen constituents in the waste as transported for dumping is less than a concentration of such constituents known to be toxic to marine organisms. In calculating the concentration of organohalogens, the applicant shall consider that these constituents are all biologically available. The determination of the toxicity value will be based on existing scientific data or developed by the use of bioassays conducted in accordance with approved EPA procedures; and

(4) The total amounts of oils and greases as identified in paragraph (a)(4) of this section do not produce a visible surface sheen in an undisturbed water sample when added at a ratio of one part waste material to 100 parts of water.

(f) The prohibitions and limitations of this section do not apply to the constituents identified in paragraph (a) of this section when the applicant can demonstrate that such constituents are (1) present in the material only as chemical compounds or forms (e.g., inert insoluble solid materials) non-toxic to marine life and non-bioaccumulative in the marine environment upon disposal and thereafter, or (2) present in the material only as chemical compounds or forms which, at the time of dumping and thereafter, will be rapidly rendered non-toxic to marine life and non-bioaccumulative in the marine environment by chemical or biological degradation in the sea; provided they will not make edible marine organisms unpalatable; or will not endanger human health or that of domestic animals, fish, shellfish, or wildlife.

(g) The prohibitions and limitations of this section do not apply to the constituents identified in paragraph (a) of this section for the granting of research permits if the substances are rapidly rendered harmless by physical, chemical or biological processes in the sea; provided they will not make edible marine organisms unpalatable and will not endanger human health or that of domestic animals.

(h) The prohibitions and limitations of this section do not apply to the constituents identified in paragraph (a) of this section for the granting of permits for the transport of these substances for the purpose of incineration at sea if the applicant can demonstrate that the stack emissions consist of substances which are rapidly rendered harmless by physical, chemical or biological processes in the sea. Incinerator operations

shall comply with requirements which will be established on a case-by-case basis.

[42 FR 2476, Jan. 11, 1977; 43 FR 1071, Jan. 6, 1978, as amended at 59 FR 26572, May 20, 1994; 59 FR 52652, Oct. 18, 1994]

### §227.7 Limits established for specific wastes or waste constituents.

Materials containing the following constituents must meet the additional limitations specified in this section to be deemed acceptable for ocean dumping:

(a) Liquid waste constituents immiscible with or slightly soluble in seawater, such as benzene, xylene, carbon disulfide and toluene, may be dumped only when they are present in the waste in concentrations below their solubility limits in seawater. This provision does not apply to materials which may interact with ocean water to form insoluble materials;

(b) Radioactive materials, other than those prohibited by §227.5, must be contained in accordance with the provisions of §227.11 to prevent their direct dispersion or dilution in ocean waters;

(c) Wastes containing living organisms may not be dumped if the organisms present would endanger human health or that of domestic animals, fish, shellfish and wildlife by:

(1) Extending the range of biological pests, viruses, pathogenic microorganisms or other agents capable of infesting, infecting or extensively and permanently altering the normal populations of organisms;

(2) Degrading uninfected areas; or

(3) Introducing viable species not indigenous to an area.

(d) In the dumping of wastes of highly acidic or alkaline nature into the ocean, consideration shall be given to:

(1) The effects of any change in acidity or alkalinity of the water at the disposal site; and

(2) The potential for synergistic effects or for the formation of toxic compounds at or near the disposal site. Allowance may be made in the permit conditions for the capability of ocean waters to neutralize acid or alkaline wastes; provided, however, that dumping conditions must be such that the average total alkalinity or total acidity of the ocean water after allowance for initial mixing, as defined in §227.29, may be changed, based on stoichiometric calculations, by no more than 10 percent during all dumping operations at a site to neutralize acid or alkaline wastes.

(e) Wastes containing biodegradable constituents, or constituents which consume oxygen in any fashion, may be dumped in the ocean only under conditions in which the dissolved oxygen after allowance for initial mixing, as defined in §227.29, will not be depressed by more than 25 percent below the normally anticipated ambient conditions in the disposal area at the time of dumping.

### §227.8 Limitations on the disposal rates of toxic wastes.

No wastes will be deemed acceptable for ocean dumping unless such wastes can be dumped so as not to exceed the limiting permissible concentration as defined in §227.27; *Provided,* That this §227.8 does not apply to those wastes for which specific criteria are established in §227.11 or §227.12. Total quantities of wastes dumped at a site may be limited as described in §228.8.

### §227.9 Limitations on quantities of waste materials.

Substances which may damage the ocean environment due to the quantities in which they are dumped, or which may seriously reduce amenities, may be dumped only when the quantities to be dumped at a single time and place are controlled to prevent long-term damage to the environment or to amenities.

### §227.10 Hazards to fishing, navigation, shorelines or beaches.

(a) Wastes which may present a serious obstacle to fishing or navigation may be dumped only at disposal sites and under conditions which will insure no unacceptable interference with fishing or navigation.

(b) Wastes which may present a hazard to shorelines or beaches may be dumped only at sites and under conditions which will insure no unacceptable danger to shorelines or beaches.

### § 227.11 Containerized wastes.

(a) Wastes containerized solely for transport to the dumping site and expected to rupture or leak on impact or shortly thereafter must meet the appropriate requirements of §§ 227.6, 227.7, 227.8, 227.9, and 227.10.

(b) Other containerized wastes will be approved for dumping only under the following conditions:

(1) The materials to be disposed of decay, decompose or radiodecay to environmentally innocuous materials within the life expectancy of the containers and/or their inert matrix; and

(2) Materials to be dumped are present in such quantities and are of such nature that only short-term localized adverse effects will occur should the containers rupture at any time; and

(3) Containers are dumped at depths and locations where they will cause no threat to navigation, fishing, shorelines, or beaches.

### § 227.12 Insoluble wastes.

(a) Solid wastes consisting of inert natural minerals or materials compatible with the ocean environment may be generally approved for ocean dumping provided they are insoluble above the applicable trace or limiting permissible concentrations and are rapidly and completely settleable, and they are of a particle size and density that they would be deposited or rapidly dispersed without damage to benthic, demersal, or pelagic biota.

(b) Persistent inert synthetic or natural materials which may float or remain in suspension in the ocean as prohibited in paragraph (d) of § 227.5 may be dumped in the ocean only when they have been processed in such a fashion that they will sink to the bottom and remain in place.

### § 227.13 Dredged materials.

(a) Dredged materials are bottom sediments or materials that have been dredged or excavated from the navigable waters of the United States, and their disposal into ocean waters is regulated by the U.S. Army Corps of Engineers using the criteria of applicable sections of parts 227 and 228. Dredged material consists primarily of natural sediments or materials which may be contaminated by municipal or industrial wastes or by runoff from terrestrial sources such as agricultural lands.

(b) Dredged material which meets the criteria set forth in the following paragraphs (b)(1), (2), or (3) of this section is environmentally acceptable for ocean dumping without further testing under this section:

(1) Dredged material is composed predominantly of sand, gravel, rock, or any other naturally occurring bottom material with particle sizes larger than silt, and the material is found in areas of high current or wave energy such as streams with large bed loads or coastal areas with shifting bars and channels; or

(2) Dredged material is for beach nourishment or restoration and is composed predominantly of sand, gravel or shell with particle sizes compatible with material on the receiving beaches; or

(3) *When:* (i) The material proposed for dumping is substantially the same as the substrate at the proposed disposal site; and

(ii) The site from which the material proposed for dumping is to be taken is far removed from known existing and historical sources of pollution so as to provide reasonable assurance that such material has not been contaminated by such pollution.

(c) When dredged material proposed for ocean dumping does not meet the criteria of paragraph (b) of this section, further testing of the liquid, suspended particulate, and solid phases, as defined in § 227.32, is required. Based on the results of such testing, dredged material can be considered to be environmentally acceptable for ocean dumping only under the following conditions:

(1) The material is in compliance with the requirements of § 227.6; and

(2)(i) All major constituents of the liquid phase are in compliance with the applicable marine water quality criteria after allowance for initial mixing; or

(ii) When the liquid phase contains major constituents not included in the applicable marine water quality criteria, or there is reason to suspect synergistic effects of certain contaminants, bioassays on the liquid phase of

the dredged material show that it can be discharged so as not to exceed the limiting permissible concentration as defined in paragraph (a) of §227.27; and

(3) Bioassays on the suspended particulate and solid phases show that it can be discharged so as not to exceed the limiting permissible concentration as defined in paragraph (b) of §227.27.

(d) For the purposes of paragraph (c)(2) of this section, major constituents to be analyzed in the liquid phase are those deemed critical by the District Engineer, after evaluating and considering any comments received from the Regional Administrator, and considering known sources of discharges in the area.

## Subpart C—Need for Ocean Dumping

### §227.14 Criteria for evaluating the need for ocean dumping and alternatives to ocean dumping.

This subpart C states the basis on which an evaluation will be made of the need for ocean dumping, and alternatives to ocean dumping. The nature of these factors does not permit the promulgation of specific quantitative criteria of each permit application. These factors will therefore be evaluated if applicable for each proposed dumping on an individual basis using the guidelines specified in this subpart C.

### §227.15 Factors considered.

The need for dumping will be determined by evaluation of the following factors:

(a) Degree of treatment useful and feasible for the waste to be dumped, and whether or not the waste material has been or will be treated to this degree before dumping;

(b) Raw materials and manufacturing or other processes resulting in the waste, and whether or not these materials or processes are essential to the provision of the applicant's goods or services, or if other less polluting materials or processes could be used;

(c) The relative environmental risks, impact and cost for ocean dumping as opposed to other feasible alternatives including but not limited to:

(1) Land fill;

(2) Well injection;

(3) Incineration;

(4) Spread of material over open ground;

(5) Recycling of material for reuse;

(6) Additional biological, chemical, or physical treatment of intermediate or final waste streams;

(7) Storage.

(d) Irreversible or irretrievable consequences of the use of alternatives to ocean dumping.

### §227.16 Basis for determination of need for ocean dumping.

(a) A need for ocean dumping will be considered to have been demonstrated when a thorough evaluation of the factors listed in §227.15 has been made, and the Administrator, Regional Administrator or District Engineer, as the case may be, has determined that the following conditions exist where applicable:

(1) There are no practicable improvements which can be made in process technology or in overall waste treatment to reduce the adverse impacts of the waste on the total environment;

(2) There are no practicable alternative locations and methods of disposal or recycling available, including without limitation, storage until treatment facilities are completed, which have less adverse environmental impact or potential risk to other parts of the environment than ocean dumping.

(b) For purposes of paragraph (a) of this section, waste treatment or improvements in processes and alternative methods of disposal are practicable when they are available at reasonable incremental cost and energy expenditures, which need not be competitive with the costs of ocean dumping, taking into account the environmental benefits derived from such activity, including the relative adverse environmental impacts associated with the use of alternatives to ocean dumping.

(c) The duration of permits issued under subchapter H and other terms and conditions imposed in those permits shall be determined after taking into account the factors set forth in this section. Notwithstanding compliance with subparts B, D, and E of this part 227 permittees may, on the basis

of the need for and alternatives to ocean dumping, be required to terminate all ocean dumping by a specified date, to phase out all ocean dumping over a specified period or periods, to continue research and development of alternative methods of disposal and make periodic reports of such research and development in order to provide additional information for periodic review of the need for and alternatives to ocean dumping, or to take such other action as the Administrator, the Regional Administrator, or District Engineer, as the case may be, determines to be necessary or appropriate.

## Subpart D—Impact of the Proposed Dumping on Esthetic, Recreational and Economic Values

### § 227.17 Basis for determination.

(a) The impact of dumping on esthetic, recreational and economic values will be evaluated on an individual basis using the following considerations:

(1) Potential for affecting recreational use and values of ocean waters, inshore waters, beaches, or shorelines;

(2) Potential for affecting the recreational and commercial values of living marine resources.

(b) For all proposed dumping, full consideration will be given to such nonquantifiable aspects of esthetic, recreational and economic impact as:

(1) Responsible public concern for the consequences of the proposed dumping;

(2) Consequences of not authorizing the dumping including without limitation, the impact on esthetic, recreational and economic values with respect to the municipalities and industries involved.

### § 227.18 Factors considered.

The assessment of the potential for impacts on esthetic, recreational and economic values will be based on an evaluation of the appropriate characteristics of the material to be dumped, allowing for conservative rates of dilution, dispersion, and biochemical degradation during movement of the materials from a disposal site to an area of significant recreational or commercial value. The following specific factors will be considered in making such an assessment:

(a) Nature and extent of present and potential recreational and commercial use of areas which might be affected by the proposed dumping;

(b) Existing water quality, and nature and extent of disposal activities, in the areas which might be affected by the proposed dumping;

(c) Applicable water quality standards;

(d) Visible characteristics of the materials (e.g., color, suspended particulates) which result in an unacceptable estetic nuisance in recreational areas;

(e) Presence in the material of pathogenic organisms which may cause a public health hazard either directly or through contamination of fisheries or shellfisheries;

(f) Presence in the material of toxic chemical constituents released in volumes which may affect humans directly;

(g) Presence in the material of chemical constituents which may be bioaccumulated or persistent and may have an adverse effect on humans directly or through food chain interactions;

(h) Presence in the material of any constituents which might significantly affect living marine resources of recreational or commercial value.

### § 227.19 Assessment of impact.

An overall assessment of the proposed dumping and possible alternative methods of disposal or recycling will be made based on the effect on esthetic, recreational and economic values based on the factors set forth in this subpart D, including where applicable, enhancement of these values, and the results of the assessment will be expressed, where possible, on a quantitative basis, such as percentage of a resource lost, reduction in use days of recreational areas, or dollars lost in commercial fishery profits or the profitability of other commercial enterprises.

## Subpart E—Impact of the Proposed Dumping on Other Uses of the Ocean

### §227.20 Basis for determination.

(a) Based on current state of the art, consideration must be given to any possible long-range effects of even the most innocuous substances when dumped in the ocean on a continuing basis. Such a consideration is made in evaluating the relationship of each proposed disposal activity in relationship to its potential for long-range impact on other uses of the ocean.

(b) An evaluation will be made on an individual basis for each proposed dumping of material of the potential for effects on uses of the ocean for purposes other than material disposal. The factors to be considered in this evaluation include those stated in subpart D, but the evaluation of this subpart E will be based on the impact of the proposed dumping on specific uses of the ocean rather than on overall esthetic, recreational and economic values.

### §227.21 Uses considered.

An appraisal will be made of the nature and extent of existing and potential uses of the disposal site itself and of any areas which might reasonably be expected to be affected by the proposed dumping, and a quantitative and qualitative evaluation made, where feasible, of the impact of the proposed dumping on each use. The uses considered shall include, but not be limited to:

(a) Commercial fishing in open ocean areas;

(b) Commercial fishing in coastal areas;

(c) Commercial fishing in estuarine areas;

(d) Recreational fishing in open ocean areas;

(e) Recreational fishing in coastal areas;

(f) Recreational fishing in estuarine areas;

(g) Recreational use of shorelines and beaches;

(h) Commercial navigation;

(i) Recreational navigation;

(j) Actual or anticipated exploitation of living marine resources;

(k) Actual or anticipated exploitation of non-living resources, including without limitation, sand and gravel places and other mineral deposits, oil and gas exploration and development and offshore marine terminal or other structure development; and

(l) Scientific research and study.

### §227.22 Assessment of impact.

The assessment of impact on other uses of the ocean will consider both temporary and long-range effects within the state of the art, but particular emphasis will be placed on any irreversible or irretrievable commitment of resources that would result from the proposed dumping.

## Subpart F—Special Requirements for Interim Permits Under Section 102 of the Act

### §227.23 General requirement.

Each interim permit issued under section 102 of the Act will include a requirement for the development and implementation, as soon as practicable, of a plan which requires, at the discretion of the Administrator or Regional Administrator, as the case may be, either:

(a) Elimination of ocean disposal of the waste, or

(b) Bringing the waste into compliance with all the criteria for acceptable ocean disposal.

### §227.24 Contents of environmental assessment.

A plan developed pursuant to this subpart F must include an environmental assessment of the proposed action, including without limitation:

(a) Description of the proposed action;

(b) A thorough review of the actual need for dumping;

(c) Environmental impact of the proposed action;

(d) Adverse impacts which cannot be avoided should the proposal be implemented;

(e) Alternatives to the proposed action;

(f) Relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity;

(g) Irreversible and irretrievable commitments of resources which would

be involved in the proposed action should it be implemented; and

(h) A discussion of problems and objections raised by other Federal, State and local agencies and by interested persons in the review process.

### § 227.25 Contents of plans.

In addition to the environmental assessment required by § 227.24, a plan developed pursuant to this subpart F must include a schedule for eliminating ocean dumping or bringing the wastes into compliance with the environmental impact criteria of subpart B, including without limitation, the following:

(a) If the waste is treated to the degree necessary to bring it into compliance with the ocean dumping criteria, the applicant should provide a description of the treatment and a scheduled program for treatment and a subsequent analysis of treated material to prove the effectiveness of the process.

(b) If treatment cannot be effected by post-process techniques the applicant should, determining the offending constituents, examine his raw materials and his total process to determine the origin of the pollutant. If the offending constituents are found in the raw material the applicant should consider a new supplier and provide an analysis of the new material to prove compliance. Raw materials are to include all water used in the process. Water from municipal sources complying with drinking water standards is acceptable. Water from other sources such as private wells should be analyzed for contaminants. Water that has been used in the process should be considered for treatment and recycling as an additional source of process water.

(c) If offending constituents are a result of the process, the applicant should investigate and describe the source of the constituents. A report of this information will be submitted to EPA and the applicant will then submit a proposal describing possible alternatives to the existing process or processes and level of cost and effectiveness.

(d) If an acceptable alternative to ocean dumping or additional control technology is required, a schedule and documentation for implementation of the alternative or approved control process shall be submitted and shall include, without limitation:

(1) Engineering plan;
(2) Financing approval;
(3) Starting date for change;
(4) Completion date;
(5) Operation starting date.

(e) If an acceptable alternative does not exist at the time the application is submitted, the applicant will submit an acceptable in-house research program or employ a competent research institution to study the problem. The program of research must be approved by the Administrator or Regional Administrator, as the case may be, before the initiation of the research. The schedule and documentation for implementation of a research program will include, without limitation:

(1) Approaches;
(2) Experimental design;
(3) Starting date;
(4) Reporting intervals;
(5) Proposed completion date;
(6) Date for submission of final report.

### § 227.26 Implementation of plans.

Implementation of each phase of a plan shall be initiated as soon as it is approved by the Administrator or Regional Administrator, as the case may be.

## Subpart G—Definitions

### § 227.27 Limiting permissible concentration (LPC).

(a) The limiting permissible concentration of the liquid phase of a material is:

(1) That concentration of a constituent which, after allowance for initial mixing as provided in § 227.29, does not exceed applicable marine water quality criteria; or, when there are no applicable marine water quality criteria,

(2) That concentration of waste or dredged material in the receiving water which, after allowance for initial mixing, as specified in § 227.29, will not exceed a toxicity threshold defined as 0.01 of a concentration shown to be acutely toxic to appropriate sensitive marine organisms in a bioassay carried out in accordance with approved EPA procedures.

(3) When there is reasonable scientific evidence on a specific waste material to justify the use of an application factor other than 0.01 as specified in paragraph (a)(2) of this section, such alternative application factor shall be used in calculating the LPC.

(b) The limiting permissible concentration of the suspended particulate and solid phases of a material means that concentration which will not cause unreasonable acute or chronic toxicity or other sublethal adverse effects based on bioassay results using appropriate sensitive marine organisms in the case of the suspended particulate phase, or appropriate sensitive benthic marine organisms in the case of the solid phase; and which will not cause accumulation of toxic materials in the human food chain. Suspended particulate phase bioaccumulation testing is not required. These bioassays are to be conducted in accordance with procedures approved by EPA, or, in the case of dredged material, approved by EPA and the Corps of Engineers.[1]

(c) *Appropriate sensitive marine organisms* means at least one species each representative of phytoplankton or zooplankton, crustacean or mollusk, and fish species chosen from among the most sensitive species documented in the scientific literature or accepted by EPA as being reliable test organisms to determine the anticipated impact of the wastes on the ecosystem at the disposal site. Bioassays, except on phytoplankton or zooplankton, shall be run for a minimum of 96 hours under temperature, salinity, and dissolved oxygen conditions representing the extremes of environmental stress at the disposal site. Bioassays on phytoplankton or zooplankton may be run for shorter periods of time as appropriate for the organisms tested at the discretion of EPA, or EPA and the Corps of Engineers, as the case may be.

(d) *Appropriate sensitive benthic marine organisms* means two or more species that together represent filter-feeding, deposit-feeding, and burrowing characteristics. These organisms shall be chosen from among the species that are most sensitive for each type they represent, and that are documented in the scientific literature and accepted by EPA as being reliable test organisms to determine the anticipated impact on the site; provided, however, that until sufficient species are adequately tested and documented, interim guidance on appropriate organisms available for use will be provided by the Administrator, Regional Administrator, or the District Engineer, as the case may be.

[42 FR 2476, Jan. 11, 1977; 43 FR 1071, Jan. 6, 1978, as amended at 59 FR 26572, May 20, 1994; 59 FR 52652, Oct. 18, 1994; 61 FR 51203, Sept. 30, 1996]

### § 227.28 Release zone.

The release zone is the area swept out by the locus of points constantly 100 meters from the perimeter of the conveyance engaged in dumping activities, beginning at the first moment in which dumping is scheduled to occur and ending at the last moment in which dumping is scheduled to occur. No release zone shall exceed the total surface area of the dumpsite.

### § 227.29 Initial mixing.

(a) Initial mixing is defined to be that dispersion or diffusion of liquid, suspended particulate, and solid phases of a waste which occurs within four hours after dumping. The limiting permissible concentration shall not be exceeded beyond the boundaries of the disposal site during initial mixing, and shall not be exceeded at any point in the marine environment after initial mixing. The maximum concentration of the liquid, suspended particulate, and solid phases of a dumped material after initial mixing shall be estimated by one of these methods, in order of preference:

(1) When field data on the proposed dumping are adequate to predict initial dispersion and diffusion of the waste, these shall be used, if necessary, in

[1] An implementation manual is being developed jointly by EPA and the Corps of Engineers, and announcement of the availability of the manual will be published in the FEDERAL REGISTER. Until this manual is available, interim guidance on the appropriate procedures can be obtained from the Marine Protection Branch, WH–548, Environmental Protection Agency, 401 M Street SW, Washington, DC 20460, or the Corps of Engineers, as the case may be.

conjunction with an appropriate mathematical model acceptable to EPA or the District Engineer, as appropriate.

(2) When field data on the dispersion and diffusion of a waste of characteristics similar to that proposed for discharge are available, these shall be used in conjunction with an appropriate mathematical model acceptable to EPA or the District Engineer, as appropriate.

(3) When no field data are available, theoretical oceanic turbulent diffusion relationships may be applied to known characteristics of the waste and the disposal site.

(b) When no other means of estimation are feasible.

(1) The liquid and suspended particulate phases of the dumped waste may be assumed to be evenly distributed after four hours over a column of water bounded on the surface by the release zone and extending to the ocean floor, thermocline, or halocline if one exists, or to a depth of 20 meters, whichever is shallower, and

(2) The solid phase of a dumped waste may be assumed to settle rapidly to the ocean bottom and to be distributed evenly over the ocean bottom in an area equal to that of the release zone as defined in § 227.28.

(c) When there is reasonable scientific evidence to demonstrate that other methods of estimating a reasonable allowance for initial mixing are appropriate for a specific material, such methods may be used with the concurrence of EPA after appropriate scientific review.

### § 227.30 High-level radioactive waste.

High-level radioactive waste means the aqueous waste resulting from the operation of the first cycle solvent extraction system, or equivalent, and the concentrated waste from subsequent extraction cycles, or equivalent, in a facility for reprocessing irradiated reactor fuels or irradiated fuel from nuclear power reactors.

### § 227.31 Applicable marine water quality criteria.

Applicable marine water quality criteria means the criteria given for marine waters in the EPA publication ''Quality Criteria for Water'' as published in 1976 and amended by subsequent supplements or additions.

### § 227.32 Liquid, suspended particulate, and solid phases of a material.

(a) For the purposes of these regulations, the liquid phase of a material, subject to the exclusions of paragraph (b) of this section, is the supernatant remaining after one hour undisturbed settling, after centrifugation and filtration through a 0.45 micron filter. The suspended particulate phase is the supernatant as obtained above prior to centrifugation and filtration. The solid phase includes all material settling to the bottom in one hour. Settling shall be conducted according to procedures approved by EPA.

(b) For dredged material, other material containing large proportions of insoluble matter, materials which may interact with ocean water to form insoluble matter or new toxic compounds, or materials which may release toxic compounds upon deposition, the Administrator, Regional Administrator, or the District Engineer, as the case may be, may require that the separation of liquid, suspended particulate, and solid phases of the material be performed upon a mixture of the waste with ocean water rather than on the material itself. In such cases the following procedures shall be used:

(1) For dredged material, the liquid phase is considered to be the centrifuged and 0.45 micron filtered supernatant remaining after one hour undisturbed settling of the mixture resulting from a vigorous 30-minute agitation of one part bottom sediment from the dredging site with four parts water (vol/vol) collected from the dredging site or from the disposal site, as appropriate for the type of dredging operation. The suspended particulate phase is the supernatant as obtained above prior to centrifugation and filtration. The solid phase is considered to be all material settling to the bottom within one hour. Settling shall be conducted by procedures approved by EPA and the Corps of Engineers.

(2) For other materials, the proportion of ocean water used shall be the minimum amount necessary to produce the anticipated effect (e.g., complete neutralization of an acid or alkaline

waste) based on guidance provided by EPA on particular cases, or in accordance with approved EPA procedures. For such materials the liquid phase is the filtered and centrifuged supernatant resulting from the mixture after 30 minutes of vigorous shaking followed by undisturbed settling for one hour. The suspended particulate phase is the supernatant as obtained above prior to centrifugation and filtration. The solid phase is the insoluble material settling to the bottom in that period.

## PART 228—CRITERIA FOR THE MANAGEMENT OF DISPOSAL SITES FOR OCEAN DUMPING

Sec.

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AUTHORITY: 33 U.S.C. 1412 and 1418.

SOURCE: 42 FR 2482, Jan. 11, 1977, unless otherwise noted.

### §228.1 Applicability.

The criteria of this part 228 are established pursuant to section 102 of the Act and apply to the evaluation of proposed ocean dumping under title I of the Act. The criteria of this part 228 deal with the evaluation of the proposed dumping of material in ocean waters in relation to continuing requirements for effective management of ocean disposal sites to prevent unreasonable degradation of the marine environment from all wastes being dumped in the ocean. This part 228 is applicable to dredged material disposal sites only as specified in §§228.4(e), 228.9, and 228.12.

### §228.2 Definitions.

(a) The term *disposal site* means an interim or finally approved and precise geographical area within which ocean dumping of wastes is permitted under conditions specified in permits issued under sections 102 and 103 of the Act. Such sites are identified by boundaries established by (1) coordinates of latitude and longitude for each corner, or by (2) coordinates of latitude and longitude for the center point and a radius in nautical miles from that point. Boundary coordinates shall be identified as precisely as is warranted by the accuracy with which the site can be located with existing navigational aids or by the implantation of transponders, buoys or other means of marking the site.

(b) The term *baseline* or *trend assessment* survey means the planned sampling or measurement of parameters at set stations or in set areas in and near disposal sites for a period of time sufficient to provide synoptic data for determining water quality, benthic, or biological conditions as a result of ocean disposal operations. The minimum requirements for such surveys are given in §228.13.

(c) The term *disposal site evaluation study* means the collection, analysis, and interpretation of all pertinent information available concerning an existing disposal site, including but not limited to, data and information from trend assessment surveys, monitoring surveys, special purpose surveys of other Federal agencies, public data archives, and social and economic studies and records of affected areas.

(d) The term *disposal site designation study* means the collection, analysis and interpretation of all available pertinent data and information on a proposed disposal site prior to use, including but not limited to, that from baseline surveys, special purpose surveys of other Federal agencies, public data archives, and social and economic studies and records of areas which would be affected by use of the proposed site.

(e) The term *management authority* means the EPA organizational entity

assigned responsibility for implementing the management functions identified in § 228.3.

(f) *Statistical significance* shall mean the statistical significance determined by using appropriate standard techniques of multivariate analysis with results interpreted at the 95 percent confidence level and based on data relating species which are present in sufficient numbers at control areas to permit a valid statistical comparison with the areas being tested.

(g) *Valuable commercial and recreational species* shall mean those species for which catch statistics are compiled on a routine basis by the Federal or State agency responsible for compiling such statistics for the general geographical area impacted, or which are under current study by such Federal or State agencies for potential development for commercial or recreational use.

(h) *Normal ambient value* means that concentration of a chemical species reasonably anticipated to be present in the water column, sediments, or biota in the absence of disposal activities at the disposal site in question.

### § 228.3 Disposal site management responsibilities.

(a) Management of a site consists of regulating times, rates, and methods of disposal and quantities and types of materials disposed of; developing and maintaining effective ambient monitoring programs for the site; conducting disposal site evaluation and designation studies; and recommending modifications in site use and/or designation (e.g., termination of use of the site for general use or for disposal of specific wastes).

(b) Each site, upon interim or final designation, will be assigned to either an EPA Regional office or to EPA Headquarters for management. These designations will be consistent with the delegation of authority in § 220.4. The designated management authority is fully responsible for all aspects of the management of sites within the general requirements specified in § 220.4 and this section. Specific requirements for meeting the management responsibilities assigned to the designated management authority for each site are outlined in §§ 228.5 and 228.6.

[42 FR 2482, Jan. 11, 1977, as amended at 59 FR 61129, Nov. 29, 1994]

### § 228.4 Procedures for designation of sites.

(a) *General Permits.* Geographical areas or regions within which materials may be dumped under a general permit will be published as part of the promulgation of each general permit.

(b) *Special and Interim Permits.* Areas where ocean dumping is permitted subject to the specific conditions of individual special or interim permits, will be designated by promulgation in this part 228, and such designation will be made based on environmental studies of each site, regions adjacent to the site, and on historical knowledge of the impact of waste disposal on areas similar to such sites in physical, chemical, and biological characteristics. All studies for the evaluation and potential selection of dumping sites will be conducted in accordance with the requirements of §§ 228.5 and 228.6.

The Administrator may, from time to time, designate specific locations for temporary use for disposal of small amounts of materials under a special permit only without disposal site designation studies when such materials satisfy the Criteria and the Administrator determines that the quantities to be disposed of at such sites will not result in significant impact on the environment. Such designations will be done by promulgation in this part 228, and will be for a specified period of time and for specified quantities of materials.

(c) *Emergency Permits.* Dumping sites for materials disposed of under an emergency permit will be specified by the Administrator as a permit condition and will be based on an individual appraisal of the characteristics of the waste and the safest means for its disposal.

(d) *Research Permits.* Dumping sites for research permits will be determined by the nature of the proposed study. Dumping sites will be specified by the Administrator as a permit condition.

(e) *Dredged Material Permits.* (1) Areas where ocean dumping of dredged material is permitted subject to the specific

conditions of Dredged Material permits issued by the U.S. Army Corps of Engineers will be designated by EPA promulgation in this part 228, and such designation will be made based on environmental studies of each site, regions adjacent to the site, and on historical knowledge of the impact of dredged material disposal on areas similar to such sites in physical, chemical, and biological characteristics. All studies for the evaluation and potential selection of dredged material disposal sites will be conducted in accordance with the appropriate requirements of §§228.5 and 228.6, except that:

(i) Baseline or trend assessment requirements may be developed on a case-by-case basis from the results of research, including that now in progress by the Corps of Engineers.

(ii) An environmental impact assessment for all sites within a particular geographic area may be prepared based on complete disposal site designation or evaluation studies on a typical site or sites in that area. In such cases, sufficient studies to demonstrate the generic similarity of all sites within such a geographic area will be conducted.

(2) In those cases where a recommended disposal site has not been designated by the Administrator, or where it is not feasible to utilize a recommended disposal site that has been designated by the Administrator, the District Engineer shall, in consultation with EPA, select a site in accordance with the requirements of §§228.5 and 228.6(a). Concurrence by EPA in permits issued for the use of such site for the dumping of dredged material at the site will constitute EPA approval of the use of the site for dredged material disposal only.

(3) Sites designated for the ocean dumping of dredged material in accordance with the procedures of paragraph (e) (1) or (2) of this section shall be used only for the ocean dumping of dredged material under permits issued by the U.S. Army Corps of Engineers.

### §228.5 General criteria for the selection of sites.

(a) The dumping of materials into the ocean will be permitted only at sites or in areas selected to minimize the interference of disposal activities with other activities in the marine environment, particularly avoiding areas of existing fisheries or shellfisheries, and regions of heavy commercial or recreational navigation.

(b) Locations and boundaries of disposal sites will be so chosen that temporary perturbations in water quality or other environmental conditions during initial mixing caused by disposal operations anywhere within the site can be expected to be reduced to normal ambient seawater levels or to undetectable contaminant concentrations or effects before reaching any beach, shoreline, marine sanctuary, or known geographically limited fishery or shellfishery.

(c) If at any time during or after disposal site evaluation studies, it is determined that existing disposal sites presently approved on an interim basis for ocean dumping do not meet the criteria for site selection set forth in §§228.5 through 228.6, the use of such sites will be terminated as soon as suitable alternate disposal sites can be designated.

(d) The sizes of ocean disposal sites will be limited in order to localize for identification and control any immediate adverse impacts and permit the implementation of effective monitoring and surveilance programs to prevent adverse long-range impacts. The size, configuration, and location of any disposal site will be determined as a part of the disposal site evaluation or designation study.

(e) EPA will, wherever feasible, designate ocean dumping sites beyond the edge of the continental shelf and other such sites that have been historically used.

### §228.6 Specific criteria for site selection.

(a) In the selection of disposal sites, in addition to other necessary or appropriate factors determined by the Administrator, the following factors will be considered:

(1) Geographical position, depth of water, bottom topography and distance from coast;

(2) Location in relation to breeding, spawning, nursery, feeding, or passage areas of living resources in adult or juvenile phases;

(3) Location in relation to beaches and other amenity areas;

(4) Types and quantities of wastes proposed to be disposed of, and proposed methods of release, including methods of packing the waste, if any;

(5) Feasibility of surveillance and monitoring;

(6) Dispersal, horizontal transport and vertical mixing characteristics of the area, including prevailing current direction and velocity, if any;

(7) Existence and effects of current and previous discharges and dumping in the area (including cumulative effects);

(8) Interference with shipping, fishing, recreation, mineral extraction, desalination, fish and shellfish culture, areas of special scientific importance and other legitimate uses of the ocean;

(9) The existing water quality and ecology of the site as determined by available data or by trend assessment or baseline surveys;

(10) Potentiality for the development or recruitment of nuisance species in the disposal site;

(11) Existence at or in close proximity to the site of any significant natural or cultural features of historical importance.

(b) The results of a disposal site evaluation and/or designation study based on the criteria stated in paragraphs (b)(1) through (11) of this section will be presented in support of the site designation promulgation as an environmental assessment of the impact of the use of the site for disposal, and will be used in the preparation of an environmental impact statement for each site where such a statement is required by EPA policy. By publication of a notice in accordance with this part 228, an environmental impact statement, in draft form, will be made available for public comment not later than the time of publication of the site designation as proposed rulemaking, and a final EIS will be made available at the time of final rulemaking.

### § 228.7 Regulation of disposal site use.

Where necessary, disposal site use will be regulated by setting limitations on times of dumping and rates of discharge, and establishing a disposal site monitoring program.

### § 228.8 Limitations on times and rates of disposal.

Limitations as to time for and rates of dumping may be stated as part of the promulgation of site designation. The times and the quantities of permitted material disposal will be regulated by the EPA management authority so that the limits for the site as specified in the site designation are not exceeded. This will be accomplished by the denial of permits for the disposal of some materials, by the imposition of appropriate conditions on other permits and, if necessary, the designation of new disposal sites under the procedures of § 228.4. In no case may the total volume of material disposed of at any site under special or interim permits cause the concentration of the total materials or any constituent of any of the materials being disposed of at the site to exceed limits specified in the site designation.

### § 228.9 Disposal site monitoring.

(a) The monitoring program, if deemed necessary by the Regional Administrator or the District Engineer, as appropriate, may include baseline or trend assessment surveys by EPA, NOAA, other Federal agencies, or contractors, special studies by permittees, and the analysis and interpretation of data from remote or automatic sampling and/or sensing devices. The primary purpose of the monitoring program is to evaluate the impact of disposal on the marine environment by referencing the monitoring results to a set of baseline conditions. When disposal sites are being used on a continuing basis, such programs may consist of the following components:

(1) Trend assessment surveys conducted at intervals frequent enough to assess the extent and trends of environmental impact. Until survey data or other information are adequate to show that changes in frequency or scope are necessary or desirable, trend assessment and baseline surveys should generally conform to the applicable requirements of § 228.13. These surveys shall be the responsibility of the Federal government.

(2) Special studies conducted by the permittee to identify immediate and

short-term impacts of disposal operations.

(b) These surveys may be supplemented, where feasible and useful, by data collected from the use of automatic sampling buoys, satellites or in situ platforms, and from experimental programs.

(c) EPA will require the full participation of permittees, and encourage the full participation of other Federal and State and local agencies in the development and implementation of disposal site monitoring programs. The monitoring and research programs presently supported by permittees may be incorporated into the overall monitoring program insofar as feasible.

### § 228.10 Evaluating disposal impact.

(a) Impact of the disposal at each site designated under section 102 of the Act will be evaluated periodically and a report will be submitted as appropriate as part of the Annual Report to Congress. Such reports will be prepared by or under the direction of the EPA management authority for a specific site and will be based on an evaluation of all data available from baseline and trend assessment surveys, monitoring surveys, and other data pertinent to conditions at and near a site.

(b) The following types of effects, in addition to other necessary or appropriate considerations, will be considered in determining to what extent the marine environment has been impacted by materials disposed of at an ocean disposal site:

(1) Movement of materials into estuaries or marine sanctuaries, or onto oceanfront beaches, or shorelines;

(2) Movement of materials toward productive fishery or shellfishery areas;

(3) Absence from the disposal site of pollution-sensitive biota characteristic of the general area;

(4) Progressive, non-seasonal, changes in water quality or sediment composition at the disposal site, when these changes are attributable to materials disposed of at the site;

(5) Progressive, non-seasonal, changes in composition or numbers of pelagic, demersal, or benthic biota at or near the disposal site, when these changes can be attributed to the effects of materials disposed of at the site;

(6) Accumulation of material constituents (including without limitation, human pathogens) in marine biota at or near the site.

(c) The determination of the overall severity of disposal at the site on the marine environment, including without limitation, the disposal site and adjacent areas, will be based on the evaluation of the entire body of pertinent data using appropriate methods of data analysis for the quantity and type of data available. Impacts will be categorized according to the overall condition of the environment of the disposal site and adjacent areas based on the determination by the EPA management authority assessing the nature and extent of the effects identified in paragraph (b) of this section in addition to other necessary or appropriate considerations. The following categories shall be used:

(1) *Impact Category I:* The effects of activities at the disposal site shall be categorized in Impact Category I when one or more of the following conditions is present and can reasonably be attributed to ocean dumping activities;

(i) There is identifiable progressive movement or accumulation, in detectable concentrations above normal ambient values, of any waste or waste constituent from the disposal site within 12 nautical miles of any shoreline, marine sanctuary designated under title III of the Act, or critical area designated under section 102(c) of the Act; or

(ii) The biota, sediments, or water column of the disposal site, or of any area outside the disposal site where any waste or waste constituent from the disposal site is present in detectable concentrations above normal ambient values, are adversely affected by the toxicity of such waste or waste constituent to the extent that there are statistically significant decreases in the populations of valuable commercial or recreational species, or of specific species of biota essential to the propagation of such species, within the disposal site and such other area as compared to populations of the same organisms in comparable locations outside such site and area; or

(iii) Solid waste material disposed of at the site has accumulated at the site or in areas adjacent to it, to such an extent that major uses of the site or of adjacent areas are significantly impaired and the Federal or State agency responsible for regulating such uses certifies that such significant impairment has occurred and states in its certificate the basis for its determination of such impairment; or

(iv) There are adverse effects on the taste or odor of valuable commercial or recreational species as a result of disposal activities; or

(v) When any toxic waste, toxic waste constituent, or toxic byproduct of waste interaction, is consistently identified in toxic concentrations above normal ambient values outside the disposal site more than 4 hours after disposal.

(2) *Impact Category II:* The effects of activities at the disposal site which are not categorized in Impact Category I shall be categorized in Impact Category II.

### § 228.11 Modification in disposal site use.

(a) Modifications in disposal site use which involve the withdrawal of designated disposal sites from use or permanent changes in the total specified quantities or types of wastes permitted to be discharged to a specific disposal site will be made through promulgation of an amendment to the disposal site designation set forth in this part 228 and will be based on the results of the analyses of impact described in § 228.10 or upon changed circumstances concerning use of the site.

(b) Modifications in disposal site use promulgated pursuant to paragraph (a) of this section shall not automatically modify conditions of any outstanding permit issued pursuant to this subchapter H, and provided further that unless the EPA management authority for such site modifies, revokes or suspends such permit or any of the terms or conditions of such permit in accordance with the provisions of § 232.2 based on the results of impact analyses as described in § 228.10 or upon changed circumstances concerning use of the site, such permit will remain in force until its expiration date.

(c) When the EPA management authority determines that activities at a disposal site have placed the site in Impact Category I, the Administrator or the Regional Administrator, as the case may be, shall place such limitations on the use of the site as are necessary to reduce the impacts to acceptable levels.

(d) The determination of the Administrator as to whether to terminate or limit use of a disposal site will be based on the impact of disposal at the site itself and on the Criteria.

[42 FR 2482, Jan. 11, 1977; 43 FR 1071, Jan. 6, 1978]

### § 228.12 [Reserved]

### § 228.13 Guidelines for ocean disposal site baseline or trend assessment surveys under section 102 of the Act.

The purpose of a baseline or trend assessment survey is to determine the physical, chemical, geological, and biological structure of a proposed or existing disposal site at the time of the survey. A baseline or trend assessment survey is to be regarded as a comprehensive synoptic and representative picture of existing conditions; each such survey is to be planned as part of a continual monitoring program through which changes in conditions at a disposal site can be documented and assessed. Surveys will be planned in coordination with the ongoing programs of NOAA and other Federal, State, local, or private agencies with missions in the marine environment. The field survey data collection phase of a disposal site evaluation or designation study shall be planned and conducted to obtain a body of information both representative of the site at the time of study and obtained by techniques reproducible in precision and accuracy in future studies. A full plan of study which will provide a record of sampling, analytical, and data reduction procedures must be developed, documented and approved by the EPA management authority. Plans for all surveys which will produce information to be used in the preparation of environmental impact statements will be approved by the Administrator or his designee. This plan of study also shall be

incorporated as an appendix into a technical report on the study, together with notations describing deviations from the plan required in actual operations. Relative emphasis on individual aspects of the environment at each site will depend on the type of wastes disposed of at the site and the manner in which such wastes are likely to affect the local environment, but no major feature of the disposal site may be neglected. The observations made and the data obtained are to be based on the information necessary to evaluate the site for ocean dumping. The parameters measured will be those indicative, either directly or indirectly, of the immediate and long-term impact of pollutants on the environment at the disposal site and adjacent land or water areas. An initial disposal site evaluation or designation study should provide an immediate baseline appraisal of a particular site, but it should also be regarded as the first of a series of studies to be continued as long as the site is used for waste disposal.

(a) *Timing.* Baseline or trend assessment surveys will be conducted with due regard for climatic and seasonal impact on stratification and other conditions in the upper layers of the water column. Where a choice of season is feasible, trend assessment surveys should be made during those months when pollutant accumulation within disposal sites is likely to be most severe, or when pollutant impact within disposal sites is likely to be most noticeable.

(1) Where disposal sites are near large riverine inflows to the ocean, surveys will be done with due regard for the seasonal variation in river flow. In some cases several surveys at various river flows may be necessary before a site can be approved.

(2) When initial surveys show that seasonal variation is not significant and surveys at greater than seasonable intervals are adequate for characterizing a site, resurveys shall be carried out in climatic conditions as similar to those of the original surveys as possible, particularly in depths less than 200 meters.

(b) *Duration.* The actual duration of a field survey will depend upon the size and depth of the site, weather conditions during the survey, and the types of data to be collected. For example, for a survey of an area of 100 square miles on the continental shelf, including an average dump site and the region contiguous to it, an on-site operation would be scheduled for completion within one week of weather suitable for on-site operations. More on-site operating time may be scheduled for larger or highly complex sites.

(c) *Numbers and locations of sampling stations.* The numbers and locations of sampling stations will depend in part on the local bathymetry with minimum numbers of stations per site fixed as specified in the following sections. Where the bottom is smooth or evenly sloping, stations for water column measurements and benthic sampling and collections, other than trawls, shall be spaced throughout the survey area in a manner planned to provide maximum coverage of both the disposal site and contiguous control areas, considering known water movement characteristics. Where there are major irregularities in the bottom topography, such as canyons or gullies, or in the nature of the bottom, sampling stations for sediments and benthic communities shall be spaced to provide representative sampling of the major different features.

Sampling shall be done within the dump site itself and in the contiguous area. Sufficient control stations outside a disposal site shall be occupied to characterize the control area environment at least as well as the disposal site itself. Where there are known persistent currents, sampling in contiguous areas shall include at least two stations downcurrent of the dump site, and at least two stations upcurrent of the site.

(d) *Measurements in the water column at and near the dump site*—(1) *Water quality parameters measured.* These shall include the major indicators of water quality, particularly those likely to be affected by the waste proposed to be dumped. Specifically included at all stations are measurements of temperature, dissolved oxygen, salinity, suspended solids, turbidity, total organic carbon, pH, inorganic nutrients, and chlorophyll *a*.

(i) At one station near the center of the disposal site, samples of the water column shall be taken for the analysis of the following parameters: Mercury, cadmium, copper, chromium, zinc, lead, arsenic, selenium, vanadium, beryllium, nickel, pesticides, petroleum hydrocarbons, and persistent organohalogens. These samples shall be preserved for subsequent analysis by or under the direct supervision of EPA laboratories in accordance with the approved plan of study.

(ii) These parameters are the basic requirements for all sites. For the evaluation of any specific disposal site additional measurements may be required, depending on the present or intended use of the site. Additional parameters may be selected based on the materials likely to be in wastes dumped at the site, and on parameters likely to be affected by constituents of such wastes. Analysis for other constituents characteristic of wastes discharged to a particular disposal site, or of the impact of such wastes on water quality, will be included in accordance with the approved plan of study.

(2) *Water quality sampling requirements.* The number of samples collected from the water column should be sufficient to identify representative changes throughout the water column such as to avoid short-term impact due to disposal activities. The following key locations should be considered in selecting water column depths for sampling:

(i) Surface, below interference from surface waves;

(ii) Middle of the surface layer;

(iii) Bottom of the surface layer;

(iv) Middle of the thermocline or halocline, or both if present;

(v) Near the top of the stable layer beneath a thermocline or halocline;

(vi) Near the middle of a stable layer;

(vii) As near the bottom as feasible;

(viii) Near the center of any zone showing pronounced biological activity or lack thereof.

In very shallow waters where only a few of these would be pertinent, as a minimum, surface, mid-depth and bottom samples shall be taken, with samples at additional depths being added as indicated by local conditions. At disposal sites far enough away from the influence of major river inflows, ocean or coastal currents, or other features which might cause local perturbations in water chemistry, a minimum of 5 water chemistry stations should be occupied within the boundaries of a site. Additional stations should be added when the area to be covered in the survey is more than 20 square miles or when local perturbations in water chemistry may be expected because of the presence of one of the features mentioned above. In zones where such impacts are likely, stations shall be distributed so that at least 3 stations are occupied in the transition from one stable regime to another. Each water column chemistry station shall be replicated a minimum of 2 times during a survey except in waters over 200 meters deep.

(3) *Water column biota.* Sampling stations for the biota in the water column shall be as near as feasible to stations used for water quality; in addition at least two night-time stations in the disposal site and contiguous area are required. At each station vertical or oblique tows with appropriately-meshed nets shall be used to assess the microzooplankton, the nekton, and the macrozooplankton, Towing times and distances shall be sufficient to obtain representative samples of organisms near water quality stations. Organisms shall be sorted and identified to taxonomic levels necessary to identify dominant organisms, sensitive or indicator organisms, and organism diversity. Tissue samples of representative species shall be analyzed for pesticides, persistent organohalogens, and heavy metals. Discrete water samples shall also be used to quantitatively assess the phytoplankton at each station.

These requirements are the minimum necessary in all cases. Where there are discontinuities present, such as thermoclines, haloclines, convergences, or upwelling, additional tows shall be made in each water mass as appropriate.

(e) *Measurements of the benthic region*—(1) *Bottom sampling.* Samples of the bottom shall be taken for both sediment composition and structure, and to determine the nature and numbers of benthic biota.

(i) At each station sampling may consist of core samples, grab samples, dredge samples, trawls, and bottom photography or television, where available and feasible, depending on the nature of the bottom and the type of disposal site. Each type of sampling shall be replicated sufficiently to obtain a representative set of samples. The minimum numbers of replicates of successful samples at each continental shelf station for each type of device mentioned above are as follows:

| | |
|---|---|
| Cores | 3. |
| Grabs | 5. |
| Dredge | 3. |
| Trawl | 20-min. tow. |

Lesser numbers of replicates may be allowed in water deeper than 200 meters, at those sites where pollution impacts on the bottom are unlikely in the judgment of the EPA management authority.

(ii) Selection of bottom stations will be based to a large extent on the bottom topography and hydrography as determined by the bathymetric survey. On the continental shelf, where the bottom has no significant discontinuities, a bottom station density of at least three times the water column stations is recommended, depending on the type of site being evaluated. Where there are significant differences in bottom topography, additional stations shall be occupied near the discontinuity and on each side of it. Beyond the continental shelf, lesser densities may be used.

(2) *Bathymetric survey.* Sufficient tracklines shall be run to develop complete bottom coverage of bathymetry with reasonable assurance of accurate coverage of bottom topography, with trackline direction and spacing as close as available control allows. The site itself is to be developed at the greatest density possible, with data to be collected to a suitable distance about the site as is required to identify major changes in bathymetry which might affect the site. Specifications for each bathymetric survey will vary, depending on control, bottom complexity, depths, equipment, and map scale required. In most cases, a bathymetric map at a scale of 1:25,000 to 1:10,000 will be required, with a minimum of 1–5 meter contour interval except in very flat areas. When the foregoing bathymetric detail is available from recent surveys of the disposal site, bathymetry during a baseline or trend assessment survey may be limited to sonar profiles of bathymetry on transects between sampling stations.

(3) *Nature of bottom.* The size distribution of sediments, mineral character and chemical quality of the bottom will be determined to a depth appropriate for the type of bottom. The following parameters will be measured at all stations: Particle size distribution, major mineral constituents, texture, settling rate, and organic carbon.

(i) At several stations near the center of the disposal site, samples of sediments shall be taken for the analysis of the following parameters: Mercury, cadmium, copper, chromium, zinc, lead, arsenic, selenium, vanadium, beryllium, nickel, pesticides, persistent organohalogens, and petroleum hydrocarbons. These samples shall be preserved for subsequent analysis by or under the direct supervision of EPA laboratories in accordance with the approved plan of study.

(ii) These parameters are the basic requirements for all sites. For the evaluation of any specific disposal site additional measurements may be required, depending on the present or intended use of the site. Additional parameters may be selected based on the materials likely to be in wastes dumped at the site, and on parameters likely to be affected by constituents of such wastes. Such additional parameters will be selected by the EPA management authority.

(4) *Benthic biota.* This shall consist of a quantitative and qualitative evaluation of benthic communities including macroinfauna and macroepifauna, meiobenthos, and microbenthos, and should include an appraisal, based on existing information, of the sensitivity of indigenous species to the waste proposed to be discharged. Organisms, shall be sorted, and identified to taxonomic levels necessary to identify dominant organisms, sensitive or indicator organisms, and organism diversity. Tissue samples of the following types of organisms shall be analyzed

for persistent organohalogens, pesticides, and heavy metals:

(i) A predominant species of demersal fish;

(ii) The most abundant macroinfaunal species; and

(iii) A dominant epifaunal species, with particular preference for a species of economic importance.

(f) *Other measurements*—(1) *Hydrodynamic features.* The direction and speed of water movement shall be characterized at levels appropriate for the site and type of waste to be dumped. Where depths and climatic conditions are great enough for a thermocline or halocline to exist, the relationship of water movement to such a feature shall be characterized.

(i) *Current measurements.* When current meters are used as the primary source of hydrodynamic data, at least 4 current meter stations with at least 3 meters at depths appropriate for the observed or expected discontinuities in the water column should be operated for as long as possible during the survey. Where feasible, current meters should be deployed at the initiation of the survey and recovered after its completion. Stations should be at least a mile apart, and should be placed along the long axis of the dumping site. For dumping sites more than 10 miles along the long axis, one current meter station every 5 miles should be operated. Where there are discontinuities in surface layers, e.g., due to land runoff, stations should be operated in each water mass.

(ii) *Water mass movement.* Acceptable methods include: dye, drogues, surface drifters, side scan sonar, bottom drifters, and bottom photography or television. When such techniques are the primary source of hydrodynamic data, coverage should be such that all significant hydrodynamic features likely to affect waste movement are measured.

(2) *Sea state.* Observations of sea state and of standard meteorological parameters shall be made at 8-hour intervals.

(3) *Surface phenomena.* Observations shall be made of oil slicks, floating materials, and other visible evidence of pollution; and, where possible, collections of floating materials shall be made.

(g) *Survey procedures and techniques.* Techniques and procedures used for sampling and analysis shall represent the state-of-the-art in oceanographic survey and analytical practice. Survey plans shall specify the methods to be used and will be subject to approval by EPA.

(h) *Quality assurance.* The EPA management authority may require that certain samples be submitted on a routine basis to EPA laboratories for analysis as well as being analyzed by the surveyor, and that EPA personnel participate in some field surveys.

### § 228.14 Dumping sites designated on an interim basis.

(a)(1) The sites identified in this section are approved for dumping the indicated materials on an interim basis pending completion of baseline or trend assessment surveys and final designation or termination of use. Unless otherwise specifically provided in the entry for a particular site, such interim use sites are available indefinitely pending completion of the present studies and determination of the need for the continuing use of these sites, the completion of any necessary studies, and evaluation of their suitability. Designation studies for particular sites within this group will begin as soon as feasible after the completion of nearby sites presently being studied. The sizes and use specifications are based on historical usage and do not necessarily meet the criteria stated in this part.

(2) Unless otherwise specifically noted, site management authority for each site set forth in this section is delegated to the EPA Regional office under which the site entry is listed.

(3) Unless otherwise specifically noted, all ocean dumping site coordinates are based upon the North American Datum of 1927.

(b) Region I Interim Dredged Material Sites.

(1) Cape Arundel, ME.

(i) *Location:* 43°17′45″N., 70°27′12″W. (500 yds. diameter).

(ii) [Reserved]

(c) Region I Interim Other Wastes Sites.

(1) No interim sites.

(2) [Reserved]

(d) Region II Interim Dredged Material Sites.

(1) No interim sites.

(2) [Reserved]

(e) Region II Interim Other Wastes Sites.

(1) Incineration of Wood, NY/NJ.

(i) *Location:* 40°00′00″N. to 40°04′20″N.; 73°41′00″W. to 73°38′10″W.

(ii) [Reserved]

(2) [Reserved]

(f) Region III Interim Dredged Material Sites.

(1) No interim sites.

(2) [Reserved]

(g) Region III Interim Other Wastes Sites.

(1) No interim sites.

(2) [Reserved]

(h) Region IV Interim Dredged Material Sites.

(1) Port Royal Harbor North, SC.

(i) *Location:* 32°10′11″N., 80°36′00″W.; 32°10′06″N., 80°36′35″W.; 32°08′38″N., 80°36′23″W.; 32°08′41″N., 80°35′49″W.

(ii) [Reserved]

(2) Port Royal Harbor South, SC.

(i) *Location:* 32°05′46″N., 80°35′30″W.; 32°05′42″N., 80°36′27″W.; 32°04′22″N., 80°36′16″W.; 32°04′27″N., 80°35′18″W.

(ii) [Reserved]

(3) Palm Beach Harbor West, FL.

(i) *Location:* 26°46′10″N., 80°02′00″W.; 26°45′54″N., 80°02′06″W.; 26°45′54″N., 80°02′13″W.; 26°46′10″N., 80°02′07″W.

(ii) [Reserved]

(4) Palm Beach Harbor East, FL.

(i) *Location:* 26°46′00″N., 79°58′55″W.; 26°46′00″N., 79°57′47″W.; 26°45′00″N., 79°57′47″W.; 26°45′00″N., 79°58′55″W.

(ii) [Reserved]

(5) Port Everglades Harbor, FL.

(i) *Location:* 26°07′00″N., 80°04′30″W.; 26°07′00″N., 80°03′30″W.; 26°06′00″N., 80°03′30″W.; 26°06′00″N., 80°04′30″W.

(ii) [Reserved]

(6) [Reserved]

(7) Charlotte Harbor, FL.

(i) *Location:* 26°37′36″N., 82°19′55″W.; 26°37′36″N., 82°18′47″W.; 26°36′36″N., 82°18′47″W.; 26°36′36″N., 82°19′55″W.

(ii) [Reserved]

(8) Port St. Joe South, FL.

(i) *Location:* 29°50.9′ N., 85°29.9′ W.; 29°51.3′ N., 85°29.5′ W.; 29°49.2′ N., 85°28.2′ W.; 29°49.0′ N., 85°28.8′ W.

(ii) [Reserved]

(9) Port St. Joe North, FL.

(i) *Location:* 29°53.9′ N., 85°31.8′ W.; 29°54.1′ N., 85°31.3′ W.; 29°52.2′ N., 85°30.1′ W.; 29°52.2′ N., 85°30.8′ W.

(ii) [Reserved]

(10) Panama City, FL.

(i) *Location:* 30°07.1′ N., 85°45.9′ W.; 30°07.2′ N., 85°45.5′ W.; 30°06.9′ N., 85°45.1′ W.; 30°06.7′ N., 85°45.6′

(ii) [Reserved]

(i) Region IV Interim Other Wastes Sites.

(1) No interim sites.

(2) [Reserved]

(j) Region VI Interim Dredged Material Sites.

(1) Mississippi River, Baton Rouge to the Gulf of Mexico, LA—South Pass.

(1) *Description and location:* Maintaince dredging disposal area 0.5 mile square, parallel to the channel and located on the west side. Beginning at 28°58′33″N. and 89°07′00″W., following channel centerline (azimuth 295°41′) of the Gulf entrance channel to 28°58′24″N. and 89°06′30″W., thence to 28°57′54″N. and 89°06′42″W., thence to 28°58′06″N. and 89°07′18″W., thence to the point of beginning.

(ii) [Reserved]

(2) Mississippi River Outlets, Venice, LA—Tiger Pass.

(i) *Description and location:* Maintenance dredging disposal area 0.5 mile wide by 2.5 miles long, parallel and adjacent to the channel and located on the south side. Beginning at 29°08′24″W. and 89°25′35″N. following 270° azimuth to 29°08′24″W. and 89°28′05″N., thence to 29°07′54″W. and 89°28′05″N., thence to 29°07′54″W. and 89°25′35″N., thence to the point of beginning.

(ii) [Reserved]

(3) Waterway from Empire, LA to the Gulf of Mexico—Bar channel.

(i) *Description and location:* Maintenance dredging disposal area 0.5 mile wide by 1 mile long, parallel to the channel and located on the west side. Beginning at 29°15′06″N. and 89°36′30″W., following channel centerline (azimuth 11°08′) of the gulf entrance channel to 29°14′30″N. and 89°36′36″W., thence to 29°14′36″N. and 89°36′48″W., thence to 29°15′12″N. and 89°36′42″W., thence to the point of beginning.

(ii) [Reserved]

(4) Bayou Lafourche and Lafourche—Jump Waterway, LA—Bell Pass.

(i) *Description and location:* Maintenance dredging disposal area 2,000 feet wide by 1.5 miles long, parallel to the channel and located on the west side. Beginning at 29°05′00″N. and 90°13′45″W., following Bell Pass centerline (azimuth 12°55′) in the gulf entrance channel to 29°03′51″N., and 90°14′06″W., thence to 29°03′57″N. and 90°14′21″W., thence to 29°05′06″N. and 90°14′03″W., thence to the point of beginning.

(ii) [Reserved]

(5) Atchafalaya River—Morgan City to the Gulf of Mexico, LA and Atchafalaya River and Bayous Chene, Boeuf and Black, LA—Bar channel.

(i) *Description and location:* Maintenance dredging disposal area 0.5 mile wide by 12 miles long, parallel to the bar channel and located on the east side. Beginning at 29°20′50″N. and 91°24′03″W., following channel centerline (azimuth 37°57′) of the gulf entrance channel to 29°11′35″N. and 91°32′10″W., thence to 29°11′21″N. and″ 91°31′37″W., thence to 29°20′36″N. and 91°23′27″W., thence to the point of beginning.

(ii) [Reserved]

(6) Mermentau River, LA, Disposal Area ''A''.

(i) *Description and location:* Maintenance dredging disposal area 0.5 mile wide and 1.5 miles long, parallel to the entrance channels in the Lower Mermentau River and in the Lower Mud Lake, both located on the west side: Beginning at 28°44′48″N. and 93°07′12″W., following channel centerline (azimuth 256°59′) of the gulf entrance to 29°43′39″N. and 93°07′36″W., thence to 29°43′42″N. and 93°07′48″W., thence to 29°44′51″N. and 93°07′24″W., thence to the point of beginning.

(ii) [Reserved]

(7) Mermentau River, LA, Disposal Area ''B''.

(i) *Description and location:* Maintenance dredging disposal area 0.5 mile wide by 1.5 miles long, parallel to the entrance channels in the Lower Mermentau River in the Lower Mud Lake, both located on the west side: Beginning at 29°43′24″N. and 93°01′54″W., following channel centerline (azimuth 359°50′) of the gulf centerline to 29°42′33″N. and 93°02′12″W., thence to 29°42′36″N. and 93°02′24″W., thence to 29°43′36″N. and 93°02′06″W., thence to the point of beginning.

(ii) [Reserved]

(8) Freshwater Bayou, LA—Bar channel.

(i) *Description and location:* Maintenance dredging disposal area 2,000 feet wide by 3.5 miles long, parallel to the channel and located on the west side. Beginning at 29°32′00″N. and 92°18′48″W., following channel centerline (azimuth 09°25′) of the gulf entrance to 29°28′24″N. and 92°19′30″W., thence to 29°28′25″N. and 92°19′42″W., thence to 29°32′01″N. and 92°19′00″W., thence to the point of beginning.

(ii) [Reserved]

(k) Region VI Interim Other Wastes Sites.

(1) No interim sites.

(2) [Reserved]

(l) Region IX Interim Dredged Material Sites.

(1) Newport Beach, CA (LA–3).

(i) *Location:* 33°31′42″N., 117°54′48″W. (1,000 yd. radius).

(ii) [Reserved]

(2) Port Hueneme, CA (LA–1).

(i) *Location:* 34°05′00″N., 119°14′00″W. (1,000 yd. radius).

(ii) [Reserved]

(3) Crescent City Harbor, CA (SF–1).

(i) *Location:* 41°43′15″N., 124°12′10″W. (1,000 yd. diameter).

(ii) [Reserved]

(4) Noyo River, CA (SF–5).

(i) *Location:* 39°25′45″N., 123°49′42″W. (500 yd. diameter).

(ii) [Reserved]

(5) Guam—Apra Harbor.

(i) *Location:* 13°29′30″N., 144°34′30″ E. (1,000 yd. radius)

(ii) [Reserved]

(m) Region IX Interim Other Wastes Sites.

(1) No interim sites.

(2) [Reserved]

(n) Region X Interim Dredged Material Sites.

(1) Rogue River Entrance, OR.

(i) *Location:* 42°24′16″N., 124°26′48″W.; 42°24′04″N., 124°26′35″W.; 42°23′40″N., 124°27′13″W.; 42°23′52″N., 124°27′26″W.

(ii) [Reserved]

(2) Port Orford, OR.

(i) *Location:* 42°44′08″N., 124°29′38″W.; 42°44′08″N., 124°29′28″W.; 42°43′52″N., 124°29′28″W.; 42°43′52″N., 124°29′38″W.

(ii) [Reserved]

(3) Umpqua River Entrance, OR.

(i) *Location:* 43°40′07″N., 124°14′18″W.; 43°40′07″N., 124°13′42″W.; 43°39′53″N., 124°13′42″W.; 43°39′53″N., 124°14′18″W.

(ii) [Reserved]

(4) Siuslaw River Entrance, OR.

(i) *Location:* 44°01′32″N., 124°09′37″W.; 44°01′22″N., 124°09′02″W.; 44°01′14″N., 124°09′07″W.; 44°01′24″N., 124°09′42″W.

(ii) [Reserved]

(5) Yaquina Bay and Harbor Entrance, OR.

(i) *Location:* 44°36′31″N., 124°06′4″W.; 44°36′31″N., 124°05′16″W.; 44°36′17″N., 124°05′16″.; 44°36′17″N., 124°06′04″W.

(ii) [Reserved]

(6) Tillamook Bay Entrance, OR.

(i) *Location:* 45°34′09″N., 123°59′37″W.; 45°34′09″N., 123°58′45″W.; 45°33′55″N., 123°58′45″W.; 45°33′55″N., 123°59′37″W.

(ii) [Reserved]

(7) Willapa Bay, WA.

(i) *Location:* 46°44′00″N., 124°10′00″W.; 46°39′00″N., 124°09′00″W.

(ii) [Reserved]

(o) Region X Interim Other Wastes Sites.

(1) No interim sites.

(2) [Reserved]

[59 FR 61129, Nov. 29, 1994, as amended at 61 FR 2946, Jan. 30, 1996]

### § 228.15 Dumping sites designated on a final basis.

(a)(1) The sites identified in this section are approved for dumping the indicated materials. Designation of these sites was based on environmental studies conducted in accordance with the provisions of this part 228, and the sites listed in this section have been found to meet the site designation criteria of §§ 228.5 and 228.6.

(2) Unless otherwise specifically noted, site management authority for each site set forth in this section is delegated to the EPA Regional office under which the site entry is listed.

(3) Unless otherwise specifically noted, all ocean dumping site coordinates are based upon the North American Datum of 1927.

(b) Region I Final Dredged Material Sites.

(1) Portland, Maine, Dredged Material Disposal Site.

(i) *Location:* 43°33′36″N., 70°02′42″W.; 43°33′36″N., 70°01′18″W.; 43°34′36″N., 70°02′42″W.; 43°34′36″N., 70°01′18″W.

(ii) *Size:* One square nautical mile.

(iii) *Depth:* 50 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material.

(2) Massachusetts Bay Disposal Site.

(i) *Location:* Center coordinates (NAD 1983) 42°25.1′ north latitude, 70°35.0′ west latitude.

(ii) *Size:* 2 nautical mile diameter.

(iii) *Depth:* Average 90 meters.

(iv) *Exclusive Use:* Dredged material.

(v) *Period of Use:* Continuing.

(vi) *Restriction:* Disposal shall be limited to dredged material which meets the requirements of the MPRSA and its accompanying regulations. Disposal-and-capping is prohibited at the MBDS until its efficacy can be effectively demonstrated.

(c) Region I Final Other Wastes Sites.

(1) No final sites.

(2) [Reserved]

(d) Region II Final Dredged Material Sites.

(1) Fire Island Inlet, Long Island, New York Dredged Material Disposal Site.

(i) *Location:* 40°36′49″N., 73°23′50″W.; 40°37′12″N., 73°21′30″W.; 40°36′41″N., 73°21′20″W.; 40°36′10″N., 73°23′40″W.

(ii) *Size:* Approximately 1.09 square nautical miles.

(iii) *Depth:* Ranges from 7 to 10 meters.

(iv) *Primary Use:* Dredged material disposal.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Fire Island Inlet, Long Island, New York.

(2) Jones Inlet, Long Island, New York Dredged Material Disposal Site.

(i) *Location:* 40°34′32″N., 73°39′14″W.; 40°34′32″N., 73°37′06″W.; 40°33′48″N., 73°37′06″W.; 40°33′48″N., 73°39′14″W.

(ii) *Size:* Approximately 1.19 square nautical miles.

(iii) *Depth:* Ranges from 7 to 10 meters.

(iv) *Primary use:* Dredged material disposal.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Jones Island Inlet, Long Island, New York.

(3) East Rockaway Inlet, Long Island NY Dredged Material Disposal Site.

(i) *Location:* 40°34′36″N., 73°49′00″W.; 40°35′06″N., 73°47′06″W.; 40°34′10″N., 73°48′6″W.; 40°34′12″N., 73°47′17″W.

(ii) *Size:* Approximately 0.81 square nautical miles.

(iii) *Depth:* Ranges from 6 to 9 meters.

(iv) *Primary use:* Dredged material disposal.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from East Rockaway Inlet, Long Island, New York.

(4) Rockaway Inlet, Long Island, New York Dredged Material Disposal Site.

(i) *Location:* 40°32′30″N., 73°55′00″W.; 40°32′30″N., 73°54′00W″; 40°32′00″N., 73°54′00″W.; 40°32′00″N., 73°55′00″W.

(ii) *Size:* Approximately 0.38 square nautical miles.

(iii) *Depth:* Ranges from 8 to 11 meters.

(iv) *Primary use:* Dredged material disposal.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Rockaway Inlet, Long Island, New York.

(5) Shark River, New Jersey Dredged Material Disposal Site.

(i) *Location:* 40°12′48″N., 73°59′45″W.; 40°12′44″N., 73°59′06″W.; 40°11′36″N., 73°59′28″W.; 40°11′42″N., 74°00′12″W.

(ii) *Size:* Approximately 0.6 square nautical miles.

(iii) *Depth:* Approximately 12 meters.

(iv) *Primary use:* Dredged material disposal.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Shark River Inlet, New Jersey.

(6) Historical Area Remediation Site (HARS) Designation/Mud Dump Site Termination.

(i) Status of Former Mud Dump Site: The Mud Dump Site, designated as an Impact Category I site on May 4, 1984, is terminated.

(ii) Location: (A) The HARS (which includes the 2.2 square nautical mile area of the former Mud Dump Site) is a 15.7 square nautical mile area located approximately 3.5 nautical miles east of Highlands, New Jersey and 7.7 nautical miles south of Rockaway, Long Island. The HARS consists of a Primary Remediation Area (PRA), a Buffer Zone, and a No Discharge Zone. The HARS is bounded by the following coordinates:

| Point | Latitude DMS | Longitude DMS | Latitude DDM | Longitude DDM |
|---|---|---|---|---|
| A | 40° 25′ 39″ N | 73° 53′ 55″ W | 40° 25.65′ N | 73° 53.92′ W. |
| M | 40° 25′ 39″ N | 73° 48′ 58″ W | 40° 25.65′ N | 73° 48.97″ W. |
| P | 40° 21′ 19″ N | 73° 48′ 57″ W | 40° 21.32′ N | 73° 48.95′ W. |
| R | 40° 21′ 19″ N | 73° 52′ 30″ W | 40° 21.32′ N | 73° 52.50′ W. |
| S | 40° 21′ 52″ N | 73° 53′ 55″ W | 40° 21.87′ N | 73° 53.92′ W. |
| V | 40° 21′ 52″ N | 73° 52′ 30″ W | 40° 21.87′ N | 73° 52.50′ W. |

DMS = Degrees, Minutes, Seconds.
DDM = Degrees, Decimal Minutes.

(B) The PRA, is a 9.0 square nautical mile area to be remediated with at least a 1 meter cap of the Material for Remediation. The PRA is bounded by the following coordinates:

| Point | Latitude DMS | Longitude DMS | Latitude DDM | Longitude DDM |
|---|---|---|---|---|
| B | 40° 25′ 23″ N | 73° 53′ 34″ W | 40° 25.38′ N | 73° 53.57′ W. |
| D | 40° 25′ 22″ N | 73° 52′ 08″ W | 40° 25.37′ N | 73° 52.13′ W. |
| F | 40° 23′ 13″ N | 73° 52′ 09″ W | 40° 23.22′ N | 73° 52.15″ W. |
| G | 40° 23′ 13″ N | 73° 51′ 28″ W | 40° 23.22′ N | 73° 51.47′ W. |
| H | 40° 22′ 41″ N | 73° 51′ 28″ W | 40° 22.68′ N | 73° 51.47′ W. |
| I | 40° 22′ 41″ N | 73° 50′ 43#″ W | 40° 22.68′ N | 73° 50.72′ W. |
| L | 40° 25′ 22″ N | 73° 50′ 44″ W | 40° 25.37′ N | 73° 50.73′ W. |
| N | 40° 25′ 22″ N | 73° 49′ 19″ W | 40° 25.37′ N | 73° 49.32′ W. |
| O | 40° 21′ 35″ N | 73° 49′ 19″ W | 40° 21.58′ N | 73° 49.32′ W. |
| Q | 40° 21′ 36″ N | 73° 52′ 08″ W | 40° 21.60′ N | 73° 52.13′ W. |
| T | 40° 22′ 08″ N | 73° 52′ 08″ W | 40° 22.13′ N | 73° 52.13′ W. |
| U | 40° 22′ 08″ N | 73° 53′ 34″ W | 40° 22.13′ N | 73° 53.57′ W. |

DMS = Degrees, Minutes, Seconds.
DDM = Degrees, Decimal Minutes.

(iii) Size: 15.7 square nautical miles.

(iv) Depth: Ranges from 12 to 42 meters.

(v) Restrictions on Use:

(A) The site will be managed so as to reduce impacts within the PRA to acceptable levels in accordance with 40 CFR 228.11(c). Use of the site will be restricted to dredged material suitable for use as the Material for Remediation. This material shall be selected so as to ensure it will not cause significant undesirable effects including through bioaccumulation or unacceptable toxicity, in accordance with 40 CFR 227.6.

(B) Placement of Material for Remediation will be limited to the PRA. Placement of Material for Remediation within the PRA is not allowed in a 0.27 nautical mile radius around the following coordinates due to the presence of shipwrecks: 40° 25.30′ W, 73° 52.80′ N; 40° 25.27′ W, 73° 52.13′ N; 40° 25.07′ W, 73° 50.05′ N; 40° 22.46′ W, 73° 53.27′ N.

(C) No placement of material may take place within the Buffer Zone, although this zone may receive material that incidentally spreads out of the PRA. The Buffer Zone is an approximately 5.7 square nautical mile area (0.27 nautical mile wide band around the PRA), which is bounded by the following coordinates:

| Point | Latitude DMS | Longitude DMS | Latitude DDM | Longitude DDM |
|---|---|---|---|---|
| A | 40°25′39″ N | 73°53′55″ W | 40°25.65′ N | 73°53.92′ W. |
| B | 40°25′23″ N | 73°53′34″ W | 40°25.38′ N | 73°53.57′ W. |
| C | 40°25′39″ N | 73°51′48″ W | 40°25.65′ N | 73°51.80′ W. |
| D | 40°25′22″ N | 73°52′08″ W | 40°25.37′ N | 73°52.13′ W. |
| E | 40°23′48″ N | 73°51′48″ W | 40°23.80′ N | 73°51.80′ W. |
| F | 40°23′13″ N | 73°52′09″ W | 40°23.22′ N | 73°52.15′ W. |
| G | 40°23′13″ N | 73°51′28″ W | 40°23.22′ N | 73°51.47′ W. |
| H | 40°22′41″ N | 73°51′28″ W | 40°22.68′ N | 73°51.47′ W. |
| I | 40°22′41″ N | 73°50′43″ W | 40°22.68′ N | 73°50.72′ W. |
| J | 40°23′48″ N | 73°51′06″ W | 40°23.80′ N | 73°51.10′ W. |
| K | 40°25′39″ N | 73°51′06″ W | 40°25.65′ N | 73°51.10′ W. |
| L | 40°25′22″ N | 73°50′44″ W | 40°25.37′ N | 73°50.73′ W. |
| M | 40°25′39″ N | 73°48′58″ W | 40°25.65′ N | 73°48.97′ W. |
| N | 40°25′22″ N | 73°49′19″ W | 40°25.37′ N | 73°49.32′ W. |
| O | 40°21′35″ N | 73°49′19″ W | 40°21.58′ N | 73°49.32′ W. |
| P | 40°21′19″ N | 73°48′57″ W | 40°21.32′ N | 73°48.95′ W. |
| Q | 40°21′36″ N | 73°52′08″ W | 40°21.60′ N | 73°52.13′ W. |
| R | 40°21′19″ N | 73°52′30″ W | 40°21.32′ N | 73°52.50′ W. |
| S | 40°21′52″ N | 73°53′55″ W | 40°21.87′ N | 73°53.92′ W. |
| T | 40°22′08″ N | 73°52′08″ W | 40°22.13′ N | 73°52.13′ W. |
| U | 40°22′08″ N | 73°53′34″ W | 40°22.13′ N | 73°53.57′ W. |
| V | 40°21′52″ N | 73°52′30″ W | 40°21.87′ N | 73°52.50′ W. |

DMS = Degrees, Minutes, Seconds.
DDM = Degrees, Decimal Minutes.

(D) No placement or incidental spread of the material is allowed within the No Discharge Zone, an approximately 1.0 square nautical mile area, bounded by the following coordinates:

| Point | Latitude DMS | Longitude DMS | Latitude DDM | Longitude DDM |
|---|---|---|---|---|
| C | 40°25′39″ N | 73°51′48″ W | 40°25.65′ N | 73°51.80′ W. |
| E | 40°23′48″ N | 73°51′48″ W | 40°23.80′ N | 73°51.80′ W. |
| J | 40°23′48″ N | 73°51′06″ W | 40°23.80′ N | 73°51.10′ W. |
| K | 40°25′39″ N | 73°51′06″ W | 40°25.65′ N | 73°51.10′ W. |

DMS = Degrees, Minutes, Seconds.
DDM = Degrees, Decimal Minutes.

(vi) Period of Use: Continuing use until EPA determines that the PRA has been sufficiently capped with at least 1 meter of the Material for Remediation. At that time, EPA will undertake any necessary rulemaking to dedesignate the HARS.

(7) Manasquan, New Jersey Dredged Material Disposal Site.

(i) *Location:* 40°06′36″N., 74°01′34″W.; 40°06′19″N., 74°01′39″W.; 40°06′18″N., 74°01′53″W.; 40°06′41″N., 74°01′51″W.

(ii) *Size:* Approximately 0.11 square nautical miles.

(iii) *Depth:* Approximately 18 meters.

(iv) *Primary Use:* Dredged material disposal.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Manasquan Inlet, New Jersey.

(8) Absecon Inlet, NJ Dredged Material Disposal Site.

(i) *Location:* 39°20′39″N., 74°18′43″W.; 39°20′30″N., 74°18′25″W.; 39°20′03″N., 74°18′43″W.; 39°20′12″N., 74°19′01″W.

(ii) *Size:* Approximately 0.28 square nautical miles.

(iii) *Depth:* Approximately 17 meters.

(iv) *Primary Use:* Dredged material disposal.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Absecon Inlet, New Jersey.

(9) Cold Spring Inlet, NJ Dredged Material Disposal Site.

(i) *Location:* 38°55′52″N., 74°53′04″W.; 38°55′37″N., 74°52′55″W.; 38°55′23″N., 74°53′27″W.; 38°55′36″N., 74°53′36″W.

(ii) *Size:* Approximately 0.13 square nautical miles.

(iii) *Depth:* Approximately 9 meters.

(iv) *Primary Use:* Dredged material disposal.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Cold Spring Inlet, New Jersey.

(10) San Juan Harbor, PR, Dredged Material Site.

(i) *Location:* 18°30′10″N., 66°09′31″W.; 18°30′10″N., 66°08′29″W.; 18°31′10″N., 66°08′29″W.; 18°31′10″N., 66°09′31″W.

(ii) *Size:* 0.98 square nautical mile.

(iii) *Depth:* Ranges from 200 to 400 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Port of San Juan, Puerto Rico, and coastal areas within 20 miles of said port entrance.

(11) Arecibo Harbor, PR Dredged Material Disposal Site.

(i) *Location:* 18°31′00″ N., 66°43′47″ W.; 18°31′00″ N., 66°42′ 45″ W.; 18°30′00″ N., 66°42′45″W.; 18°30′00″ N., 66°43′47″ W.

(ii) *Size:* Approximately 1 square nautical mile.

(iii) *Depth:* Ranges from 101 to 417 meters.

(iv) *Primary Use:* Dredged material disposal.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Arecibo Harbor, PR.

(12) Mayaguez Harbor, PR Dredged Material Disposal Site.

(i) *Location:* 18°15′30″ N., 67°16′13″ W.; 18°15′30″ N., 67°15′11″ W.; 18°14′30″ N., 67°15′11″ W.; 18°14′30″ N., 67°16′13″ W.

(ii) *Size:* Approximately 1 square nautical mile.

(iii) *Depth:* Ranges from 351 to 384 meters.

(iv) *Primary Use:* Dredged material disposal.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Mayaguez Harbor, PR.

(13) Ponce Harbor, PR Dredged Material Disposal Site.

(i) *Location:* 17°54′00″ N., 66°37′43″ W.; 17°54′00″ N., 66°36′41″ W.; 17°53′00″ N., 66°36′41″ W.; 17°53′00″ N., 66°37′43″ W.

(ii) *Size:* Approximately 1 square nautical mile.

(iii) *Depth:* Ranges from 329 to 457 meters.

(iv) *Primary Use:* Dredged material disposal.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Ponce Harbor, PR.

(14) Yabucoa Harbor, PR Dredged Material Disposal Site.

(i) *Location:* 18°03′42″ N., 65°42′49″ W.; 18°03′42″ N., 65°41′47″ W.; 18°02′42″ N., 65°41′47″W.; 18°02′42″ N., 65°42′49″ W.

(ii) *Size:* Approximately 1 square nautical mile.

(iii) *Depth:* Ranges from 549 to 914 meters.

(iv) *Primary Use:* Dredged material disposal.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Yabucoa Harbor, PR.

(e) Region II Final Other Wastes Sites.

(1) No final sites.

(2) [Reserved]

(f) Region III Final Dredged Material Sites.

(1) Dam Neck, Virginia, Dredged Material Disposal Site.

(i) *Location:* 36°51′24.1″ N., 75°54′41.4″ W.; 36°51′24.1″ N., 75°53′02.9″ W.; 36°50′52.0″ N., 75°52′49.0″W.; 36°46′27.4″ N., 75°51′39.2″ W.; 36°46′27.5″ N., 75°54′19.0″ W.; 36°50′05.0″ N., 75°54′19.0″ W.

(ii) *Size:* 8 square nautical miles.

(iii) *Depth:* Averages 11 meters.

(iv) *Primary Use:* Dredged Material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the mouth of Chesapeake Bay.

(2) Norfolk, VA, Dredged Material Disposal Site.

(i) *Location:* Center point: Latitude—36°59′00″ N., Longitude—75°39′00″ W.

(ii) *Size:* Circular with a radius of 7.4 kilometers (4 nautical miles).

(iii) *Depth:* Ranges from 13.1 to 26 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Site shall be limited to suitable dredged material which passed the criteria for ocean dumping.

(g) Region III Final Other Wastes Sites.

(1) No final sites.

(2) [Reserved]

(h) Region IV Final Dredged Material Sites.

(1) Morehead City, NC Dredged Material Disposal Site.

(i) *Location:* 34°38′30″ N., 76°45′0″ W.; 34°38′30″ N., 76°41′42″ W.; 34°38′09″ N., 76°41′0″ W.; 34°36′0″ N., 76°41′0″ W.; 34°36′0″ N., 76°45′0″ W.

(ii) *Size:* 8 square nautical miles.

(iii) *Depth:* Average 12.0 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Morehead City Harbor, North Carolina area. All material disposed must satisfy the requirements of the ocean dumping regulations.

(2) Wilmington, NC Dredged Material Disposal Site.

(i) *Location:* 33°49′30″ N., 78°03′06″ W.; 33°48′18″ N., 78°01′39″ W.; 33°47′19″ N., 78°02′48″ W.; 33°48′30″ N., 78°04′16″ W.

(ii) *Size:* 2.3 square nautical miles.

(iii) *Depth:* Averages 13 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to the dredged material from Wilmington Harbor area.

(3) Georgetown Harbor; Georgetown, South Carolina: Ocean Dredged Material Disposal Site.

(i) *Location:* 33°11′18″ N., 79°07′20″ W.; 33°11′18″ N., 79°05′23″ W.; 33°10′38″ N., 79°05′24″ W.; 33°10′38″ N., 79°07′21″ W.

(ii) *Size:* 1 square nautical mile.

(iii) *Depth:* 6 to 11 meter range.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to suitable dredged material from the greater Georgetown, South Carolina, area.

(4) [Reserved]

(5) Charleston, SC Harbor Deepening Project Dredged Material Disposal Site.

(i) *Location:* 32°38′06″N., 79°41′57″W.; 32°40′42″N., 79°47′30″W.; 32°39′04″N., 79°49′21″W.; 32°36′28″N., 79°43′48″W.

(ii) *Size:* 11.8 square nautical miles.

(iii) *Depth:* Averages 11 meters.

(iv) *Primary use:* Dredged material from the Charleston Harbor deepening project.

(v) Period of use: Continued use.

(vi) Restriction: Disposal shall be limited to dredged material from the Charleston Harbor area. All dredged materials, except entrance channel materials, shall be limited to that part of the site east of the line between coordinates 32°39′04″ N, 79°44′25″ W and 32°37′24″ N, 79°45′30″ W unless the material can be shown by sufficient testing to contain 10% or less of fine material (grain size of less than 0.074 mm) by weight and shown to be suitable for ocean disposal. Additionally, all disposals shall be in accordance with all provisions of material placement as

specified by the Site Management Plan.

(6) Savannah, GA Dredged Material Disposal Site.

(i) *Location:* 31°55′53″N., 80°44′20″W.; 31°57′55″N., 80°46′48″W.; 31°57′55″N., 80°44′20″W.; 31°55′53″N., 80°46′48″W.

(ii) *Size:* 4.26 square nautical miles.

(iii) *Depth:* Averages 11.4 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Savannah Harbor area.

(7) Brunswick Harbor, Brunswick, Georgia Ocean Dredged Material Disposal Site.

(i) *Location:* 31°02′35″N., 81°17′40″W.; 31°02′35″N., 81°16′30″W.; 31°00′30″N., 81°16′30″W.; 31°00′30″N., 81°17′42″W.

(ii) *Size:* Approximately 2 square nautical miles.

(iii) *Depth:* Average 9 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to suitable dredged material from the greater Brunswick, Georgia, vicinity.

(8) Fernandina Beach, FL Dredged Material Disposal Site.

(i) *Location:* 30°33′00″N., 81°16′52″W.; 30°31′00″N., 81°16′52″W.; 30°31′00″N., 81°19′08″W.; 30°33′00″N., 81°19′08″W.

(ii) *Size:* Four square nautical miles.

(iii) *Depth:* Average 16 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing Use.

(vi) *Restriction:* Disposal shall be limited to dredged material which meets the criteria given in the Ocean Dumping Regulations in 40 CFR part 227.

(9) Jacksonville, FL Dredged Material Site.

(i) *Location:* 30°21′30″N., 81°18′34″W.; 30°21′30″N., 81°17′26″W.; 30°20′30″N., 81°17′26″W.; 30°20′30″N., 81°18′34″W.

(ii) *Size:* One square nautical mile.

(iii) *Depth:* Ranges from 12 to 16 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Jacksonville, Florida, area.

(10) Canaveral Harbor, FL, Dredged Material Dumpsite.

(i) *Location:* 28°20′15″N., 80°31′11″W.; 28°18′51″N., 80°29′15″W.; 28°17′13″N., 80°30′53″W.; 28°18′36″N., 80°32′45″W.

Center coordinates: 28°18′44″N., 80°31′00″W. (NAD 27).

(ii) *Size:* 4 square nautical miles.

(iii) *Depth:* Range 47 to 55 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to suitable dredged material from the greater Canaveral, Florida, vicinity.

(11) Fort Pierce Harbor, FL, Fort Pierce, FL, Ocean Dredged material Disposal Site.

(i) Location: 27°28′00″ N., 80°12′33″ W.; 27°28′00″ N., 80°11′27″ W.; 27°27′00″ N., 80°11′27″ W.; and 27°27′00″ N., 80°12′33″ W.

(ii) *Size:* 1 square nautical mile.

(iii) *Depth:* Average range 40 to 54 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to suitable dredged material from the greater Fort Pierce Harbor vicinity. All dredged material consisting of greater than 10% fine grained material (grain size of less than 0.047mm) by weight shall be limited to that part of the site east of 80°12′00″W. and south of 27°27′20″N.

(12) Pensacola Nearshore, FL Dredged Material Disposal Site.

(i) *Location:* 30°17′24″N., 87°18′30″W.; 30°17′00″N., 87°19′50″W.; 30°15′36″N., 87°17′48″W.; 30°15′15″N., 87°19′18″W.

(ii) *Size:* 2.48 square nautical miles.

(iii) *Depth:* Averages 11 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged materials which are shown to be predominantly sand (defined by a median grain size greater than 0.125 mm and a composition of less than 10% fines) and meet the Ocean Dumping Criteria.

(13) Pensacola, Florida Ocean Dredged Material Disposal Site, i.e. the Pensacola (Offshore) Ocean Dredged Material Disposal Site.

(i) *Location:* 30°08′50″N., 87°19′30″W.; 30°08′50″N., 87°16′30″W.; 30°07′05″″N., 87°16′30″W.; 30°07′05″N., 87°19′30″W.

(ii) *Size:* Approximately 6 square statute miles.

(iii) *Depth:* Ranges from 65 to 80 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal is restricted to predominantly fine-grained dredged material from the greater Pensacola, Florida area that meets the Ocean Dumping Criteria but is not suitable for beach nourishment or disposal at the existing EPA designated Pensacola (Nearshore) ODMDS (§ 228.15(h)(11)). The Pensacola (Nearshore) ODMDS is restricted to suitable dredged material with a median grain size of > 0.125 mm and a composition of < 10% fines.

(14) Mobile, Alabama Dredged Material Disposal Site.

(i) *Location:* 30°10′00″N., 88°07′42″W.; 30°10′24″N., 88°05′12″W.; 30°09′24″N., 88°04′42″W.; 30°08′30″N., 88°05′12″W.; 30°08′30″N., 88°08′12″W.

(ii) *Size:* 4.8 square nautical miles.

(iii) *Depth:* Average 14 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged materials which meet the Ocean Dumping Criteria.

(15) Pascagoula, MS, Ocean Dredged Material Dumpsite.

(i) *Location:* 30°12′06″N., 88°44′30″W.; 30°11′42″N., 88°33′24″W.; 30°08′30″N., 88°37′00″W.; and 30°08′18″N., 88°41′54″W.

Center coordinates: 30°10′09″N., 88°39′12″W.

(ii) *Size:* 18.5 square nautical miles.

(iii) *Depth:* Average 46 feet, range 38–52 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to suitable material from the Mississippi Sound and vicinity.

(16) Gulfport, Mississippi Dredged Material Disposal Site—Eastern Site

(i) *Location:* 30°11′10″N., 88°58′24″W.; 30°11′12″N., 88°57′30″W.; 30°07′36″N., 88°54′24″W.; 30°07′24″N., 88°54′48″W.

(ii) *Size:* 2.47 square nautical miles.

(iii) *Depth:* 9.1 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to materials which meet the Ocean Dumping Criteria.

(17) Gulfport, MS Dredged Material Disposal Site—Western Site.

(i) *Location:* 30°12′00″N., 89°00′30″W.; 30°12′00″N., 88°59′30″W.; 30°11′00″N., 89°00′00″W.; 30°07′00″N., 88°56′30″W.; 30°06′36″N., 88°57′00″W.; 30°10′30″N., 89°00′36″W.

(ii) *Size:* 5.2 square nautical miles.

(iii) *Depth:* 8.2 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) Disposal shall be limited to dredged material which meets the Ocean Dumping Criteria.

(18) Tampa, Florida; Ocean Dredged Material Disposal Site _____ Region IV.

(i) Location:

| | |
|---|---|
| 27°32′27″ N | 83°06′02″ W; |
| 27°32′27″ N | 83°03′46″ W; |
| 27°30′27″ N | 83°06′02″ W; |
| 27°30′27″ N | 83°03′46″ W. |

(ii) Size: Approximately 4 square nautical miles.

(iii) Depth: Approximately 22 meters.

(iv) Primary use: Dredged material.

(v) Period of use: Continuing use.

(vi) Restriction: Disposal shall be limited to suitable dredged material from the greater Tampa, Florida vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(19) Miami, Florida; Ocean Dredged Material Disposal Site.

(i) Location:

| | |
|---|---|
| 25°45′30″ N | 80°03′54″ W; |
| 25°45′30″ N | 80°02′50″ W; |
| 25°44′30″ N | 80°03′54″ W; |
| 25°44′30″ N | 80°02′50″ W. |

Center coordinates are 25°45′00″ N and 80°03′22″ W.

(ii) Size: Approximately 1 square nautical mile.

(iii) Depth: Ranges from 130 to 240 meters.

(iv) Primary use: Dredged material.

(v) Period of use: Continuing use.

(vi) Restriction: Disposal shall be limited to suitable dredged material from the greater Miami, Florida vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(i) Region IV Final Other Wastes Sites.

(1) No final sites.

(2) [Reserved]

(j) Region VI Final Dredged Material Sites.

(1) Mississippi River Gulf Outlet, LA.

(i) *Location:* 29°32′35″N., 89°12′38″W.; 29°29′21″N., 89°08′00″W.; 29°24′32″N., 88°59′23″W.; 29°24′28″N., 88°59′39″W.; 29°28′59″N., 89°08′19″W.; 29°32′15″N., 89°12′57″W.; thence to point of beginning.

(ii) *Size:* 6.03 square nautical miles.

(iii) *Depth:* Ranges from 20 to 40 feet.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from the vicinity of Mississippi River Gulf Outlet.

(2) Southwest Pass—Mississippi River, LA.

(i) *Location:* 28°54′12″N., 89°27′15″W.; 28°54′12″N., 89°26′00″W.; 28°51′00″N., 89°27′15″W.; 28°51′00″N., 89°26′00″W.

(ii) *Size:* 3.44 square nautical miles.

(iii) *Depth:* Ranges from 2.7 to 32.2 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from the vicinity of the Southwest Pass Channel.

(3) Barataria Bay Waterway, LA.

(i) *Location:* 29°16′10″N., 89°56′20″W.; 29°14′19″N., 89°53′16″W.; 29°14′00″N., 89°53′36″W.; 29°16′29″N., 89°55′59″W.

(ii) *Size:* 1.4 square nautical miles.

(iii) *Depth:* Ranges from 8–20 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the vicinity of Barataria Bay Waterway.

(4) Houma Navigation Canal, Louisiana.

(i) *Location:* 29°05′22.3″N., 90°34′43″W.; thence following a line 1000 feet west of the channel centerline to 29°02′17.8″N., 90°34′28.4″W.; thence to 29°02′12.6″N., 90°35′27.8″W.; thence to 29°05′30.8″N., 90°35′27.8″W.; thence to the point of beginning.

(ii) *Size:* 2.08 square nautical miles.

(iii) *Depth:* Ranges from 6 to 30 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from the vicinity of Cat Island Pass, Louisiana.

(5) Calcasieu, LA Dredged Material Site 1.

(i) *Location:* 29°45′39″N., 93°19′36″W.; 29°42′42″N., 93°19′06″W.; 29°42′36″N., 93°19′48″W.; 29°44′42″N., 93°20′12″W.; 29°44′42″N., 93°20′24″W.; 29°45′27″N., 93°20′33″W.

(ii) *Size:* 1.76 square nautical miles.

(iii) *Depth:* Ranges from 2 to 8 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the vicinity of the Calcasieu River and Pass Project.

(6) Calcasieu, LA Dredged Material Site 2.

(i) *Location:* 29°44′31″N., 93°20′43″W.; 29°39′45″N., 93°19′56″W.; 29°39′34″N., 93°20′46″W.; 29°44′25″N., 93°21′33″W.

(ii) *Size:* 3.53 square nautical miles.

(iii) *Depth:* Ranges from 2 to 11 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the vicinity of the Calcasieu River and Pass Project.

(7) Calcasieu, LA Dredged Material Site 3.

(i) *Location:* 29°37′50″N., 93°19′37″W.; 29°37′25″N., 93°19′33″W.; 29°33′55″N., 93°16′23″W.; 29°33′49″N., 93°16′5″W.; 29°30′59″N., 93°13′51″W.; 29°29′10″N., 93°13′49″W.; 29°29′05″N., 93°14′23″W.; 29°30′49″N., 93°14′25″W.; 29°37′26″N., 93°20′24″W.; 29°37′44″N., 93°20′27″W.

(ii) *Size:* 5.88 square nautical miles.

(iii) *Depth:* Ranges from 11 to 14 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use: Continuing use.*

(vi) *Restriction:* Disposal shall be limited to dredged material from the vicinity of the Calcasieu River and Pass Project.

(8) Sabine-Neches, TX Dredged Material Site 1.

(i) *Location:* 29°28′03″N., 93°41′14″W.; 29°26′11″N., 93°41′14″W.; 29°26′11″N., 93°44′11″W.

(ii) *Size:* 2.4 square nautical miles.

(iii) *Depth:* Ranges from 11–13 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Sabine-Neches area.

(9) Sabine-Neches, TX Dredged Material Site 2.

(i) *Location:* 29°30′41″N., 93°43′49″W.; 29°28′42″N., 93°41′33″W.; 29°28′42″N., 93°44′49″W.; 29°30′08″N., 93°46′27″W.

(ii) *Size:* 4.2 square nautical miles.

(iii) *Depth:* Ranges from 9–13 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use: Continuing use.*

(vi) *Restriction:* Disposal shall be limited to dredged material from the Sabine-Neches area.

(10) Sabine-Neches, TX Dredged Material Site 3.

(i) *Location:* 29°34′24″N., 93°48′13″W.; 29°32′47″N., 93°46′16″W.; 29°32′06″N., 93°46′29″W.; 29°31′42″N., 93°48′16″W.; 29°32′59″N., 93°49′48″W.

(ii) *Size:* 4.7 square nautical miles.

(iii) *Depth:* 10 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Sabine-Neches area.

(11) Sabine-Neches, TX, Dredged Material Site 4.

(i) *Location:* 29°38′09″N., 93°′dprime;W.; 29°35′53″N., 93°48′18″W.; 29°35′06″N., 93°50′24″W.; 29°36′37″N., 93°51′09″W.; 29°37′00″N., 93°50′06″W.; 29°37′46″N., 93°50′26″W.

(ii) *Size:* 4.2 square nautical miles.

(iii) *Depth:* Ranges from 5–9 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Sabine-Neches area.

(12) Galveston, TX Dredged Material Site.

(i) *Location:* 29°18′00″N., 94°39′30″W; 29°15′54″N., 94°37′06″W.; 29°14′24″N., 94°3′8′42″W.; 29°16′54″N., 94°41′30″W.

(ii) *Size:* 6.6 square nautical miles.

(iii) *Depth:* Ranges from 10 to 15.5 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Galveston, Texas area.

(13) Freeport Harbor, TX, New Work (45 Foot Project).

(i) *Location:* 28°50″51″N., 95°13′54″W.; 28°51′44″N., 95°14′49″W.; 28°50′15″N., 95°16′40″W.; 28°49′22″N., 95°15′45″W.

(ii) *Size:* 2.64 square nautical miles.

(iii) *Depth:* 54 to 61 feet.

(iv) *Primary Use:* Construction (new work) dredged material.

(v) *Period of Use:* Indefinite period of time.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Freeport Harbor Entrance and Jetty Channels, Texas.

(14) Freeport Harbor, TX, Maintenance (45 Foot Project).

(i) *Location:* 28°54′00″N., 95°15′49″W.; 28°53′28″N., 95°15′16″W.; 28°52′00″N., 95°16′59″W.; 28°52′32″N., 95°17′32″W.

(ii) *Size:* 1.53 square nautical miles.

(iii) *Depth:* 31 to 38 feet.

(iv) *Primary use:* Maintenance dredged material.

(v) *Period of Use:* Indefinite period of time.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Freeport Harbor Entrance and Jetty Channels, Texas.

(15) Matagorda Ship Channel, TX.

(i) *Location:* 28°23′48″N., 96°18′00″W.; 28°23′21″N., 96°18′31″W.; 28°22′43″N., 96°17′52″W.; 28°23′11″N., 96°17′22″W.

(ii) *Size:* 0.56 square nautical mile.

(iii) *Depth:* Ranges from 25–40 feet.

(iv) *Primary Use:* Dredged Material.

(v) *Period of Use:* Indefinite period of time.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Matagorda Ship Channel, Texas.

(16) Homeport Project, Port Aransas, TX.

(i) *Location:* 27°47′42″ N., 97°00′12″ W.; 27°47′15″ N., 96°59′25″ W.; 27°46′17″ N., 97°01′12″ W.; 27°45′49″ N., 97°00′25″ W.

(ii) *Size:* 1.4 square miles.

(iii) *Depth:* Ranges from 45–55 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* 50 years.

(vi) *Restriction:* Disposal shall be limited to dredged material from the U.S. Navy Homeport Project, Corpus Christi/Ingleside, TX.

(17) Corpus Christi Ship Channel, TX.

(i) *Location:* 27°49′10″N., 97°01′09″W.; 27°48′42″N., 97°00′21″W.; 27°48′06″N., 97°00′48″W.; 27°48′33″N., 97°01′36″W.

(ii) *Size:* 0.63 square nautical mile.

(iii) *Depth:* Ranges from 35 to 50 feet.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Indefinite period of time.

(vi) *Restrictions:* Disposal shall be limited to dredged material from the Corpus Christi Ship Channel, Texas.

(18) Port Mansfield, TX.

(i) *Location:* 26°34′24″N., 97°15′15″W.; 26°34′26″N., 97°14′17″W.; 26°33′57″N., 97°14′17″W.; 26°33′55″N., 97°15′15″W.

(ii) *Size:* 0.42 Square nautical miles.

(iii) *Depth:* Ranges from 35–50 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Indefinite period of time.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Port Mansfield Entrance Channel, Texas.

(19) Brazos Island Harbor, TX.

(i) *Location:* 26°04′32″ N., 97°07′26″ W.; 26°04′32″ N., 97°06′30″ W.; 26°04′02″ N., 97°06′30″ W.; 26°04′02″ N., 97°07′26″ W.

(ii) *Size:* 0.42 square nautical miles.

(iii) *Depth:* Ranges from 55 to 65 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Indefinite period of time.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Brazos Island Harbor Entrance Channel, Texas.

(20) Brazos Island Harbor (42-Foot Project), TX.

(i) *Location:* 26°04′47″ N., 97°05′07″ W.; 26°05′16″ N., 97°05′04″ W.; 26°05′10″ N., 97°04′06″ W.; 26°04′42″ N., 97°04′09″ W.

(ii) *Size:* 0.42 square nautical miles.

(iii) *Depth: Ranges from 60–67 feet.*

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Indefinite period of time.

(vi) *Restrictions:* Disposal shall be limited to construction material dredged from the Brazos Island Harbor Entrance Channel, Texas.

(k) Region VI Final Other Wastes Sites.

(1) No final sites.

(2) [Reserved]

(l) Region IX Final Dredged Material Sites.

(1) San Diego, CA (LA–5).

(i) *Location:* Center coordinates of the site are: 32°36.83′ North Latitude and 117°20.67′ West Latitude (North American Datum from 1927), with a radius of 3,000 feet (910 meters).

(ii) *Size:* 0.77 square nautical miles.

(iii) *Depth:* 460 to 660 feet (145 to 200 meters).

(iv) *Primary Use:* Ocean dredged material disposal.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged materials that comply with EPA's Ocean Dumping Regulations and Corps Permitting Regulations.

(2) Los Angeles/Long Beach, CA (LA–2).

(i) *Location:* 33°37.10′ North Latitude by 118°17.40′ West Longitude (North American Datum from 1983), with a radius of 3,000 feet (910 meters).

(ii) *Size:* 0.77 square nautical miles.

(iii) *Depth:* 380 to 1060 feet (110 to 320 meters).

(iv) *Primary use:* Ocean dredged material disposal.

(v) *Period of use:* Continuing use, subject to submission of a revised Consistency Determination to the California Coastal Commission after 5 years of site management and monitoring.

(vi) *Restrictions:* Disposal shall be limited to dredged sediments that comply with EPA's Ocean Dumping Regulations.

(3) San Francisco Deepwater Ocean Site (SF–DODS) Ocean Dredged Material Disposal Site—Region IX.

(i) *Location:* Center coordinates of the oval-shaped site are: 37°39.0′ North latitude by 123°29.0′ West longitude (North American Datum from 1983), with length (north-south axis) and width (west-east axis) dimensions of approximately 4 nautical miles (7.5 kilometers) and 2.5 nautical miles (4.5 kilometers), respectively.

(ii) *Size:* 6.5 square nautical miles (22 square kilometers).

(iii) *Depth:* 8,200 to 9,840 feet (2,500 to 3,000 meters).

(iv) *Use Restricted to Disposal of:* Dredged materials.

(v) *Period of Use:* Continuing use over 50 years from date of site designation, subject to restrictions and provisions set forth below.

(vi) *Restrictions/provisions:* The remainder of this §228.15(l)(3) (hereinafter referred to as ''this section'') constitutes the required Site Management and Monitoring Plan (SMMP) for the SF–DODS. This SMMP shall be supplemented by a Site Management and Monitoring Plan Implementation Manual (SMMP Implementation Manual) containing more detailed operational guidance. The SMMP Implementation

Manual may be periodically revised as necessary; proposed revisions to the SMMP Implementation Manual shall be made following opportunity for public review and comment. SF–DODS use shall be subject to the following restrictions and provisions:

(vii) *Type and capacity of disposed materials.* The interim site disposal capacity shall be 4.8 million cubic yards of suitable dredged material per year until December 31, 1998. Thereafter, the capacity of the SF–DODS shall be set in a separate rulemaking based on either a comprehensive long-term management strategy for management of dredged materials from San Francisco Bay (reflected in an EPA-prepared dredged material management planning document) or a separate alternatives-based EPA evaluation of the need for ocean disposal. This separate rulemaking will identify the appropriate site capacity for the remaining life of this site designation. No disposal at the SF–DODS may occur after December 31, 1998 without subsequent promulgation by Rule of appropriate annual site disposal capacity.

(viii) *Permit/project conditions.* Paragraph (l)(3)(viii)(A) of this section sets forth requirements for inclusion in permits to use the SF–DODS, and in all Army Corps of Engineers federal project authorizations. Paragraph (l)(3)(viii)(B) of this section describes additional project-specific conditions that will be required of disposal permits and operations as appropriate. Paragraph (l)(3)(viii)(C) of this section describes how alternative permit conditions may be authorized by EPA and the Corps of Engineers. All references to ''permittees'' shall be deemed to include the Army Corps of Engineers when implementing a federal dredging project.

(A) *Mandatory conditions.* All permits or federal project authorizations authorizing use of the SF–DODS shall include the following conditions, unless approval for an alternative permit condition is sought and granted pursuant to paragraph (l)(3)(viii)(C) of this section:

*(1)* Transportation of dredged material to the SF–DODS shall only be allowed when weather and sea state conditions will not interfere with safe transportation and will not create risk of spillage, leak or other loss of dredged material in transit to the SF–DODS. No disposal vessel trips shall be initiated when the National Weather Service has predicted combined seas in excess of eighteen feet or has issued a gale warning for local waters during the time period necessary for the disposal vessel to complete dumping operations.

*(2)* All vessels used for dredged material transportation and disposal must be load-lined at a level at which dredged material is not expected to be spilled in transit under anticipated sea state conditions. Disposal vessels shall not be filled above their load limitations. Before any disposal vessel departs for the SF–DODS, an independent quality control inspector must certify that it is filled correctly. For purposes of paragraph (l)(3)(viii) of this section, ''independent'' means not an employee of the permittee; however, the Corps of Engineers may provide inspectors for Corps of Engineers disposal operations.

*(3)* Dredged material shall not be leaked or spilled from disposal vessels during transit to the SF–DODS.

*(4)* Disposal vessels in transit to and from the SF–DODS shall remain at least three nautical miles from the Farallon Islands at all times.

*(5)* When dredged material is discharged within the SF–DODS, no portion of the vessel from which materials are released (for example, a hopper dredge vessel or a towed barge) can be further than 3,200 feet from the center of the target area, centered at 37°39′N, 123°29′W.

*(6)* No more than one disposal vessel may be present within the permissible dumping target area referred to in paragraph (l)(3)(viii)(A)(5) of this section at any time.

*(7)* Disposal vessels shall use an appropriate navigation system capable of indicating the position of the vessel carrying dredged material (for example, a hopper dredge vessel or a towed barge) with a minimum accuracy and precision of 100 feet during all disposal operations. If the positioning system fails, all disposal operations must cease until the navigational capabilities are restored.

*(8)* The permittee shall maintain daily records of the amount of material dredged and loaded into barges for disposal, the times that disposal vessel depart for, arrive at and return from the SF–DODS, the exact locations and times of disposal, and the volumes of material disposed at the SF–DODS during each vessel trip. The permittee shall further record wind and sea state observations at intervals to be established in the permit.

*(9)* For each disposal vessel trip, the permittee shall maintain a computer printout from a Global Positioning System or other acceptable navigation system showing transit routes and disposal coordinates, including the time and position of the disposal vessel when dumping was commenced and completed.

*(10)* An independent quality control inspector (as defined in paragraph (l)(3)(viii)(A)(*2*)) of this section shall observe all dredging and disposal operations. The inspector shall verify the information required in paragraphs (l)(3)(viii)(A)(*8*) and (*9*) of this section. The inspector shall promptly inform permittees of any inaccuracies or discrepancies concerning this information and shall prepare summary reports, which summarize all such inaccuracies and discrepancies, from time to time as shall be specified in permits. Such summary reports shall be sent by the permittee to the District Engineer and the Regional Administrator within a time interval that shall be specified in the permit.

*(11)* The permittee shall report any anticipated or actual permit violations to the District Engineer and the Regional Administrator within 24 hours of discovering such violations. In addition, the permittee shall prepare and submit reports, certified accurate by the independent quality control inspector, on a frequency that shall be specified in permits, to the District Engineer and the Regional Administrator setting forth the information required by paragraphs (l)(3)(viii)(A)*(8)* and *(9)* of this section.

*(12)* Permittees shall allow observers from the Point Reyes Bird Observatory or other appropriate independent observers as specified in permits to be present on disposal vessels on all trips to the SF–DODS for the purpose of conducting shipboard surveys of seabirds and marine mammals. In addition, permittees shall ensure that independent observers are present on a sufficient number of vessel trips to characterize fully the potential impact of disposal site use on seabirds and marine mammals, taking into account, to the extent feasible, seasonal variations in such potential impacts. At a minimum, permittees shall ensure that independent observers are present on at least one disposal trip in any calendar month in which a disposal trip to the SF-DODS is made.

*(13)* At the completion of short-term dredging projects or annually for ongoing projects, permittees shall prepare and submit to the District Engineer and the Regional Administrator complete pre-dredging and post-dredging bathymetric surveys showing the depth of all areas dredged, including side slope areas, before and after dredging. Permittees shall include a report indicating whether any dredged material was dredged outside of areas authorized for dredging or was dredged within project boundaries at depths deeper than authorized for dredging by their permits.

(B) *Project-specific conditions.* Permits or federal project authorizations authorizing use of the SF–DODS may include the following conditions, if EPA determines these conditions are necessary to facilitate safe use of the SF–DODS, the prevention of potential harm to the environment or accurate monitoring of site use:

*(1)* Permittees may be required to limit the speed of disposal vessels in transit to the SF-DODS to a rate that is safe under the circumstances and will prevent the spillage of dredged materials.

*(2)* Permittees may be required to use automated data logging systems for recording navigation and disposal coordinates and/or load levels throughout disposal trips when such systems are feasible and represent an improvement over manual recording methodologies.

*(3)* Any other conditions that EPA or the Corps of Engineers determine to be necessary or appropriate to facilitate compliance with the requirements of

the MPRSA and this section may be included in site use permits.

(C) *Alternative permit/project conditions.* Alternatives to the permit conditions specified in paragraph (l)(3)(viii) of this section in a permit or federal project authorization may be authorized if the permittee demonstrates to the District Engineer and the Regional Administrator that the alternative conditions are sufficient to accomplish the specific intended purpose of the permit condition in issue and further demonstrates that the waiver will not increase the risk of harm to the environment, the health or safety of persons, nor will impede monitoring of compliance with the MPRSA, regulations promulgated under the MPRSA, or any permit issued under the MPRSA.

(ix) *Site monitoring.* Data shall be collected in accordance with a three-tiered site monitoring program which consists of three interdependent types of monitoring for each tier: Physical, chemical and biological. In addition, periodic confirmatory monitoring concerning potential site contamination shall be performed. Specific guidance for site monitoring tasks required by this paragraph shall be described in a Site Management and Monitoring Implementation Manual (SMMP Implementation Manual) developed by EPA. The SMMP Implementation Manual shall be reviewed periodically and any necessary revisions to the Manual will be issued for public review under an EPA Public Notice.

(A) *Tier 1 monitoring activities.* Tier 1 monitoring activities shall consist of the following:

*(1) Physical monitoring.* Tier 1 Physical Monitoring shall consist of a physical survey to map the area on the seafloor within and in the vicinity of the disposal site where dredged material has been deposited (the footprint). Such a survey shall use appropriate technology (for example, sediment profile photography) to determine the areal extent and thickness of the disposed dredged material, and to determine if any dredged material has deposited outside of the disposal site boundary.

*(2) Chemical monitoring.* Tier 1 Chemical Monitoring shall consist of collecting, processing, and preserving boxcore samples of sediments so that such sediments could be subjected to sediment chemistry analysis in the appropriate tier. Samples shall be collected within the dredged material footprint, outside of the dredged material footprint, and outside of the disposal site boundaries. Samples within the footprint shall be subjected to chemical analysis in annual Tier 1 activity. Samples from outside of the footprint and outside of the disposal site boundaries shall be archived and analyzed only when the criteria requiring Tier 2 as specified in paragraph (l)(3)(x) of this section are met. A sufficient number of samples shall be collected so that the potential for adverse impacts due to elevated chemistry can be assessed with an appropriate time-series or ordinal technique.

*(3) Biological monitoring.* Tier 1 Biological Monitoring shall have two components: Monitoring of pelagic communities and monitoring of benthic communities.

*(i) Pelagic communities.* Tier 1 Biological Monitoring shall include regional surveys of seabirds, marine mammals and mid-water column fish populations appropriate for evaluating how these populations might be affected by disposal site use. A combination of annual regional and periodic (random) shipboard surveys of seabirds and marine mammals will be used. The regional survey designs for each category of biota shall be similar to that used for the regional characterization studies referenced in the Final Environmental Impact Statement for Designation of a Deep Water Ocean Dredged Material Disposal Site off San Francisco, California (August 1993) with appropriate realignments to accommodate transects within and in the vicinity of the SF–DODS. The periodic shipboard surveys shall be performed from vessels involved in dredged material disposal operations at the SF–DODS as specified in permit conditions imposed pursuant to paragraph (l)(3)(viii)(A)(12) of this section. The minimum number of surveys must be sufficient to characterize the disposal operations for each project, and, as practicable, provide seasonal data for an assessment of the potential for adverse impacts for the

one-year period. An appropriate time-series (ordinal), and community analysis shall be performed using data collected during the current year and previous years.

*(ii) Benthic communities.* Tier 1 Biological Monitoring shall include collection and preservation of boxcore samples of benthic communities so that such samples could be analyzed as a Tier 2 activity.

*(4) Annual reporting.* The results of the annual Tier 1 studies shall be compiled in an annual report which will be available for public review.

*(B) Tier 2 monitoring activities.* Tier 2 monitoring activities shall consist of the following:

*(1) Physical monitoring.* Tier 2 Physical Monitoring shall consist of oceanographic studies conducted to validate and/or improve the models used to predict the dispersion in the water column and deposition of dredged material on the seafloor at the SF–DODS. The appropriate physical oceanographic studies may include: The collection of additional current meter data, deployment of sediment traps, and deployment of surface and subsurface drifters.

*(2) Chemical monitoring.* Tier 2 Chemical Monitoring shall consist of performing sediment chemistry analysis on samples collected and preserved in Tier 1 from outside of the footprint and outside of the disposal site boundaries.

*(3) Biological monitoring.* Tier 2 Biological Monitoring shall involve monitoring of pelagic communities and monitoring of benthic communities.

*(i) Pelagic communities.* Tier 2 Biological Monitoring for pelagic communities shall include supplemental surveys of similar type to those in Tier 1, or other surveys as appropriate.

*(ii) Benthic communities.* Tier 2 Biological Monitoring for benthic communities shall include a comparison of the benthic community within the dredged material footprint to benthic communities in adjacent areas outside of the dredged material footprint. An appropriate time-series (ordinal) and community analysis shall be performed using data collected during the current year and previous years to determine whether there are adverse changes in the benthic populations outside of the disposal site which may endanger the marine environment.

*(4) Annual reporting.* The results of any required Tier 2 studies shall be compiled in an annual report which will be available for public review.

(C) *Tier 3 monitoring activities.* Tier 3 monitoring activities shall consist of the following:

*(1) Physical monitoring.* Tier 3 physical monitoring shall consist of advanced oceanographic studies to study the dispersion of dredged material in the water column and the deposition of dredged material on the seafloor in the vicinity of the SF-DODS. Such physical monitoring may include additional, intensified studies involving the collection of additional current meter data, deployment of sediment traps, and deployment of surface and subsurface drifters. Such studies may include additional sampling stations, greater frequency of sampling, more advanced sampling methodologies or equipment, or other additional increased study measures compared to similar studies conducted in Tier 1 or 2.

*(2) Chemical monitoring.* Tier 3 Chemical Monitoring shall consist of analysis of tissues of appropriate field-collected benthic and/or epifaunal organisms to determine bioaccumulation of contaminants that may be associated with dredged materials deposited at the SF-DODS. Sampling and analysis shall be designed and implemented to determine whether the SF-DODS is a source of adverse bioaccumulation in the tissues of benthic species collected at or outside the SF-DODS, compared to adjacent unimpacted areas, which may endanger the marine environment. Appropriate sampling methodologies for these tests will be determined and the appropriate analyses will involve the assessment of benthic body burdens of contaminants and correlation with comparison of the benthic communities inside and outside of the sediment footprint.

*(3) Biological monitoring.* Tier 3 biological monitoring shall have two components: monitoring of pelagic communities and monitoring of benthic communities.

*(i) Pelagic communities.* Tier 3 Biological Monitoring shall include advanced studies of seabirds, marine mammals

and mid-water column fish to evaluate how these populations might be affected by disposal site use. Such studies may include additional sampling stations, greater frequency of sampling, more advanced sampling methodologies or equipment, or other additional increased study measures compared to similar studies conducted in Tier 1 or 2. Studies may include evaluation of sub-lethal changes in the health of pelagic organisms, such as the development of lesions, tumors, developmental abnormality, decreased fecundity or other adverse sub-lethal effect.

(*ii*) *Benthic communities.* Tier 3 Biological Monitoring shall include advanced studies of benthic communities to evaluate how these populations might be affected by disposal site use. Such studies may include additional sampling stations, greater frequency of sampling, more advanced sampling methodologies or equipment, or other additional increased study measures compared to similar studies conducted in Tier 2. Studies may include evaluation of sub-lethal changes in the health of benthic organisms, such as the development of lesions, tumors, developmental abnormality, decreased fecundity or other adverse sub-lethal effect.

(*4*) *Reporting.* The results of any required Tier 3 studies shall be compiled in a report which will be available for public review.

(D) *Periodic confirmatory monitoring.* At least once every three years, the following confirmatory monitoring activities will be conducted and results compiled in a report which will be available for public review: Samples of sediments taken from the dredged material footprint shall be subjected to bioassay testing using one or more appropriate sensitive marine species consistent with applicable ocean disposal testing guidance (''Green Book'' or related Regional Implementation Agreements), as determined by the Regional Administrator, to confirm whether contaminated sediments are being deposited at the SF–DODS despite extensive pre-disposal testing. In addition, near-surface arrays of appropriate filter-feeding organisms (such as mussels) shall be deployed in at least three locations in and around the disposal site for at least one month during active site use, to confirm whether substantial bioaccumulation of contaminants may be associated with exposure to suspended sediment plumes from multiple disposal events. One array must be deployed outside the influence of any expected plumes to serve as a baseline reference.

(x) *Site management actions.* Once disposal operations at the site begin, the three-tier monitoring program described in paragraphs (l)(3)(ix) (A) through (C) of this section shall be implemented on an annual basis, through December 31, 1998, independent of the actual volumes disposed at the site. Thereafter, the Regional Administrator may establish a minimum annual disposal volume (not to exceed 10 percent of the designated site capacity at any time) below which this monitoring program need not be fully implemented. The Regional Administrator shall promptly review monitoring reports for the SF–DODS along with any other information available to the Regional Administrator concerning site monitoring activities. If the information gathered from monitoring at a given monitoring tier is not sufficient for the Regional Administrator to base reasonable conclusions as to whether disposal at the SF–DODS might be endangering the marine ecosystem, then the Regional Administrator shall require intensified monitoring at a higher tier. If monitoring at a given tier establishes that disposal at the SF–DODS is endangering the marine ecosystem, then the Regional Administrator shall require modification, suspension or termination of site use.

(A) *Selection of site monitoring tiers—*(*1*) *Physical monitoring.* Physical monitoring shall remain limited to Tier 1 monitoring when Tier 1 monitoring establishes that no significant amount of dredged material has been deposited or transported outside of the site boundaries. Tier 2 monitoring shall be employed when Tier 1 monitoring is insufficient to conclude that a significant amount of dredged material as defined in paragraph (l)(3)(x)(A)*(4)* of this section has not been deposited or transported outside of the site boundaries.

(*2*) *Chemical monitoring.* (*i*) Chemical monitoring shall remain limited to Tier 1 Chemical Monitoring when the

results of Physical Monitoring indicate that a significant amount of dredged material as defined in paragraph (l)(3)(x)(A)*(4)* of this section has not been deposited or transported off-site, and Tier 1 Chemical Monitoring establishes that dredged sediments deposited at the disposal site do not contain levels of chemical contaminants that are significantly elevated above the range of chemical contaminant levels in dredged sediments that the Regional Administrator and the District Engineer found to be suitable for disposal at the SF–DODS pursuant to 40 CFR part 227.

(*ii*) Tier 2 monitoring shall be employed when the results of Physical Monitoring indicate that a significant amount of dredged material as defined in paragraph (l)(3)(x)(A)*(4)* of this section has been deposited off-site, and Tier 1 Chemical Monitoring is insufficient to establish that dredged sediments deposited at the disposal site do not contain levels of chemical contaminants that are significantly elevated above the range of chemical contaminant levels in dredged sediments that the Regional Administrator and the District Engineer found to be suitable for disposal at the SF–DODS pursuant to 40 CFR part 227.

The Regional Administrator may employ Tier 2 monitoring when available evidence indicates that a significant amount of dredged material as defined in paragraph (l)(3)(x)(A)*(4)* of this section has been deposited near the SF–DODS site boundary.

(*iii*) Tier 3 monitoring shall be employed within and outside the dredged material footprint when Tier 2 Chemical Monitoring is insufficient to establish that dredged sediments deposited at the disposal site do not contain levels of chemical contaminants that are significantly elevated above the range of chemical contaminant levels in dredged sediments that the Regional Administrator and the District Engineer found to be suitable for disposal at the SF–DODS pursuant to 40 CFR part 227.

(*3*) *Biological monitoring.* (*i*) *Pelagic communities.* Biological monitoring for pelagic communities shall remain limited to Tier 1 monitoring when Tier 1 monitoring establishes that disposal at the SF–DODS has not endangered the monitored pelagic communities. When Tier 1 monitoring is insufficient to make reasonable conclusions whether disposal at the site has endangered the monitored pelagic communities, then Tier 2 monitoring of pelagic communities shall be employed. When Tier 2 monitoring is insufficient to make reasonable conclusions whether disposal at the site has endangered the monitored pelagic communities, then Tier 3 monitoring of pelagic communities shall be employed.

(*ii*) *Benthic communities.* Biological monitoring for benthic communities shall remain limited to Tier 1 monitoring when physical monitoring establishes that a significant amount of dredged material has not been deposited outside of the site boundaries. If physical monitoring indicates that a significant amount of dredged material has been deposited or transported outside of the site boundaries, then Tier 2 analysis of benthic communities shall be performed. If Chemical Monitoring establishes that there is significant bioaccumulation of contaminants in organisms sampled from within or outside the dredged material footprint, then Tier 3 Biological Monitoring of the disposal site shall be employed. Tier 3 Biological Monitoring may replace Tier 3 Chemical Monitoring if observed biological effects are established as surrogate indicators for bioaccumulation of chemical contaminants in sampled organisms.

(*4*) *Definition of significant dredged material accumulation.* For purposes of this paragraph (l)(3)(x)(A) of this section, dredged material accumulation on the ocean bottom to a thickness of five centimeters shall be considered to be a significant amount of dredged material. The Regional Administrator may determine that a lesser amount of accumulation is significant if available evidence indicates that a lesser amount of off-site accumulation could endanger marine resources.

(B) *Modification, suspension or termination of site use. (1)* If the results of site monitoring or other information indicate that any of the following are occurring as a result of disposal at the

SF–DODS, then the Regional Administrator shall modify, suspend, or terminate site use overall, or for individual projects as appropriate:

(*i*) Exceedance of Federal marine water quality criteria within the SF–DODS following initial mixing as defined in 40 CFR 227.29(a) or beyond the site boundary at any time;

(*ii*) Placement or movement of significant quantities of disposed material outside of site boundaries near or toward significant biological resource areas or marine sanctuaries;

(*iii*) Endangerment of the marine environment related to potentially significant adverse changes in the structure of the benthic community outside the disposal site boundary;

(*iv*) Endangerment to the health, welfare, or livelihood of persons or to the environment related to potentially significant adverse bioaccumulation in organisms collected from the disposal site or areas adjacent to the site boundary compared to the reference site;

(*v*) Endangerment to the health, welfare, or livelihood of persons related to potentially significant adverse impacts upon commercial or recreational fisheries resources near the site; or

(*vi*) Endangerment to the health, welfare, or livelihood of persons or to the environment related to any other potentially significant adverse environmental impacts.

(*2*) The Regional Administrator shall modify site use, rather than suspend or terminate site use, when site use modification will be sufficient to eliminate the adverse environmental impacts referred to in paragraphs (l)(3)(x)(B)*(1) (i)* or *(ii)* of this section or the endangerment to human health, welfare or livelihood to the environment referred to in paragraphs (l)(3)(x)(B)*(1) (iii)* through (*vi*) of this section. Notwithstanding the provisions of any permit or federal project authorization authorizing site use, the Regional Administrator shall order, following opportunity for public comment, any of the following modifications to site use that he or she deems necessary to eliminate the adverse environmental effect or endangerment to human health, welfare, or livelihood or to the environment:

(*i*) Change or additional restrictions upon the permissible times, rates and total volume of disposal of dredged material at the SF–DODS;

(*ii*) Change or additional restrictions upon the method of disposal or transportation of dredged materials for disposal; or

(*iii*) Change or additional limitations upon the type or quality of dredged materials according to chemical, physical, bioassay toxicity, or bioaccumulation characteristics.

(*3*) The Regional Administrator shall suspend site use when site use suspension is both necessary and sufficient to eliminate any adverse environmental effect or endangerment to human health, welfare, or livelihood or to the environment referred to in paragraph (l)(3)(x)(B)*(1)* of this section. Notwithstanding the provisions of any permit or federal project authorization authorizing site use, the Regional Administrator shall order, following opportunity for public comment, site use suspension until an appropriate management action is identified or for a time period that will eliminate the adverse environmental effect or endangerment to human health, welfare, or livelihood or to the environment.

(*4*) Notwithstanding the provisions of any permit or federal project authorization authorizing site use, the Regional Administrator shall order, following opportunity for public comment, site use permanently terminated if this is the only means for eliminating the adverse environmental impacts referred to in paragraphs (l)(3)(x)(B)*(1) (i)* or *(ii)* of this section or the endangerment to human health, welfare or livelihood to the environment referred to in paragraphs (l)(3)(x)(B)*(1) (iii)* through *(vi)* of this section.

(4) Channel Bar Site, San Francisco, CA (SF–8).

(i) *Location:* 37°44′55″N., 122°37′18″W; 37°45′45″N., 122°34′24″W.; 37°44′24″N., 122°37′06″W.; 37°45′15″N., 122°34′12″W.

(ii) *Size:* 4,572 x 914 meters.

(iii) *Depth:* Ranges from 11 to 14.3 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to material from required dredging

operations at the entrance of the San Francisco main ship channel which is composed primarily of sand having grain sizes compatible with naturally occurring sediments at the disposal site and containing approximately 5 percent of particles having grain sizes finer than that normally attributed to very fine sand (.075 millimeters). Other dredged materials meeting the requirements of 40 CFR 227.13 but having smaller grain sizes may be dumped at this site only upon completion of an appropriate case-by-case evaluation of the impact of such material on the site which demonstrates that such impact will be acceptable.

(5) Hilo, HI.

(i) *Location:* (center point): Latitude—19°48′30″N.; Longitude—154°58′30″W.

(ii) *Size:* Circular with a radius of 920 meters.

(iii) *Depth:* Ranges from 330 to 340 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material.

(6) Kahului, HI.

(i) *Location:* (center point): Latitude—21°04′42″N.; Longitude—156°29′00″W.

(ii) *Size:* Circular with a radius of 920 meters.

(iii) *Depth:* Ranges from 345 to 365 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material.

(7) South Oahu, HI.

(i) *Location:* (center point): Latitude—21°15′10″ N.; Longitude—157°56′50″ W.

(ii) *Size:* 2 kilometers wide and 2.6 kilometers long.

(iii) *Depth:* Ranges from 400 to 475 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material.

(8) Nawiliwili, HI.

(i) *Location:* (centerpoint): Latitude—21°55′00″ N. Longitude—159°17′00″ W.

(ii) *Size:* Circular with a radius of 920 meters.

(iii) *Depth:* Ranges from 840 to 1,120 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material.

(9) Port Allen, HI.

(i) *Location:* (center point) Latitude—21°50′00″ N. Longitude—159°35′00″ W.

(ii) *Size:* Circular with a radius of 920 meters.

(iii) *Depth:* Ranges from 1,460 to 1,610 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material.

(10) Humboldt Open Ocean Disposal Site (HOODS) Ocean Dredged Material Disposal Site—Region IX.

(i) Location: The coordinates of the corners of the square site are: 40°48′25″ North latitude (N) by 124°16′22″ West longitude (W); 40°49′03″ N by 124°17′22″ W; 40°47′38″ N by 124°17′22″ N; and 40°48′17″ N by 124°18′12″ W (North American Datum from 1983).

(ii) Size: 1 square nautical mile (3 square kilometers).

(iii) Depth: Water depths within the area range between approximately 160 to 180 feet (49 to 55 meters).

(iv) Use Restricted to Disposal of: Dredged materials.

(v) Period of Use: Continuing use over 50 years from date of site designation, subject to restrictions and provisions set forth in paragraph (l)(10)(vi) of this section.

(vi) Restrictions/Provisions: Site management and monitoring activities shall be implemented during the period of site use and in accordance with the Site Management and Monitoring Plan (SMMP) for the HOODS as incorporated in the Final EIS, and summarized in Section D of this final rule. All disposal activities shall be terminated if monitoring, as described in the SMMP, is not implemented. The SMMP may be periodically revised as necessary; proposed substantive revisions to the SMMP shall be made following opportunity for public review and comment.

(m) Region IX Final Other Wastes Sites.

(1) Fish Processing Waste Disposal Site, American Samoa.

(i) *Location:* 14°24.00′ South latitude by 170°38.30′ West longitude (1.5 nautical mile radius).

(ii) *Size:* 7.07 square nautical miles.

(iii) *Depth:* 1,502 fathoms (2,746 meters or 9,012 feet).

(iv) *Primary Use:* Disposal of fish processing wastes.

(v) *Period of Use:* Continued use.

(vi) *Restriction:* Disposal shall be limited to dissolved air flotation (DAF) sludge, presswater, and precooker water produced as a result of fish processing operations at fish canneries generated in American Samoa.

(2) [Reserved]

(n) Region X Final Dredged Material Sites.

(1) Chetco, OR, Dredged Material Site.

(i) *Location:* 42°01′55″ N., 124°16′37″ W.; 42°01′55″ N., 124°16′13″ W.; 42°01′37″ N., 124°16′13″ W.; and 42°01′37″ N., 124°16′37″ W. (NAD83)

(ii) *Size:* 0.09 square nautical mile.

(iii) *Depth:* 21 meters (average).

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material determined to be suitable for unconfined disposal from the Chetco Estuary and River and adjacent areas.

(2) Coos Bay, OR Dredged Material Site E.

(i) *Location:* 43°21′59″ N., 124°22′45″ W.;43°21′48″ N., 124°21′59″ W.; 43°21′35″ N., 124°22′05″ W.; 43°21′46″ N., 124°22′51″ W.

(ii) *Size:* 0.13 square nautical mile.

(iii) *Depth:* Averages 17 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material in the Coos Bay area of type 1, as defined in the site designation final EIS.

(3) Coos Bay, OR Dredged Material Site F.

(i) *Location:* 43°22′44″ N., 124°22′18″ W.; 43°22′29″ N., 124°21′34″ W.; 43°22′16″ N., 124°21′42″ W.; 43°22′31″ N., 124°22′26″ W.

(ii) *Size:* 0.13 square nautical mile.

(iii) *Depth:* Averages 24 meters.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material in the Coos Bay area of type 1, as defined in the site designation final EIS.

(4) Coos Bay, OR Dredged Material Site H.

(i) *Location:* 43°23′53″ N., 124°22′48″ W.; 43°23′42″ N., 124°23′01″ W.; 43°24′16″ N., 124°23′26″ W.; 43°24′05″ N., 124°23′38″ W.

(ii) *Size:* 0.13 square nautical mile.

(iii) *Depth:* Averages 55 meters.

(iv) *Primary Use:* Dredged material.

(v) Period of Use: Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material in the Coos Bay area of type 2 and 3, as defined in the site designation final EIS.

(5) Coquille River Entrance, OR.

(i) *Location:* 43°08′26″ N., 124°26′44″ W.; 43°08′3″ N., 124°26′08″ W.; 43°08′13″ N., 124°27′00″ W.; 43°07′50″ N., 124°26′23″ W.

Centroid: 43°08′08″ N., 124°26′34″ W.

(ii) *Size:* 0.17 square nautical miles.

(iii) *Depth:* 18.3 meters.

(iv) *Period of Use:* Continuing use.

(v) *Restrictions:* Disposal shall be limited to dredged material from the Coquille Estuary and River and adjacent areas.

(6) Mouth of Columbia River, OR/WA Dredged Material Site A.

(i) *Location:* 46°13′03″ N., 124°06′17″ W.; 46°12′50″ N., 124°05′55″ W.; 46°12′13″ N., 124°06′43″ W.; 46°12′26″ N., 124°07′05″ W.

(ii) *Size:* 0.27 square nautical mile.

(iii) *Depth:* Ranges from 14–25 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Columbia River entrance channel and adjacent areas.

(7) Mouth of Columbia River, OR/WA Dredged Material Site B.

(i) *Location:* 46°14′37″ N., 124°10′34″ W.; 46°13′53″ N., 124°10′01″ W.; 46°13′43″ N., 124°10′26″ W.; 46°14′28″ N., 124°10′59″ W.

(ii) *Size:* 0.25 square nautical mile.

(iii) *Depth:* Ranges from 24–39 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Columbia River entrance channel and adjacent areas.

(8) Mouth of Columbia River, OR/WA Dredged Material Site E.

(i) *Location:* 46°15′43″ N., 124°05′21″ W.; 46°15′36″ N., 124°05′11″ W.; 46°15′11″ N., 124°05′53″ W.; 46°15′18″ N., 124°06′03″W.

(ii) *Size:* 0.08 square nautical mile.

(iii) *Depth:* Ranges from 16–21 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Columbia River entrance channel and adjacent areas.

(9) Mouth of Columbia River, OR/WA Dredged Material Site F.

(i) *Location:* 46°12′12″ N., 124°09′00″ W.; 46°12′00″ N., 124°08′42″ W.; 46°11′48″ N., 124°09′00″ W.; 46°12′00″ N., 124°09′18″ W.

(ii) *Size:* 0.08 square nautical mile.

(iii) *Depth:* Ranges from 38–42 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material from the Columbia River entrance channel and adjacent areas.

(10) Grays Harbor Eight Mile Site.

(i) *Location:* Circle with a 0.40 mile radius around a central coordinate at 46°57′ N., 124°20.06′ W.

(ii) *Size:* 0.5 square nautical miles.

(iii) *Depth:* 42–49 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of Use:* One time use over multiple years. Designation of the site is anticipated within five years following completion of disposal and monitoring activities.

(vi) *Restrictions:* Disposal shall be limited to dredged material from initial construction of the Grays Harbor navigation project. Post-disposal monitoring will determine the need and extent of closure requirements.

(11) Grays Harbor Southwest Navigation Site.

(i) *Location:* 46°52.94′ N., 124°13.81′ W; 46°52.17′ N., 124°12.96′ W.; 46°51.15′ N., 124°14.19′ W.; 46°51.92′ N., 124°14.95′ W.

(ii) *Size:* 1.25 square nautical miles.

(iii) *Depth:* 30–37 meters (average).

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material determined to be suitable for unconfined disposal from Grays Harbor estuary and adjacent areas. Additional discharge restrictions will be contained in the EPA/Corps management plan for the site.

(12) Nome, AK—East Site.

(i) *Location:* 64°29′54″N., 165°24′41″W.; 64°29′45″N., 165°23′27″W.; 64°28′57″N., 165°23′29″W.; 64°29′07″N., 165°24′25″.

(ii) *Size:* 0.37 square nautical mile.

(iii) *Depth:* Ranges from 1 to 12 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Nome, Alaska, and adjacent areas. Use will be coordinated with the City of Nome prior to dredging.

(13) Nome, AK—West Site.

(i) *Location:* 64°30′04″N., 165°25′52″W.; 64°29′18″N., 165°26′04″W.; 64°29′13″N., 165°25′22″W.; 64°29′54″N., 165°24′45″W.

(ii) *Size:* 0.30 nautical miles.

(iii) *Depth:* Ranges from 1 to 11 meters.

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from Nome, Alaska, and adjacent areas. Use will be coordinated with the City of Nome prior to dredging. Preference will be given to placing any material in the inner third of the site to supplement littoral drift, as needed.

(o) Region X Final Other Wastes Sites.

(1) No final sites.

(2) [Reserved]

[59 FR 61130, Nov. 29, 1994, as amended at 60 FR 2699, Jan. 11, 1995; 60 FR 25148, May 11, 1995; 60 FR 49230, Sept. 22, 1995; 60 FR 50114, Sept. 28, 1995; 61 FR 2946, Jan. 30, 1996; 61 FR 68970, Dec. 30, 1996; 62 FR 46149, Aug. 29, 1997]

## PART 229—GENERAL PERMITS

Sec.
229.1 Burial at sea.
229.2 Transport of target vessels.
229.3 Transportation and disposal of vessels.

AUTHORITY: 33 U.S.C. 1412 and 1418.

SOURCE: 42 FR 2489, Jan. 11, 1977, unless otherwise noted.

### § 229.1 Burial at sea.

(a) All persons subject to title I of the Act are hereby granted a general permit to transport human remains from the United States and all persons owning or operating a vessel or aircraft registered in the United States or flying the United States flag and all departments, agencies, or instrumentalities of the United States are hereby granted a general permit to transport human remains from any location for the purpose of burial at sea and to bury

such remains at sea subject to the following conditions:

(1) Except as herein otherwise provided, human remains shall be prepared for burial at sea and shall be buried in accordance with accepted practices and requirements as may be deemed appropriate and desirable by the United States Navy, United States Coast Guard, or civil authority charged with the responsibility for making such arrangements;

(2) Burial at sea of human remains which are not cremated shall take place no closer than 3 nautical miles from land and in water no less than one hundred fathoms (six hundred feet) deep and in no less than three hundred fathoms (eighteen hundred feet) from (i) 27°30′00″ to 31°00′00″ North Latitude off St. Augustine and Cape Canaveral, Florida; (ii) 82°20′00″ to 84°00′00″ West Longitude off Dry Tortugas, Florida; and (iii) 87°15′00″ to 89°50′00″ West Longitude off the Mississippi River Delta, Louisiana, to Pensacola, Florida. All necessary measures shall be taken to ensure that the remains sink to the bottom rapidly and permanently; and

(3) Cremated remains shall be buried in or on ocean waters without regard to the depth limitations specified in paragraph (a)(2) of this section provided that such burial shall take place no closer than 3 nautical miles from land.

(b) For purposes of this section and §§229.2 and 229.3, *land* means that portion of the baseline from which the territorial sea is measured, as provided for in the Convention on the Territorial Sea and the Contiguous Zone, which is in closest proximity to the proposed disposal site.

(c) Flowers and wreaths consisting of materials which are readily decomposable in the marine environment may be disposed of under the general permit set forth in this section at the site at which disposal of human remains is authorized.

(d) All burials conducted under this general permit shall be reported within 30 days to the Regional Administrator of the Region from which the vessel carrying the remains departed.

### §229.2 Transport of target vessels.

(a) The U.S. Navy is hereby granted a general permit to transport vessels from the United States or from any other location for the purpose of sinking such vessels in ocean waters in testing ordnance and providing related data subject to the following conditions:

(1) Such vessels may be sunk at times determined by the appropriate Navy official;

(2) Necessary measures shall be taken to insure that the vessel sinks to the bottom rapidly and permanently, and that marine navigation is not otherwise impaired by the sunk vessel;

(3) All such vessel sinkings shall be conducted in water at least 1,000 fathoms (6,000 feet) deep and at least 50 nautical miles from land, as defined in §229.1(b); and

(4) Before sinking, appropriate measures shall be taken by qualified personnel at a Navy or other certified facility to remove to the maximum extent practicable all materials which may degrade the marine environment, including without limitation (i) emptying of all fuel tanks and fuel lines to the lowest point practicable, flushing of such tanks and lines with water, and again emptying such tanks and lines to the lowest point practicable so that such tanks and lines are essentially free of petroleum, and (ii) removing from the hulls other pollutants and all readily detachable material capable of creating debris or contributing to chemical pollution.

(b) An annual report will be made to the Administrator of the Environmental Protection Agency setting forth the name of each vessel used as a target vessel, its approximate tonnage, and the location and date of sinking.

### §229.3 Transportation and disposal of vessels.

(a) All persons subject to title I of the Act are hereby granted a general permit to transport vessels from the United States, and all departments, agencies, or instrumentalities of the United States are hereby granted a general permit to transport vessels from any location for the purpose of disposal in the ocean subject to the following conditions:

(1) Except in emergency situations, as determined by the U.S. Army Corps of Engineers and/or the U.S. Coast

Guard, the person desiring to dispose of a vessel under this general permit shall, no later than 1 month prior to the proposed disposal date, provide the following information in writing to the EPA Regional Administrator for the Region in which the proposed disposal will take place:

(i) A statement detailing the need for the disposal of the vessel;

(ii) Type and description of vessel to be disposed of and type of cargo normally carried;

(iii) Detailed description of the proposed disposal procedures;

(iv) Information on the potential effect of the vessel disposal on the marine environment; and

(v) Documentation of an adequate evaluation of alternatives to ocean disposal (i.e., scrap, salvage, and reclamation).

(2) Transportation for the purpose of ocean disposal may be accomplished under the supervision of the District Commander of the U.S. Coast Guard or his designee.

(3) Except in emergency situations, as determined by the U.S. Army Corps of Engineers and/or the District Commander of the U.S. Coast Guard, appropriate measures shall be taken, prior to disposal, by qualified personnel to remove to the maximum extent practicable all materials which may degrade the marine environment, including without limitation (i) emptying of all fuel lines and fuel tanks to the lowest point practicable, flushing of such lines and tanks with water, and again emptying such lines and tanks to the lowest point practicable so that such lines and tanks are essentially free of petroleum, and (ii) removing from the hulls other pollutants and all readily detachable material capable of creating debris or contributing to chemical pollution.

(4) Except in emergency situations, as determined by the U.S. Army Corps of Engineers and/or the U.S. Coast Guard, the dumper shall, no later than 10 days prior to the proposed disposal date, notify the EPA Regional Administrator and the District Commander of the U.S. Coast Guard that the vessel has been cleaned and is available for inspection; the vessel may be transported for dumping only after EPA and the Coast Guard agree that the requirements of paragraph (a)(3) of this section have been met.

(5) Disposal of these vessels shall take place in a site designated on current nautical charts for the disposal of wrecks or no closer than 22 kilometers (12 miles) from the nearest land and in water no less than 50 fathoms (300 feet) deep, and all necessary measures shall be taken to insure that the vessels sink to the bottom rapidly and that marine navigation is not otherwise impaired.

(6) Disposal shall not take place in established shipping lanes unless at a designated wreck site, nor in a designated marine sanctuary, nor in a location where the hulk may present a hazard to commercial trawling or national defense (see 33 CFR part 205).

(7) Except in emergency situations, as determined by the U.S. Army Corps of Engineers and/or the U.S. Coast Guard, disposal of these vessels shall be performed during daylight hours only.

(8) Except in emergency situations, as determined by the U.S. Army Corps of Engineers and/or the District Commander of the U.S. Coast Guard, the Captain-of-the-Port (COTP), U.S. Coast Guard, and the EPA Regional Administrator shall be notified forty-eight (48) hours in advance of the proposed disposal. In addition, the COTP and the EPA Regional Administrator shall be notified by telephone at least twelve (12) hours in advance of the vessel's departure from port with such details as the proposed departure time and place, disposal site location, estimated time of arrival on site, and the name and communication capability of the towing vessel. Schedule changes are to be reported to the COTP as rapidly as possible.

(9) The National Ocean Survey, NOAA, 6010 Executive Blvd., Rockville, MD 20852, shall be notified in writing, within 1 week, of the exact coordinates of the disposal site so that it may be marked on appropriate charts.

# PART 230—SECTION 404(b)(1) GUIDELINES FOR SPECIFICATION OF DISPOSAL SITES FOR DREDGED OR FILL MATERIAL

### Subpart A—General

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### Subpart G—Evaluation and Testing

230.60 General evaluation of dredged or fill material.
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### Subpart H—Actions To Minimize Adverse Effects

230.70 Actions concerning the location of the discharge.
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230.75 Actions affecting plant and animal populations.
230.76 Actions affecting human use.
230.77 Other actions.

### Subpart I—Planning To Shorten Permit Processing Time

230.80 Advanced identification of disposal areas.

AUTHORITY: Secs. 404(b) and 501(a) of the Clean Water Act of 1977 (33 U.S.C. 1344(b) and 1361(a)).

SOURCE: 45 FR 85344, Dec. 24, 1980, unless otherwise noted.

## Subpart A—General

### §230.1 Purpose and policy.

(a) The purpose of these Guidelines is to restore and maintain the chemical, physical, and biological integrity of waters of the United States through the control of discharges of dredged or fill material.

(b) Congress has expressed a number of policies in the Clean Water Act. These Guidelines are intended to be consistent with and to implement those policies.

(c) Fundamental to these Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern.

(d) From a national perspective, the degradation or destruction of special aquatic sites, such as filling operations in wetlands, is considered to be among the most severe environmental impacts covered by these Guidelines. The guiding principle should be that degradation or destruction of special sites may represent an irreversible loss of valuable aquatic resources.

### § 230.2 Applicability.

(a) These Guidelines have been developed by the Administrator of the Environmental Protection Agency in conjunction with the Secretary of the Army acting through the Chief of Engineers under section 404(b)(1) of the Clean Water Act (33 U.S.C. 1344). The Guidelines are applicable to the specification of disposal sites for discharges of dredged or fill material into waters of the United States. Sites may be specified through:

(1) The regulatory program of the U.S. Army Corps of Engineers under sections 404(a) and (e) of the Act (see 33 CFR Parts 320, 323 and 325);

(2) The civil works program of the U.S. Army Corps of Engineers (see 33 CFR 209.145 and section 150 of Pub. L. 94–587, Water Resources Development Act of 1976);

(3) Permit programs of States approved by the Administrator of the Environmental Protection Agency in accordance with section 404(g) and (h) of the Act (see 40 CFR parts 122, 123 and 124);

(4) Statewide dredged or fill material regulatory programs with best management practices approved under section 208(b)(4)(B) and (C) of the Act (see 40 CFR 35.1560);

(5) Federal construction projects which meet criteria specified in section 404(r) of the Act.

(b) These Guidelines will be applied in the review of proposed discharges of dredged or fill material into navigable waters which lie inside the baseline from which the territorial sea is measured, and the discharge of fill material into the territorial sea, pursuant to the procedures referred to in paragraphs (a)(1) and (2) of this section. The discharge of dredged material into the territorial sea is governed by the Marine Protection, Research, and Sanctuaries Act of 1972, Pub. L. 92–532, and regulations and criteria issued pursuant thereto (40 CFR parts 220 through 228).

(c) Guidance on interpreting and implementing these Guidelines may be prepared jointly by EPA and the Corps at the national or regional level from time to time. No modifications to the basic application, meaning, or intent of these Guidelines will be made without rulemaking by the Administrator under the Administrative Procedure Act (5 U.S.C. 551 *et seq.*).

### § 230.3 Definitions.

For purposes of this part, the following terms shall have the meanings indicated:

(a) The term *Act* means the Clean Water Act (also known as the Federal Water Pollution Control Act or FWPCA) Pub. L. 92–500, as amended by Pub. L. 95–217, 33 U.S.C. 1251, *et seq.*

(b) The term *adjacent* means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like are ‘‘adjacent wetlands.’’

(c) The terms *aquatic environment* and *aquatic ecosystem* mean waters of the United States, including wetlands, that serve as habitat for interrelated and interacting communities and populations of plants and animals.

(d) The term *carrier of contaminant* means dredged or fill material that contains contaminants.

(e) The term *contaminant* means a chemical or biological substance in a form that can be incorporated into, onto or be ingested by and that harms aquatic organisms, consumers of aquatic organisms, or users of the aquatic environment, and includes but is not limited to the substances on the 307(a)(1) list of toxic pollutants promulgated on January 31, 1978 (43 FR 4109).

(f)–(g) [Reserved]

(h) The term *discharge point* means the point within the disposal site at which the dredged or fill material is released.

(i) The term *disposal site* means that portion of the ‘‘waters of the United

States'' where specific disposal activities are permitted and consist of a bottom surface area and any overlying volume of water. In the case of wetlands on which surface water is not present, the disposal site consists of the wetland surface area.

(j) [Reserved]

(k) The term *extraction site* means the place from which the dredged or fill material proposed for discharge is to be removed.

(l) [Reserved]

(m) The term *mixing zone* means a limited volume of water serving as a zone of initial dilution in the immediate vicinity of a discharge point where receiving water quality may not meet quality standards or other requirements otherwise applicable to the receiving water. The mixing zone should be considered as a place where wastes and water mix and not as a place where effluents are treated.

(n) The term *permitting authority* means the District Engineer of the U.S. Army Corps of Engineers or such other individual as may be designated by the Secretary of the Army to issue or deny permits under section 404 of the Act; or the State Director of a permit program approved by EPA under section 404(g) and section 404(h) or his delegated representative.

(o) The term *pollutant* means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials not covered by the Atomic Energy Act, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. The legislative history of the Act reflects that ''radioactive materials'' as included within the definition of ''pollutant'' in section 502 of the Act means only radioactive materials which are not encompassed in the definition of source, byproduct, or special nuclear materials as defined by the Atomic Energy Act of 1954, as amended, and regulated under the Atomic Energy Act. Examples of radioactive materials not covered by the Atomic Energy Act and, therefore, included within the term ''pollutant'', are radium and accelerator produced isotopes. See *Train* v. *Colorado Public Interest Research Group, Inc.*, 426 U.S. 1 (1976).

(p) The term *pollution* means the man-made or man-induced alteration of the chemical, physical, biological or radiological integrity of an aquatic ecosystem.

(q) The term *practicable* means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

(q-1) *Special aquatic sites* means those sites identified in subpart E. They are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. (See § 230.10(a)(3))

(r) The term *territorial sea* means the belt of the sea measured from the baseline as determined in accordance with the Convention on the Territorial Sea and the Contiguous Zone and extending seaward a distance of three miles.

(s) The term *waters of the United States* means:

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under this definition;

(5) Tributaries of waters identified in paragraphs (s)(1) through (4) of this section;

(6) The territorial sea;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

(t) The term *wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

[45 FR 85344, Dec. 24, 1980, as amended at 58 FR 45037, Aug. 25, 1993]

### § 230.4 Organization.

The Guidelines are divided into eight subparts. Subpart A presents those provisions of general applicability, such as purpose and definitions. Subpart B establishes the four conditions which must be satisfied in order to make a finding that a proposed discharge of dredged or fill material complies with the Guidelines. Section 230.11 of subpart B, sets forth factual determinations which are to be considered in determining whether or not a proposed discharge satisfies the subpart B conditions of compliance. Subpart C describes the physical and chemical components of a site and provides guidance as to how proposed discharges of dredged or fill material may affect these components. Subparts D through F detail the special characteristics of particular aquatic ecosystems in terms of their values, and the possible loss of these values due to discharges of dredged or fill material. Subpart G prescribes a number of physical, chemical, and biological evaluations and testing procedures to be used in reaching the required factual determinations. Subpart H details the means to prevent or mimimize adverse effects. Subpart I concerns advanced identification of disposal areas.

### § 230.5 General procedures to be followed.

In evaluating whether a particular discharge site may be specified, the permitting authority should use these Guidelines in the following sequence:

(a) In order to obtain an overview of the principal regulatory provisions of the Guidelines, review the restrictions on discharge in § 230.10(a) through (d), the measures to mimimize adverse impact of subpart H, and the required factual determinations of § 230.11.

(b) Determine if a General permit (§ 230.7) is applicable; if so, the applicant needs merely to comply with its terms, and no further action by the permitting authority is necessary. Special conditions for evaluation of proposed General permits are contained in § 230.7. If the discharge is not covered by a General permit:

(c) Examine practicable alternatives to the proposed discharge, that is, not discharging into the waters of the U.S. or discharging into an alternative aquatic site with potentially less damaging consequences (§ 230.10(a)).

(d) Delineate the candidate disposal site consistent with the criteria and evaluations of § 230.11(f).

(e) Evaluate the various physical and chemical components which characterize the non-living environment of the candidate site, the substrate and the water including its dynamic characteristics (subpart C).

(f) Identify and evaluate any special or critical characteristics of the candidate disposal site, and surrounding areas which might be affected by use of such site, related to their living communities or human uses (subparts D, E, and F).

(g) Review Factual Determinations in §230.11 to determine whether the information in the project file is sufficient to provide the documentation required by §230.11 or to perform the pretesting evaluation described in §230.60, or other information is necessary.

(h) Evaluate the material to be discharged to determine the possibility of chemical contamination or physical incompatibility of the material to be discharged (§230.60).

(i) If there is a reasonable probability of chemical contamination, conduct the appropriate tests according to the section on Evaluation and Testing (§230.61).

(j) Identify appropriate and practicable changes to the project plan to minimize the environmental impact of the discharge, based upon the specialized methods of minimization of impacts in subpart H.

(k) Make and document Factual Determinations in §230.11.

(l) Make and document Findings of Compliance (§230.12) by comparing Factual Determinations with the requirements for discharge of §230.10.

This outline of the steps to follow in using the Guidelines is simplified for purposes of illustration. The actual process followed may be iterative, with the results of one step leading to a reexamination of previous steps. The permitting authority must address all of the relevant provisions of the Guidelines in reaching a Finding of Compliance in an individual case.

### §230.6 Adaptability.

(a) The manner in which these Guidelines are used depends on the physical, biological, and chemical nature of the proposed extraction site, the material to be discharged, and the candidate disposal site, including any other important components of the ecosystem being evaluated. Documentation to demonstrate knowledge about the extraction site, materials to be extracted, and the candidate disposal site is an essential component of guideline application. These Guidelines allow evaluation and documentation for a variety of activities, ranging from those with large, complex impacts on the aquatic environment to those for which the impact is likely to be innocuous. It is unlikely that the Guidelines will apply in their entirety to any one activity, no matter how complex. It is anticipated that substantial numbers of permit applications will be for minor, routine activities that have little, if any, potential for significant degradation of the aquatic environment. It generally is not intended or expected that extensive testing, evaluation or analysis will be needed to make findings of compliance in such routine cases. Where the conditions for General permits are met, and where numerous applications for similar activities are likely, the use of General permits will eliminate repetitive evaluation and documentation for individual discharges.

(b) The Guidelines user, including the agency or agencies responsible for implementing the Guidelines, must recognize the different levels of effort that should be associated with varying degrees of impact and require or prepare commensurate documentation. The level of documentation should reflect the significance and complexity of the discharge activity.

(c) An essential part of the evaluation process involves making determinations as to the relevance of any portion(s) of the Guidelines and conducting further evaluation only as needed. However, where portions of the Guidelines review procedure are ''short form'' evaluations, there still must be sufficient information (including consideration of both individual and cumulative impacts) to support the decision of whether to specify the site for disposal of dredged or fill material and to support the decision to curtail or abbreviate the evaluation process. The presumption against the discharge in §230.1 applies to this decision-making.

(d) In the case of activities covered by General permits or section 208(b)(4)(B) and (C) Best Management Practices, the analysis and documentation required by the Guidelines will be performed at the time of General permit issuance or section 208(b)(4)(B) and (C) Best Management Practices promulgation and will not be repeated when activities are conducted under a General permit or section 208(b)(4)(B) and (C) Best Management Practices

control. These Guidelines do not require reporting or formal written communication at the time individual activities are initiated under a General permit or section 208(b)(4)(B) and (C) Best Management Practices. However, a particular General permit may require appropriate reporting.

### § 230.7 General permits.

(a) *Conditions for the issuance of General permits.* A General permit for a category of activities involving the discharge of dredged or fill material complies with the Guidelines if it meets the applicable restrictions on the discharge in § 230.10 and if the permitting authority determines that:

(1) The activities in such category are similar in nature and similar in their impact upon water quality and the aquatic environment;

(2) The activities in such category will have only minimal adverse effects when performed separately; and

(3) The activities in such category will have only minimal cumulative adverse effects on water quality and the aquatic environment.

(b) *Evaluation process.* To reach the determinations required in paragraph (a) of this section, the permitting authority shall set forth in writing an evaluation of the potential individual and cumulative impacts of the category of activities to be regulated under the General permit. While some of the information necessary for this evaluation can be obtained from potential permittees and others through the proposal of General permits for public review, the evaluation must be completed before any General permit is issued, and the results must be published with the final permit.

(1) This evaluation shall be based upon consideration of the prohibitions listed in § 230.10(b) and the factors listed in § 230.10(c), and shall include documented information supporting each factual determination in § 230.11 of the Guidelines (consideration of alternatives in § 230.10(a) are not directly applicable to General permits);

(2) The evaluation shall include a precise description of the activities to be permitted under the General permit, explaining why they are sufficiently similar in nature and in environmental impact to warrant regulation under a single General permit based on subparts C through F of the Guidelines. Allowable differences between activities which will be regulated under the same General permit shall be specified. Activities otherwise similar in nature may differ in environmental impact due to their location in or near ecologically sensitive areas, areas with unique chemical or physical characteristics, areas containing concentrations of toxic substances, or areas regulated for specific human uses or by specific land or water management plans (e.g., areas regulated under an approved Coastal Zone Management Plan). If there are specific geographic areas within the purview of a proposed General permit (called a draft General permit under a State 404 program), which are more appropriately regulated by individual permit due to the considerations cited in this paragraph, they shall be clearly delineated in the evaluation and excluded from the permit. In addition, the permitting authority may require an individual permit for any proposed activity under a General permit where the nature or location of the activity makes an individual permit more appropriate.

(3) To predict cumulative effects, the evaluation shall include the number of individual discharge activities likely to be regulated under a General permit until its expiration, including repetitions of individual discharge activities at a single location.

## Subpart B—Compliance With the Guidelines

### § 230.10 Restrictions on discharge.

NOTE: Because other laws may apply to particular discharges and because the Corps of Engineers or State 404 agency may have additional procedural and substantive requirements, a discharge complying with the requirement of these Guidelines will not automatically receive a permit.

Although all requirements in § 230.10 must be met, the compliance evaluation procedures will vary to reflect the seriousness of the potential for adverse impacts on the aquatic ecosystems posed by specific dredged or fill material discharge activities.

(a) Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

(1) For the purpose of this requirement, practicable alternatives include, but are not limited to:

(i) Activities which do not involve a discharge of dredged or fill material into the waters of the United States or ocean waters;

(ii) Discharges of dredged or fill material at other locations in waters of the United States or ocean waters;

(2) An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.

(3) Where the activity associated with a discharge which is proposed for a special aquatic site (as defined in subpart E) does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not ''water dependent''), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.

(4) For actions subject to NEPA, where the Corps of Engineers is the permitting agency, the analysis of alternatives required for NEPA environmental documents, including supplemental Corps NEPA documents, will in most cases provide the information for the evaluation of alternatives under these Guidelines. On occasion, these NEPA documents may address a broader range of alternatives than required to be considered under this paragraph or may not have considered the alternatives in sufficient detail to respond to the requirements of these Guidelines. In the latter case, it may be necessary to supplement these NEPA documents with this additional information.

(5) To the extent that practicable alternatives have been identified and evaluated under a Coastal Zone Management program, a section 208 program, or other planning process, such evaluation shall be considered by the permitting authority as part of the consideration of alternatives under the Guidelines. Where such evaluation is less complete than that contemplated under this subsection, it must be supplemented accordingly.

(b) No discharge of dredged or fill material shall be permitted if it:

(1) Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard;

(2) Violates any applicable toxic effluent standard or prohibition under section 307 of the Act;

(3) Jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act of 1973, as amended, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, as amended. If an exemption has been granted by the Endangered Species Committee, the terms of such exemption shall apply in lieu of this subparagraph;

(4) Violates any requirement imposed by the Secretary of Commerce to protect any marine sanctuary designated under title III of the Marine Protection, Research, and Sanctuaries Act of 1972.

(c) Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Findings of significant degradation related to the proposed discharge shall be based upon appropriate factual

determinations, evaluations, and tests required by subparts B and G, after consideration of subparts C through F, with special emphasis on the persistence and permanence of the effects outlined in those subparts. Under these Guidelines, effects contributing to significant degradation considered individually or collectively, include:

(1) Significantly adverse effects of the discharge of pollutants on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites.

(2) Significantly adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical, and chemical processes;

(3) Significantly adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability. Such effects may include, but are not limited to, loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy; or

(4) Significantly adverse effects of discharge of pollutants on recreational, aesthetic, and economic values.

(d) Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. Subpart H identifies such possible steps.

### § 230.11 Factual determinations.

The permitting authority shall determine in writing the potential short-term or long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic environment in light of subparts C through F. Such factual determinations shall be used in § 230.12 in making findings of compliance or non-compliance with the restrictions on discharge in § 230.10. The evaluation and testing procedures described in § 230.60 and § 230.61 of subpart G shall be used as necessary to make, and shall be described in, such determination. The determinations of effects of each proposed discharge shall include the following:

(a) *Physical substrate determinations.* Determine the nature and degree of effect that the proposed discharge will have, individually and cumulatively, on the characteristics of the substrate at the proposed disposal site. Consideration shall be given to the similarity in particle size, shape, and degree of compaction of the material proposed for discharge and the material constituting the substrate at the disposal site, and any potential changes in substrate elevation and bottom contours, including changes outside of the disposal site which may occur as a result of erosion, slumpage, or other movement of the discharged material. The duration and physical extent of substrate changes shall also be considered. The possible loss of environmental values (§ 230.20) and actions to minimize impact (subpart H) shall also be considered in making these determinations. Potential changes in substrate elevation and bottom contours shall be predicted on the basis of the proposed method, volume, location, and rate of discharge, as well as on the individual and combined effects of current patterns, water circulation, wind and wave action, and other physical factors that may affect the movement of the discharged material.

(b) *Water circulation, fluctuation, and salinity determinations.* Determine the nature and degree of effect that the proposed discharge will have individually and cumulatively on water, current patterns, circulation including downstream flows, and normal water fluctuation. Consideration shall be given to water chemistry, salinity, clarity, color, odor, taste, dissolved gas levels, temperature, nutrients, and eutrophication plus other appropriate characteristics. Consideration shall also be given to the potential diversion or obstruction of flow, alterations of bottom contours, or other significant changes in the hydrologic regime. Additional consideration of the possible loss of environmental values (§§ 230.23 through 230.25) and actions to minimize impacts (subpart H), shall be used in

making these determinations. Potential significant effects on the current patterns, water circulation, normal water fluctuation and salinity shall be evaluated on the basis of the proposed method, volume, location, and rate of discharge.

(c) *Suspended particulate/turbidity determinations.* Determine the nature and degree of effect that the proposed discharge will have, individually and cumulatively, in terms of potential changes in the kinds and concentrations of suspended particulate/turbidity in the vicinity of the disposal site. Consideration shall be given to the grain size of the material proposed for discharge, the shape and size of the plume of suspended particulates, the duration of the discharge and resulting plume and whether or not the potential changes will cause violations of applicable water quality standards. Consideration should also be given to the possible loss of environmental values (§ 230.21) and to actions for minimizing impacts (subpart H). Consideration shall include the proposed method, volume, location, and rate of discharge, as well as the individual and combined effects of current patterns, water circulation and fluctuations, wind and wave action, and other physical factors on the movement of suspended particulates.

(d) *Contaminant determinations.* Determine the degree to which the material proposed for discharge will introduce, relocate, or increase contaminants. This determination shall consider the material to be discharged, the aquatic environment at the proposed disposal site, and the availability of contaminants.

(e) *Aquatic ecosystem and organism determinations.* Determine the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms. Consideration shall be given to the effect at the proposed disposal site of potential changes in substrate characteristics and elevation, water or substrate chemistry, nutrients, currents, circulation, fluctuation, and salinity, on the recolonization and existence of indigenous aquatic organisms or communities. Possible loss of environmental values (§ 230.31), and actions to minimize impacts (subpart H) shall be examined. Tests as described in § 230.61 (Evaluation and Testing), may be required to provide information on the effect of the discharge material on communities or populations of organisms expected to be exposed to it.

(f) *Proposed disposal site determinations.* (1) Each disposal site shall be specified through the application of these Guidelines. The mixing zone shall be confined to the smallest practicable zone within each specified disposal site that is consistent with the type of dispersion determined to be appropriate by the application of these Guidelines. In a few special cases under unique environmental conditions, where there is adequate justification to show that widespread dispersion by natural means will result in no significantly adverse environmental effects, the discharged material may be intended to be spread naturally in a very thin layer over a large area of the substrate rather than be contained within the disposal site.

(2) The permitting authority and the Regional Administrator shall consider the following factors in determining the acceptability of a proposed mixing zone:

(i) Depth of water at the disposal site;

(ii) Current velocity, direction, and variability at the disposal site;

(iii) Degree of turbulence;

(iv) Stratification attributable to causes such as obstructions, salinity or density profiles at the disposal site;

(v) Discharge vessel speed and direction, if appropriate;

(vi) Rate of discharge;

(vii) Ambient concentration of constituents of interest;

(viii) Dredged material characteristics, particularly concentrations of constituents, amount of material, type of material (sand, silt, clay, etc.) and settling velocities;

(ix) Number of discharge actions per unit of time;

(x) Other factors of the disposal site that affect the rates and patterns of mixing.

(g) *Determination of cumulative effects on the aquatic ecosystem.* (1) Cumulative impacts are the changes in an aquatic

ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems.

(2) Cumulative effects attributable to the discharge of dredged or fill material in waters of the United States should be predicted to the extent reasonable and practical. The permitting authority shall collect information and solicit information from other sources about the cumulative impacts on the aquatic ecosystem. This information shall be documented and considered during the decision-making process concerning the evaluation of individual permit applications, the issuance of a General permit, and monitoring and enforcement of existing permits.

(h) *Determination of secondary effects on the aquatic ecosystem.* (1) Secondary effects are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities.

(2) Some examples of secondary effects on an aquatic ecosystem are fluctuating water levels in an impoundment and downstream associated with the operation of a dam, septic tank leaching and surface runoff from residential or commercial developments on fill, and leachate and runoff from a sanitary landfill located in waters of the U.S. Activities to be conducted on fast land created by the discharge of dredged or fill material in waters of the United States may have secondary impacts within those waters which should be considered in evaluating the impact of creating those fast lands.

**§ 230.12 Findings of compliance or non-compliance with the restrictions on discharge.**

(a) On the basis of these Guidelines (subparts C through G) the proposed disposal sites for the discharge of dredged or fill material must be:

(1) Specified as complying with the requirements of these Guidelines; or

(2) Specified as complying with the requirements of these Guidelines with the inclusion of appropriate and practicable discharge conditions (see subpart H) to minimize pollution or adverse effects to the affected aquatic ecosystems; or

(3) Specified as failing to comply with the requirements of these Guidelines where:

(i) There is a practicable alternative to the proposed discharge that would have less adverse effect on the aquatic ecosystem, so long as such alternative does not have other significant adverse environmental consequences; or

(ii) The proposed discharge will result in significant degradation of the aquatic ecosystem under § 230.10(b) or (c); or

(iii) The proposed discharge does not include all appropriate and practicable measures to minimize potential harm to the aquatic ecosystem; or

(iv) There does not exist sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with these Guidelines.

(b) Findings under this section shall be set forth in writing by the permitting authority for each proposed discharge and made available to the permit applicant. These findings shall include the factual determinations required by § 230.11, and a brief explanation of any adaptation of these Guidelines to the activity under consideration. In the case of a General permit, such findings shall be prepared at the time of issuance of that permit rather than for each subsequent discharge under the authority of that permit.

## Subpart C—Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem

NOTE: The effects described in this subpart should be considered in making the factual determinations and the findings of compliance or non-compliance in subpart B.

### § 230.20 Substrate.

(a) The substrate of the aquatic ecosystem underlies open waters of the United States and constitutes the surface of wetlands. It consists of organic and inorganic solid materials and includes water and other liquids or gases that fill the spaces between solid particles.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can result in varying degrees of change in the complex physical, chemical, and biological characteristics of the substrate. Discharges which alter substrate elevation or contours can result in changes in water circulation, depth, current pattern, water fluctuation and water temperature. Discharges may adversely affect bottom-dwelling organisms at the site by smothering immobile forms or forcing mobile forms to migrate. Benthic forms present prior to a discharge are unlikely to recolonize on the discharged material if it is very dissimilar from that of the discharge site. Erosion, slumping, or lateral displacement of surrounding bottom of such deposits can adversely affect areas of the substrate outside the perimeters of the disposal site by changing or destroying habitat. The bulk and composition of the discharged material and the location, method, and timing of discharges may all influence the degree of impact on the substrate.

### § 230.21 Suspended particulates/turbidity.

(a) Suspended particulates in the aquatic ecosystem consist of fine-grained mineral particles, usually smaller than silt, and organic particles. Suspended particulates may enter water bodies as a result of land runoff, flooding, vegetative and planktonic breakdown, resuspension of bottom sediments, and man's activities including dredging and filling. Particulates may remain suspended in the water column for variable periods of time as a result of such factors as agitation of the water mass, particulate specific gravity, particle shape, and physical and chemical properties of particle surfaces.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can result in greatly elevated levels of suspended particulates in the water column for varying lengths of time. These new levels may reduce light penetration and lower the rate of photosynthesis and the primary productivity of an aquatic area if they last long enough. Sight-dependent species may suffer reduced feeding ability leading to limited growth and lowered resistance to disease if high levels of suspended particulates persist. The biological and the chemical content of the suspended material may react with the dissolved oxygen in the water, which can result in oxygen depletion. Toxic metals and organics, pathogens, and viruses absorbed or adsorbed to fine-grained particulates in the material may become biologically available to organisms either in the water column or on the substrate. Significant increases in suspended particulate levels create turbid plumes which are highly visible and aesthetically displeasing. The extent and persistence of these adverse impacts caused by discharges depend upon the relative increase in suspended particulates above the amount occurring naturally, the duration of the higher levels, the current patterns, water level, and fluctuations present when such discharges occur, the volume, rate, and duration of the discharge, particulate deposition, and the seasonal timing of the discharge.

### § 230.22 Water.

(a) Water is the part of the aquatic ecosystem in which organic and inorganic constituents are dissolved and suspended. It constitutes part of the liquid phase and is contained by the substrate. Water forms part of a dynamic aquatic life-supporting system. Water clarity, nutrients and chemical

content, physical and biological content, dissolved gas levels, pH, and temperature contribute to its life-sustaining capabilities.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can change the chemistry and the physical characteristics of the receiving water at a disposal site through the introduction of chemical constituents in suspended or dissolved form. Changes in the clarity, color, odor, and taste of water and the addition of contaminants can reduce or eliminate the suitability of water bodies for populations of aquatic organisms, and for human consumption, recreation, and aesthetics. The introduction of nutrients or organic material to the water column as a result of the discharge can lead to a high biochemical oxygen demand (BOD), which in turn can lead to reduced dissolved oxygen, thereby potentially affecting the survival of many aquatic organisms. Increases in nutrients can favor one group of organisms such as algae to the detriment of other more desirable types such as submerged aquatic vegetation, potentially causing adverse health effects, objectionable tastes and odors, and other problems.

### § 230.23 Current patterns and water circulation.

(a) Current patterns and water circulation are the physical movements of water in the aquatic ecosystem. Currents and circulation respond to natural forces as modified by basin shape and cover, physical and chemical characteristics of water strata and masses, and energy dissipating factors.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can modify current patterns and water circulation by obstructing flow, changing the direction or velocity of water flow, changing the direction or velocity of water flow and circulation, or otherwise changing the dimensions of a water body. As a result, adverse changes can occur in: Location, structure, and dynamics of aquatic communities; shoreline and substrate erosion and depositon rates; the deposition of suspended particulates; the rate and extent of mixing of dissolved and suspended components of the water body; and water stratification.

### § 230.24 Normal water fluctuations.

(a) Normal water fluctuations in a natural aquatic system consist of daily, seasonal, and annual tidal and flood fluctuations in water level. Biological and physical components of such a system are either attuned to or characterized by these periodic water fluctuations.

(b) Possible loss of environmental characteristics and values: The discharge of dredged or fill material can alter the normal water-level fluctuation pattern of an area, resulting in prolonged periods of inundation, exaggerated extremes of high and low water, or a static, nonfluctuating water level. Such water level modifications may change salinity patterns, alter erosion or sedimentation rates, aggravate water temperature extremes, and upset the nutrient and dissolved oxygen balance of the aquatic ecosystem. In addition, these modifications can alter or destroy communities and populations of aquatic animals and vegetation, induce populations of nuisance organisms, modify habitat, reduce food supplies, restrict movement of aquatic fauna, destroy spawning areas, and change adjacent, upstream, and downstream areas.

### § 230.25 Salinity gradients.

(a) Salinity gradients form where salt water from the ocean meets and mixes with fresh water from land.

(b) Possible loss of environmental characteristics and values: Obstructions which divert or restrict flow of either fresh or salt water may change existing salinity gradients. For example, partial blocking of the entrance to an estuary or river mouth that significantly restricts the movement of the salt water into and out of that area can effectively lower the volume of salt water available for mixing within that estuary. The downstream migration of the salinity gradient can occur, displacing the maximum sedimentation zone and requiring salinity-dependent

aquatic biota to adjust to the new conditions, move to new locations if possible, or perish. In the freshwater zone, discharge operations in the upstream regions can have equally adverse impacts. A significant reduction in the volume of fresh water moving into an estuary below that which is considered normal can affect the location and type of mixing thereby changing the characteristic salinity patterns. The resulting changed circulation pattern can cause the upstream migration of the salinity gradient displacing the maximim sedimentation zone. This migration may affect those organisms that are adapted to freshwater environments. It may also affect municipal water supplies.

NOTE: Possible actions to minimize adverse impacts regarding site characteristics can be found in subpart H.

## Subpart D—Potential Impacts on Biological Characteristics of the Aquatic Ecosystem

NOTE: The impacts described in this subpart should be considered in making the factual determinations and the findings of compliance or non-compliance in subpart B.

### § 230.30 Threatened and endangered species.

(a) An endangered species is a plant or animal in danger of extinction throughout all or a significant portion of its range. A threatened species is one in danger of becoming an endangered species in the foreseeable future throughout all or a significant portion of its range. Listings of threatened and endangered species as well as critical habitats are maintained by some individual States and by the U.S. Fish and Wildlife Service of the Department of the Interior (codified annually at 50 CFR 17.11). The Department of Commerce has authority over some threatened and endangered marine mammals, fish and reptiles.

(b) Possible loss of values: The major potential impacts on threatened or endangered species from the discharge of dredged or fill material include:

(1) Covering or otherwise directly killing species;

(2) The impairment or destruction of habitat to which these species are limited. Elements of the aquatic habitat which are particularly crucial to the continued survival of some threatened or endangered species include adequate good quality water, spawning and maturation areas, nesting areas, protective cover, adequate and reliable food supply, and resting areas for migratory species. Each of these elements can be adversely affected by changes in either the normal water conditions for clarity, chemical content, nutrient balance, dissolved oxygen, pH, temperature, salinity, current patterns, circulation and fluctuation, or the physical removal of habitat; and

(3) Facilitating incompatible activities.

(c) Where consultation with the Secretary of the Interior occurs under section 7 of the Endangered Species Act, the conclusions of the Secretary concerning the impact(s) of the discharge on threatened and endangered species and their habitat shall be considered final.

### § 230.31 Fish, crustaceans, mollusks, and other aquatic organisms in the food web.

(a) Aquatic organisms in the food web include, but are not limited to, finfish, crustaceans, mollusks, insects, annelids, planktonic organisms, and the plants and animals on which they feed and depend upon for their needs. All forms and life stages of an organism, throughout its geographic range, are included in this category.

(b) Possible loss of values: The discharge of dredged or fill material can variously affect populations of fish, crustaceans, mollusks and other food web organisms through the release of contaminants which adversely affect adults, juveniles, larvae, or eggs, or result in the establishment or proliferation of an undesirable competitive species of plant or animal at the expense of the desired resident species. Suspended particulates settling on attached or buried eggs can smother the eggs by limiting or sealing off their exposure to oxygenated water. Discharge of dredged and fill material may result

in the debilitation or death of sedentary organisms by smothering, exposure to chemical contaminants in dissolved or suspended form, exposure to high levels of suspended particulates, reduction in food supply, or alteration of the substrate upon which they are dependent. Mollusks are particularly sensitive to the discharge of material during periods of reproduction and growth and development due primarily to their limited mobility. They can be rendered unfit for human consumption by tainting, by production and accumulation of toxins, or by ingestion and retention of pathogenic organisms, viruses, heavy metals or persistent synthetic organic chemicals. The discharge of dredged or fill material can redirect, delay, or stop the reproductive and feeding movements of some species of fish and crustacea, thus preventing their aggregation in accustomed places such as spawning or nursery grounds and potentially leading to reduced populations. Reduction of detrital feeding species or other representatives of lower trophic levels can impair the flow of energy from primary consumers to higher trophic levels. The reduction or potential elimination of food chain organism populations decreases the overall productivity and nutrient export capability of the ecosystem.

### § 230.32 Other wildlife.

(a) Wildlife associated with aquatic ecosystems are resident and transient mammals, birds, reptiles, and amphibians.

(b) Possible loss of values: The discharge of dredged or fill material can result in the loss or change of breeding and nesting areas, escape cover, travel corridors, and preferred food sources for resident and transient wildlife species associated with the aquatic ecosystem. These adverse impacts upon wildlife habitat may result from changes in water levels, water flow and circulation, salinity, chemical content, and substrate characteristics and elevation. Increased water turbidity can adversely affect wildlife species which rely upon sight to feed, and disrupt the respiration and feeding of certain aquatic wildlife and food chain organisms. The availability of contaminants from the discharge of dredged or fill material may lead to the bioaccumulation of such contaminants in wildlife. Changes in such physical and chemical factors of the environment may favor the introduction of undesirable plant and animal species at the expense of resident species and communities. In some aquatic environments lowering plant and animal species diversity may disrupt the normal functions of the ecosystem and lead to reductions in overall biological productivity.

NOTE: Possible actions to minimize adverse impacts regarding characteristics of biological components of the aquatic ecosystem can be found in subpart H.

## Subpart E—Potential Impacts on Special Aquatic Sites

NOTE: The impacts described in this subpart should be considered in making the factual determinations and the findings of compliance or non-compliance in subpart B. The definition of special aquatic sites is found in § 230.3(q–1).

### § 230.40 Sanctuaries and refuges.

(a) Sanctuaries and refuges consist of areas designated under State and Federal laws or local ordinances to be managed principally for the preservation and use of fish and wildlife resources.

(b) Possible loss of values: Sanctuaries and refuges may be affected by discharges of dredged or fill material which will:

(1) Disrupt the breeding, spawning, migratory movements or other critical life requirements of resident or transient fish and wildlife resources;

(2) Create unplanned, easy and incompatible human access to remote aquatic areas;

(3) Create the need for frequent maintenance activity;

(4) Result in the establishment of undesirable competitive species of plants and animals;

(5) Change the balance of water and land areas needed to provide cover, food, and other fish and wildlife habitat requirements in a way that modifies sanctuary or refuge management practices;

(6) Result in any of the other adverse impacts discussed in subparts C and D as they relate to a particular sanctuary or refuge.

### § 230.41 Wetlands.

(a)(1) Wetlands consist of areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

(2) Where wetlands are adjacent to open water, they generally constitute the transition to upland. The margin between wetland and open water can best be established by specialists familiar with the local environment, particularly where emergent vegetation merges with submerged vegetation over a broad area in such places as the lateral margins of open water, headwaters, rainwater catch basins, and groundwater seeps. The landward margin of wetlands also can best be identified by specialists familiar with the local environment when vegetation from the two regions merges over a broad area.

(3) Wetland vegetation consists of plants that require saturated soils to survive (obligate wetland plants) as well as plants, including certain trees, that gain a competitive advantage over others because they can tolerate prolonged wet soil conditions and their competitors cannot. In addition to plant populations and communities, wetlands are delimited by hydrological and physical characteristics of the environment. These characteristics should be considered when information about them is needed to supplement information available about vegetation, or where wetland vegetation has been removed or is dormant.

(b) Possible loss of values: The discharge of dredged or fill material in wetlands is likely to damage or destroy habitat and adversely affect the biological productivity of wetlands ecosystems by smothering, by dewatering, by permanently flooding, or by altering substrate elevation or periodicity of water movement. The addition of dredged or fill material may destroy wetland vegetation or result in advancement of succession to dry land species. It may reduce or eliminate nutrient exchange by a reduction of the system's productivity, or by altering current patterns and velocities. Disruption or elimination of the wetland system can degrade water quality by obstructing circulation patterns that flush large expanses of wetland systems, by interfering with the filtration function of wetlands, or by changing the aquifer recharge capability of a wetland. Discharges can also change the wetland habitat value for fish and wildlife as discussed in subpart D. When disruptions in flow and circulation patterns occur, apparently minor loss of wetland acreage may result in major losses through secondary impacts. Discharging fill material in wetlands as part of municipal, industrial or recreational development may modify the capacity of wetlands to retain and store floodwaters and to serve as a buffer zone shielding upland areas from wave actions, storm damage and erosion.

### § 230.42 Mud flats.

(a) Mud flats are broad flat areas along the sea coast and in coastal rivers to the head of tidal influence and in inland lakes, ponds, and riverine systems. When mud flats are inundated, wind and wave action may resuspend bottom sediments. Coastal mud flats are exposed at extremely low tides and inundated at high tides with the water table at or near the surface of the substrate. The substrate of mud flats contains organic material and particles smaller in size than sand. They are either unvegetated or vegetated only by algal mats.

(b) Possible loss of values: The discharge of dredged or fill material can cause changes in water circulation patterns which may permanently flood or dewater the mud flat or disrupt periodic inundation, resulting in an increase in the rate of erosion or accretion. Such changes can deplete or eliminate mud flat biota, foraging areas, and nursery areas. Changes in inundation patterns can affect the chemical and biological exchange and decomposition process occurring on the mud flat and change the deposition of

suspended material affecting the productivity of the area. Changes may reduce the mud flat's capacity to dissipate storm surge runoff.

### § 230.43 Vegetated shallows.

(a) Vegetated shallows are permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as turtle grass and eelgrass in estuarine or marine systems as well as a number of freshwater species in rivers and lakes.

(b) Possible loss of values: The discharge of dredged or fill material can smother vegetation and benthic organisms. It may also create unsuitable conditions for their continued vigor by: (1) Changing water circulation patterns; (2) releasing nutrients that increase undesirable algal populations; (3) releasing chemicals that adversely affect plants and animals; (4) increasing turbidity levels, thereby reducing light penetration and hence photosynthesis; and (5) changing the capacity of a vegetated shallow to stabilize bottom materials and decrease channel shoaling. The discharge of dredged or fill material may reduce the value of vegetated shallows as nesting, spawning, nursery, cover, and forage areas, as well as their value in protecting shorelines from erosion and wave actions. It may also encourage the growth of nuisance vegetation.

### § 230.44 Coral reefs.

(a) Coral reefs consist of the skeletal deposit, usually of calcareous or silicaceous materials, produced by the vital activities of anthozoan polyps or other invertebrate organisms present in growing portions of the reef.

(b) Possible loss of values: The discharge of dredged or fill material can adversely affect colonies of reef building organisms by burying them, by releasing contaminants such as hydrocarbons into the water column, by reducing light penetration through the water, and by increasing the level of suspended particulates. Coral organisms are extremely sensitive to even slight reductions in light penetration or increases in suspended particulates. These adverse effects will cause a loss of productive colonies which in turn provide habitat for many species of highly specialized aquatic organisms.

### § 230.45 Riffle and pool complexes.

(a) Steep gradient sections of streams are sometimes characterized by riffle and pool complexes. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. Pools are characterized by a slower stream velocity, a steaming flow, a smooth surface, and a finer substrate. Riffle and pool complexes are particularly valuable habitat for fish and wildlife.

(b) Possible loss of values: Discharge of dredged or fill material can eliminate riffle and pool areas by displacement, hydrologic modification, or sedimentation. Activities which affect riffle and pool areas and especially riffle/pool ratios, may reduce the aeration and filtration capabilities at the discharge site and downstream, may reduce stream habitat diversity, and may retard repopulation of the disposal site and downstream waters through sedimentation and the creation of unsuitable habitat. The discharge of dredged or fill material which alters stream hydrology may cause scouring or sedimentation of riffles and pools. Sedimentation induced through hydrological modification or as a direct result of the deposition of unconsolidated dredged or fill material may clog riffle and pool areas, destroy habitats, and create anaerobic conditions. Eliminating pools and meanders by the discharge of dredged or fill material can reduce water holding capacity of streams and cause rapid runoff from a watershed. Rapid runoff can deliver large quantities of flood water in a short time to downstream areas resulting in the destruction of natural habitat, high property loss, and the need for further hydraulic modification.

NOTE: Possible actions to minimize adverse impacts on site or material characteristics can be found in subpart H.

## Subpart F—Potential Effects on Human Use Characteristics

NOTE: The effects described in this subpart should be considered in making the factual determinations and the findings of compliance or non-compliance in subpart B.

### §230.50 Municipal and private water supplies.

(a) Municipal and private water supplies consist of surface water or ground water which is directed to the intake of a municipal or private water supply system.

(b) Possible loss of values: Discharges can affect the quality of water supplies with respect to color, taste, odor, chemical content and suspended particulate concentration, in such a way as to reduce the fitness of the water for consumption. Water can be rendered unpalatable or unhealthy by the addition of suspended particulates, viruses and pathogenic organisms, and dissolved materials. The expense of removing such substances before the water is delivered for consumption can be high. Discharges may also affect the quantity of water available for municipal and private water supplies. In addition, certain commonly used water treatment chemicals have the potential for combining with some suspended or dissolved substances from dredged or fill material to form other products that can have a toxic effect on consumers.

### §230.51 Recreational and commercial fisheries.

(a) Recreational and commercial fisheries consist of harvestable fish, crustaceans, shellfish, and other aquatic organisms used by man.

(b) Possible loss of values: The discharge of dredged or fill materials can affect the suitability of recreational and commercial fishing grounds as habitat for populations of consumable aquatic organisms. Discharges can result in the chemical contamination of recreational or commercial fisheries. They may also interfere with the reproductive success of recreational and commercially important aquatic species through disruption of migration and spawning areas. The introduction of pollutants at critical times in their life cycle may directly reduce populations of commercially important aquatic organisms or indirectly reduce them by reducing organisms upon which they depend for food. Any of these impacts can be of short duration or prolonged, depending upon the physical and chemical impacts of the discharge and the biological availability of contaminants to aquatic organisms.

### §230.52 Water-related recreation.

(a) Water-related recreation encompasses activities undertaken for amusement and relaxation. Activities encompass two broad categories of use: consumptive, e.g., harvesting resources by hunting and fishing; and non-comsumptive, e.g. canoeing and sightseeing.

(b) Possible loss of values: One of the more important direct impacts of dredged or fill disposal is to impair or destroy the resources which support recreation activities. The disposal of dredged or fill material may adversely modify or destroy water use for recreation by changing turbidity, suspended particulates, temperature, dissolved oxygen, dissolved materials, toxic materials, pathogenic organisms, quality of habitat, and the aesthetic qualities of sight, taste, odor, and color.

### §230.53 Aesthetics.

(a) Aesthetics associated with the aquatic ecosystem consist of the perception of beauty by one or a combination of the senses of sight, hearing, touch, and smell. Aesthetics of aquatic ecosystems apply to the quality of life enjoyed by the general public and property owners.

(b) Possible loss of values: The discharge of dredged or fill material can mar the beauty of natural aquatic ecosystems by degrading water quality, creating distracting disposal sites, inducing inappropriate development, encouraging unplanned and incompatible human access, and by destroying vital elements that contribute to the compositional harmony or unity, visual distinctiveness, or diversity of an area. The discharge of dredged or fill

material can adversely affect the particular features, traits, or characteristics of an aquatic area which make it valuable to property owners. Activities which degrade water quality, disrupt natural substrate and vegetational characteristics, deny access to or visibility of the resource, or result in changes in odor, air quality, or noise levels may reduce the value of an aquatic area to private property owners.

### § 230.54 Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves.

(a) These preserves consist of areas designated under Federal and State laws or local ordinances to be managed for their aesthetic, educational, historical, recreational, or scientific value.

(b) Possible loss of values: The discharge of dredged or fill material into such areas may modify the aesthetic, educational, historical, recreational and/or scientific qualities thereby reducing or eliminating the uses for which such sites are set aside and managed.

NOTE: Possible actions to minimize adverse impacts regarding site or material characteristics can be found in subpart H.

## Subpart G—Evaluation and Testing

### § 230.60 General evaluation of dredged or fill material.

The purpose of these evaluation procedures and the chemical and biological testing sequence outlined in § 230.61 is to provide information to reach the determinations required by § 230.11. Where the results of prior evaluations, chemical and biological tests, scientific research, and experience can provide information helpful in making a determination, these should be used. Such prior results may make new testing unnecessary. The information used shall be documented. Where the same information applies to more than one determination, it may be documented once and referenced in later determinations.

(a) If the evaluation under paragraph (b) indicates the dredged or fill material is not a carrier of contaminants, then the required determinations pertaining to the presence and effects of contaminants can be made without testing. Dredged or fill material is most likely to be free from chemical, biological, or other pollutants where it is composed primarily of sand, gravel, or other naturally occurring inert material. Dredged material so composed is generally found in areas of high current or wave energy such as streams with large bed loads or coastal areas with shifting bars and channels. However, when such material is discolored or contains other indications that contaminants may be present, further inquiry should be made.

(b) The extraction site shall be examined in order to assess whether it is sufficiently removed from sources of pollution to provide reasonable assurance that the proposed discharge material is not a carrier of contaminants. Factors to be considered include but are not limited to:

(1) Potential routes of contaminants or contaminated sediments to the extraction site, based on hydrographic or other maps, aerial photography, or other materials that show watercourses, surface relief, proximity to tidal movement, private and public roads, location of buildings, municipal and industrial areas, and agricultural or forest lands.

(2) Pertinent results from tests previously carried out on the material at the extraction site, or carried out on similar material for other permitted projects in the vicinity. Materials shall be considered similar if the sources of contamination, the physical configuration of the sites and the sediment composition of the materials are comparable, in light of water circulation and stratification, sediment accumulation and general sediment characteristics. Tests from other sites may be relied on only if no changes have occurred at the extraction sites to render the results irrelevant.

(3) Any potential for significant introduction of persistent pesticides from land runoff or percolation;

(4) Any records of spills or disposal of petroleum products or substances designated as hazardous under section 311 of the Clean Water Act (See 40 CFR part 116);

(5) Information in Federal, State and local records indicating significant introduction of pollutants from industries, municipalities, or other sources, including types and amounts of waste materials discharged along the potential routes of contaminants to the extraction site; and

(6) Any possibility of the presence of substantial natural deposits of minerals or other substances which could be released to the aquatic environment in harmful quantities by man-induced discharge activities.

(c) To reach the determinations in §230.11 involving potential effects of the discharge on the characteristics of the disposal site, the narrative guidance in subparts C through F shall be used along with the general evaluation procedure in §230.60 and, if necessary, the chemical and biological testing sequence in §230.61. Where the discharge site is adjacent to the extraction site and subject to the same sources of contaminants, and materials at the two sites are substantially similar, the fact that the material to be discharged may be a carrier of contaminants is not likely to result in degradation of the disposal site. In such circumstances, when dissolved material and suspended particulates can be controlled to prevent carrying pollutants to less contaminated areas, testing will not be required.

(d) Even if the §230.60(b) evaluation (previous tests, the presence of polluting industries and information about their discharge or runoff into waters of the U.S., bioinventories, etc.) leads to the conclusion that there is a high probability that the material proposed for discharge is a carrier of contaminants, testing may not be necessary if constraints are available to reduce contamination to acceptable levels within the disposal site and to prevent contaminants from being transported beyond the boundaries of the disposal site, if such constraints are acceptable to the permitting authority and the Regional Administrator, and if the potential discharger is willing and able to implement such constraints. However, even if tests are not performed, the permitting authority must still determine the probable impact of the operation on the receiving aquatic ecosystem. Any decision not to test must be explained in the determinations made under §230.11.

## §230.61 Chemical, biological, and physical evaluation and testing.

NOTE: The Agency is today proposing revised testing guidelines. The evaluation and testing procedures in this section are based on the 1975 section 404(b)(1) interim final Guidelines and shall remain in effect until the revised testing guidelines are published as final regulations.

(a) No single test or approach can be applied in all cases to evaluate the effects of proposed discharges of dredged or fill materials. This section provides some guidance in determining which test and/or evaluation procedures are appropriate in a given case. Interim guidance to applicants concerning the applicability of specific approaches or procedures will be furnished by the permitting authority.

(b) *Chemical-biological interactive effects.* The principal concerns of discharge of dredged or fill material that contain contaminants are the potential effects on the water column and on communities of aquatic organisms.

(1) *Evaluation of chemical-biological interactive effects.* Dredged or fill material may be excluded from the evaluation procedures specified in paragraphs (b) (2) and (3) of this section if it is determined, on the basis of the evaluation in §230.60, that the likelihood of contamination by contaminants is acceptably low, unless the permitting authority, after evaluating and considering any comments received from the Regional Administrator, determines that these procedures are necessary. The Regional Administrator may require, on a case-by-case basis, testing approaches and procedures by stating what additional information is needed through further analyses and how the results of the analyses will be of value in evaluating potential environmental effects.

If the General Evaluation indicates the presence of a sufficiently large number of chemicals to render impractical the identification of all contaminants by chemical testing, information may be obtained from bioassays in lieu of chemical tests.

(2) *Water column effects.* (i) Sediments normally contain constituents that exist in various chemical forms and in various concentrations in several locations within the sediment. An elutriate test may be used to predict the effect on water quality due to release of contaminants from the sediment to the water column. However, in the case of fill material originating on land which may be a carrier of contaminants, a water leachate test is appropriate.

(ii) Major constituents to be analyzed in the elutriate are those deemed critical by the permitting authority, after evaluating and considering any comments received from the Regional Administrator, and considering results of the evaluation in § 230.60. Elutriate concentrations should be compared to concentrations of the same constituents in water from the disposal site. Results should be evaluated in light of the volume and rate of the intended discharge, the type of discharge, the hydrodynamic regime at the disposal site, and other information relevant to the impact on water quality. The permitting authority should consider the mixing zone in evaluating water column effects. The permitting authority may specify bioassays when such procedures will be of value.

(3) *Effects on benthos.* The permitting authority may use an appropriate benthic bioassay (including bioaccumulation tests) when such procedures will be of value in assessing ecological effects and in establishing discharge conditions.

(c) Procedure for comparison of sites.

(1) When an inventory of the total concentration of contaminants would be of value in comparing sediment at the dredging site with sediment at the disposal site, the permitting authority may require a sediment chemical analysis. Markedly different concentrations of contaminants between the excavation and disposal sites may aid in making an environmental assessment of the proposed disposal operation. Such differences should be interpreted in terms of the potential for harm as supported by any pertinent scientific literature.

(2) When an analysis of biological community structure will be of value to assess the potential for adverse environmental impact at the proposed disposal site, a comparison of the biological characteristics between the excavation and disposal sites may be required by the permitting authority. Biological indicator species may be useful in evaluating the existing degree of stress at both sites. Sensitive species representing community components colonizing various substrate types within the sites should be identified as possible bioassay organisms if tests for toxicity are required. Community structure studies should be performed only when they will be of value in determining discharge conditions. This is particularly applicable to large quantities of dredged material known to contain adverse quantities of toxic materials. Community studies should include benthic organisms such as microbiota and harvestable shellfish and finfish. Abundance, diversity, and distribution should be documented and correlated with substrate type and other appropriate physical and chemical environmental characteristics.

(d) Physical tests and evaluation. The effect of a discharge of dredged or fill material on physical substrate characteristics at the disposal site, as well as on the water circulation, fluctuation, salinity, and suspended particulates content there, is important in making factual determinations in § 230.11. Where information on such effects is not otherwise available to make these factual determinations, the permitting authority shall require appropriate physical tests and evaluations as are justified and deemed necessary. Such tests may include sieve tests, settleability tests, compaction tests, mixing zone and suspended particulate plume determinations, and site assessments of water flow, circulation, and salinity characteristics.

## Subpart H—Actions To Minimize Adverse Effects

NOTE: There are many actions which can be undertaken in response to § 203.10(d) to minimize the adverse effects of discharges of dredged or fill material. Some of these, grouped by type of activity, are listed in this subpart.

**§230.70 Actions concerning the location of the discharge.**

The effects of the discharge can be minimized by the choice of the disposal site. Some of the ways to accomplish this are by:

(a) Locating and confining the discharge to minimize smothering of organisms;

(b) Designing the discharge to avoid a disruption of periodic water inundation patterns;

(c) Selecting a disposal site that has been used previously for dredged material discharge;

(d) Selecting a disposal site at which the substrate is composed of material similar to that being discharged, such as discharging sand on sand or mud on mud;

(e) Selecting the disposal site, the discharge point, and the method of discharge to minimize the extent of any plume;

(f) Designing the discharge of dredged or fill material to minimize or prevent the creation of standing bodies of water in areas of normally fluctuating water levels, and minimize or prevent the drainage of areas subject to such fluctuations.

**§230.71 Actions concerning the material to be discharged.**

The effects of a discharge can be minimized by treatment of, or limitations on the material itself, such as:

(a) Disposal of dredged material in such a manner that physiochemical conditions are maintained and the potency and availability of pollutants are reduced.

(b) Limiting the solid, liquid, and gaseous components of material to be discharged at a particular site;

(c) Adding treatment substances to the discharge material;

(d) Utilizing chemical flocculants to enhance the deposition of suspended particulates in diked disposal areas.

**§230.72 Actions controlling the material after discharge.**

The effects of the dredged or fill material after discharge may be controlled by:

(a) Selecting discharge methods and disposal sites where the potential for erosion, slumping or leaching of materials into the surrounding aquatic ecosystem will be reduced. These sites or methods include, but are not limited to:

(1) Using containment levees, sediment basins, and cover crops to reduce erosion;

(2) Using lined containment areas to reduce leaching where leaching of chemical constituents from the discharged material is expected to be a problem;

(b) Capping in-place contaminated material with clean material or selectively discharging the most contaminated material first to be capped with the remaining material;

(c) Maintaining and containing discharged material properly to prevent point and nonpoint sources of pollution;

(d) Timing the discharge to minimize impact, for instance during periods of unusual high water flows, wind, wave, and tidal actions.

**§230.73 Actions affecting the method of dispersion.**

The effects of a discharge can be minimized by the manner in which it is dispersed, such as:

(a) Where environmentally desirable, distributing the dredged material widely in a thin layer at the disposal site to maintain natural substrate contours and elevation;

(b) Orienting a dredged or fill material mound to minimize undesirable obstruction to the water current or circulation pattern, and utilizing natural bottom contours to minimize the size of the mound;

(c) Using silt screens or other appropriate methods to confine suspended particulate/turbidity to a small area where settling or removal can occur;

(d) Making use of currents and circulation patterns to mix, disperse and dilute the discharge;

(e) Minimizing water column turbidity by using a submerged diffuser system. A similar effect can be accomplished by submerging pipeline discharges or otherwise releasing materials near the bottom;

(f) Selecting sites or managing discharges to confine and minimize the release of suspended particulates to

give decreased turbidity levels and to maintain light penetration for organisms;

(g) Setting limitations on the amount of material to be discharged per unit of time or volume of receiving water.

### § 230.74 Actions related to technology.

Discharge technology should be adapted to the needs of each site. In determining whether the discharge operation sufficiently minimizes adverse environmental impacts, the applicant should consider:

(a) Using appropriate equipment or machinery, including protective devices, and the use of such equipment or machinery in activities related to the discharge of dredged or fill material;

(b) Employing appropriate maintenance and operation on equipment or machinery, including adequate training, staffing, and working procedures;

(c) Using machinery and techniques that are especially designed to reduce damage to wetlands. This may include machines equipped with devices that scatter rather than mound excavated materials, machines with specially designed wheels or tracks, and the use of mats under heavy machines to reduce wetland surface compaction and rutting;

(d) Designing access roads and channel spanning structures using culverts, open channels, and diversions that will pass both low and high water flows, accommodate fluctuating water levels, and maintain circulation and faunal movement;

(e) Employing appropriate machinery and methods of transport of the material for discharge.

### § 230.75 Actions affecting plant and animal populations.

Minimization of adverse effects on populations of plants and animals can be achieved by:

(a) Avoiding changes in water current and circulation patterns which would interfere with the movement of animals;

(b) Selecting sites or managing discharges to prevent or avoid creating habitat conducive to the development of undesirable predators or species which have a competitive edge ecologically over indigenous plants or animals;

(c) Avoiding sites having unique habitat or other value, including habitat of threatened or endangered species;

(d) Using planning and construction practices to institute habitat development and restoration to produce a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental characteristics. Habitat development and restoration techniques can be used to minimize adverse impacts and to compensate for destroyed habitat. Use techniques that have been demonstrated to be effective in circumstances similar to those under consideration wherever possible. Where proposed development and restoration techniques have not yet advanced to the pilot demonstration stage, initiate their use on a small scale to allow corrective action if unanticipated adverse impacts occur;

(e) Timing discharge to avoid spawning or migration seasons and other biologically critical time periods;

(f) Avoiding the destruction of remnant natural sites within areas already affected by development.

### § 230.76 Actions affecting human use.

Minimization of adverse effects on human use potential may be achieved by:

(a) Selecting discharge sites and following discharge procedures to prevent or minimize any potential damage to the aesthetically pleasing features of the aquatic site (e.g. viewscapes), particularly with respect to water quality;

(b) Selecting disposal sites which are not valuable as natural aquatic areas;

(c) Timing the discharge to avoid the seasons or periods when human recreational activity associated with the aquatic site is most important;

(d) Following discharge procedures which avoid or minimize the disturbance of aesthetic features of an aquatic site or ecosystem;

(e) Selecting sites that will not be detrimental or increase incompatible human activity, or require the need for frequent dredge or fill maintenance activity in remote fish and wildlife areas;

(f) Locating the disposal site outside of the vicinity of a public water supply intake.

### § 230.77 Other actions.

(a) In the case of fills, controlling runoff and other discharges from activities to be conducted on the fill;

(b) In the case of dams, designing water releases to accommodate the needs of fish and wildlife;

(c) In dredging projects funded by Federal agencies other than the Corps of Engineers, maintain desired water quality of the return discharge through agreement with the Federal funding authority on scientifically defensible pollutant concentration levels in addition to any applicable water quality standards;

(d) When a significant ecological change in the aquatic environment is proposed by the discharge of dredged or fill material, the permitting authority should consider the ecosystem that will be lost as well as the environmental benefits of the new system.

## Subpart I—Planning To Shorten Permit Processing Time

### § 230.80 Advanced identification of disposal areas.

(a) Consistent with these Guidelines, EPA and the permitting authority, on their own initiative or at the request of any other party and after consultation with any affected State that is not the permitting authority, may identify sites which will be considered as:

(1) Possible future disposal sites, including existing disposal sites and nonsensitive areas; or

(2) Areas generally unsuitable for disposal site specification;

(b) The identification of any area as a possible future disposal site should not be deemed to constitute a permit for the discharge of dredged or fill material within such area or a specification of a disposal site. The identification of areas that generally will not be available for disposal site specification should not be deemed as prohibiting applications for permits to discharge dredged or fill material in such areas. Either type of identification constitutes information to facilitate individual or General permit application and processing.

(c) An appropriate public notice of the proposed identification of such areas shall be issued;

(d) To provide the basis for advanced identification of disposal areas, and areas unsuitable for disposal, EPA and the permitting authority shall consider the likelihood that use of the area in question for dredged or fill material disposal will comply with these Guidelines. To facilitate this analysis, EPA and the permitting authority should review available water resources management data including data available from the public, other Federal and State agencies, and information from approved Coastal Zone Management programs and River Basin Plans;

(e) The permitting authority should maintain a public record of the identified areas and a written statement of the basis for identification.

# PART 231—SECTION 404(c) PROCEDURES

Sec.
231.1 Purpose and scope.
231.2 Definitions.
231.3 Procedures for proposed determinations.
231.4 Public comments and hearings.
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231.6 Administrator's final determinations.
231.7 Emergency procedure.
231.8 Extension of time.

AUTHORITY: 33 U.S.C. 1344(c).

SOURCE: 44 FR 58082, Oct. 9, 1979, unless otherwise noted.

### § 231.1 Purpose and scope.

(a) The Regulations of this part include the procedures to be followed by the Environmental Protection agency in prohibiting or withdrawing the specification, or denying, restricting, or withdrawing the use for specification, of any defined area as a disposal site for dredged or fill material pursuant to section 404(c) of the Clean Water Act (''CWA''), 33 U.S.C. 1344(c). The U.S. Army Corps of Engineers or a state with a 404 program which has been approved under section 404(h) may grant permits specifying disposal sites for dredged or fill material by determining that the section 404(b)(1) Guidelines (40

CFR Part 230) allow specification of a particular site to receive dredged or fill material. The Corps may also grant permits by determining that the discharge of dredged or fill material is necessary under the economic impact provision of section 404(b)(2). Under section 404(c), the Administrator may exercise a veto over the specification by the U.S. Army Corps of Engineers or by a state of a site for the discharge of dredged or fill material. The Administrator may also prohibit the specification of a site under section 404(c) with regard to any existing or potential disposal site before a permit application has been submitted to or approved by the Corps or a state. The Administrator is authorized to prohibit or otherwise restrict a site whenever he determines that the discharge of dredged or fill material is having or will have an ''unacceptable adverse effect'' on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. In making this determination, the Administrator will take into account all information available to him, including any written determination of compliance with the section 404(b)(1) Guidelines made in 40 CFR part 230, and will consult with the Chief of Engineers or with the state.

(b) These regulations establish procedures for the following steps:

(1) The Regional Administrator's proposed determinations to prohibit or withdraw the specification of a defined area as a disposal site, or to deny, restrict or withdraw the use of any defined area for the discharge of any particular dredged or fill material;

(2) The Regional Administrator's recommendation to the Administrator for determination as to the specification of a defined area as a disposal site.

(3) The Administrator's final determination to affirm, modify or rescind the recommended determination after consultation with the Chief of Engineers or with the state.

(c) Applicability: The regulations set forth in this part are applicable whenever the Administrator is considering whether the specification of any defined area as a disposal site should be prohibited, denied, restricted, or withdrawn. These regulations apply to all existing, proposed or potential disposal sites for discharges of dredged or fill material into waters of the United States, as defined in 40 CFR 230.2.

### § 231.2 Definitions.

For the purposes of this part, the definitions of terms in 40 CFR 230.2 shall apply. In addition, the term:

(a) *Withdraw specification* means to remove from designation any area already specified as a disposal site by the U.S. Army Corps of Engineers or by a state which has assumed the section 404 program, or any portion of such area.

(b) *Prohibit specification* means to prevent the designation of an area as a present or future disposal site.

(c) *Deny or restrict the use of any defined area for specification* is to deny or restrict the use of any area for the present or future discharge of any dredged or fill material.

(d) *Person* means an individual, corporation, partnership, association, Federal agency, state, municipality, or commission, or political subdivision of a state, or any interstate body.

(e) *Unacceptable adverse effect* means impact on an aquatic or wetland ecosystem which is likely to result in significant degradation of municipal water supplies (including surface or ground water) or significant loss of or damage to fisheries, shellfishing, or wildlife habitat or recreation areas. In evaluating the unacceptability of such impacts, consideration should be given to the relevant portions of the section 404(b)(1) guidelines (40 CFR part 230).

(f) *State* means any state agency administering a 404 program which has been approved under section 404(h).

### § 231.3 Procedures for proposed determinations.

(a) If the Regional Administrator has reason to believe after evaluating the information available to him, including any record developed under the section 404 referral process specified in 33 CFR 323.5(b), that an ''unacceptable adverse effect'' could result from the specification or use for specification of a defined area for the disposal of dredged or fill material, he may initiate the following actions:

(1) The Regional Administrator will notify the District Engineer or the state, if the site is covered by an approved state program, the owner of record of the site, and the applicant, if any, in writing that the Regional Administrator intends to issue a public notice of a proposed determination to prohibit or withdraw the specification, or to deny, restrict or withdraw the use for specification, whichever the case may be, of any defined area as a disposal site.

(2) If within 15 days of receipt of the Regional Administrator's notice under paragraph (a)(1) of this section, it has not been demonstrated to the satisfaction of the Regional Administrator that no unacceptable adverse effect(s) will occur or the District Engineer or state does not notify the Regional Administrator of his intent to take corrective action to prevent an unacceptable adverse effect satisfactory to the Regional Administrator, the Regional Administrator shall publish notice of a proposed determination in accordance with the procedures of this section. Where the Regional Administrator has notified the District Engineer under paragraph (a)(1) of this section that he is considering exercising section 404(c) authority with respect to a particular disposal site for which a permit application is pending but for which no permit has been issued, the District Engineer, in accordance with 33 CFR 325.8, shall not issue the permit until final action is taken under this part.

COMMENT: In cases involving a proposed disposal site for which a permit application is pending, it is anticipated that the procedures of the section 404 referral process will normally be exhausted prior to any final decision of whether to initiate a 404(c) proceeding.

(b) Public notice of every proposed determination and notice of all public hearings shall be given by the Regional Administrator. Every public notice shall contain, at a minimum:

(1) An announcement that the Regional Administrator has proposed a determination to prohibit or withdraw specification, or to deny, restrict, or withdraw the use for specification, of an area as a disposal site, including a summary of the facts on which the proposed determination is based;

(2) The location of the existing, proposed or potential disposal site, and a summary of its characteristics;

(3) A summary of information concerning the nature of the proposed discharge, where applicable;

(4) The identity of the permit applicant, if any;

(5) A brief description of the right to, and procedures for requesting, a public hearing; and

(6) The address and telephone number of the office where interested persons may obtain additional information, including copies of the proposed determination; and

(7) Such additional statements, representations, or information as the Regional Administrator considers necessary or proper.

(c) In addition to the information required under paragraph (b) of this section, public notice of a public hearing held under § 231.4 shall contain the following information:

(1) Reference to the date of public notice of the proposed determination;

(2) Date, time and place of the hearing; and

(3) A brief description of the nature and purpose of the hearing including the applicable rules and procedures.

(d) The following procedures for giving public notice of the proposed determination or of a public hearing shall be followed:

(1) Publication at least once in a daily or weekly newspaper of general circulation in the area in which the defined area is located. In addition the Regional Administrator may (i) post a copy of the notice at the principal office of the municipality in which the defined area is located, or if the defined area is not located near a sizeable community, at the principal office of the political subdivision (State, county or local, whichever is appropriate) with general jurisdiction over the area in which the disposal site is located, and (ii) post a copy of the notice at the United States Post Office serving that area.

(2) A copy of the notice shall be mailed to the owner of record of the site, to the permit applicant or permit holder, if any, to the U.S. Fish and Wildlife Service, National Marine Fisheries Service and any other interested

Federal and State water pollution control and resource agencies, and to any person who has filed a written request with the Regional Administrator to receive copies of notices relating to section 404(c) determinations;

(3) A copy of the notice shall be mailed to the appropriate District and Division Engineer(s) and state;

(4) The notice will also be published in the FEDERAL REGISTER.

### § 231.4 Public comments and hearings.

(a) The Regional Administrator shall provide a comment period of not less than 30 or more than 60 days following the date of public notice of the proposed determination. During this period any interested persons may submit written comments on the proposed determination. Comments should be directed to whether the proposed determination should become the final determination and corrective action that could be taken to reduce the adverse impact of the discharge. All such comments shall be considered by the Regional Administrator or his designee in preparing his recommended determination in § 231.5.

(b) Where the Regional Administrator finds a significant degree of public interest in a proposed determination or that it would be otherwise in the public interest to hold a hearing, or if an affected landowner or permit applicant or holder requests a hearing, he or his designee shall hold a public hearing. Public notice of that hearing shall be given as specified in § 231.3(c). No hearing may be held prior to 21 days after the date of the public notice. The hearing may be scheduled either by the Regional Administrator at his own initiative, or in response to a request received during the comment period provided for in paragraph (a) of this section. If no public hearing is held the Regional Administrator shall notify any persons who requested a hearing of the reasons for that decision. Where practicable, hearings shall be conducted in the vicinity of the affected site.

(c) Hearings held under this section shall be conducted by the Regional Administrator, or his designee, in an orderly and expeditious manner. A record of the proceeding shall be made by either tape recording or verbatim transcript.

(d) Any person may appear at the hearing and submit oral or written statements and data and may be represented by counsel or other authorized representative. Any person may present written statements for the hearing file prior to the time the hearing file is closed to public submissions, and may present proposed findings and recommendations. The Regional Administrator or his designee shall afford the participants an opportunity for rebuttal.

(e) The Regional Administrator, or his designee, shall have discretion to establish reasonable limits on the nature, amount or form of presentation of documentary material and oral presentations. No cross examination of any hearing participant shall be permitted, although the Regional Administrator, or his designee, may make appropriate inquiries of any such participant.

(f) The Regional Administrator or his designee shall allow a reasonable time not to exceed 15 days after the close of the public hearing for submission of written comments. After such time has expired, unless such period is extended by the Regional Administrator or his designee for good cause, the hearing file shall be closed to additional public written comments.

(g) No later than the time a public notice of proposed determination is issued, a Record Clerk shall be designated with responsibility for maintaining the administrative record identified in § 231.5(e). Copying of any documents in the record shall be permitted under appropriate arrangements to prevent their loss. The charge for such copies shall be in accordance with the written schedule contained in part 2 of this chapter.

### § 231.5 Recommended determination.

(a) The Regional Administrator or his designee shall, within 30 days after the conclusion of the public hearing (but not before the end of the comment period), or, if no hearing is held, within 15 days after the expiration of the comment period on the public notice of the proposed determination, either withdraw the proposed determination or prepare a recommended determination

to prohibit or withdraw specification, or to deny, restrict, or withdraw the use for specification, of the disposal site because the discharge of dredged or fill material at such site would be likely to have an unacceptable adverse effect.

(b) Where a recommended determination is prepared, the Regional Administrator or his designee shall promptly forward the recommended determination and administrative record to the Administrator for review, with a copy of the recommended determination to the Assistant Administrator for Water and Waste Management.

(c) Where the Regional Administrator, or his designee, decides to withdraw the proposed determination, he shall promptly notify the Administrator by mail, with a copy to the Assistant Administrator for Water and Waste Management, who shall have 10 days from receipt of such notice to notify the Regional Administrator of his intent to review such withdrawal. Copies of the notification shall be sent to all persons who commented on the proposed determination or participated at the hearing. Such persons may submit timely written recommendations concerning review.

(1) If the Administrator does not notify him, the Regional Administrator shall give notice at the withdrawal of the proposed determination as provided in §231.3(d). Such notice shall constitute final agency action.

(2) If the Administrator does decide to review, the Regional Administrator or his designee shall forward the administrative record to the Administrator for a final determination under §231.6. Where there is review of a withdrawal of proposed determination or review of a recommended determination under §231.6, final agency action does not occur until the Administrator makes a final determination.

(d) Any recommended determination under paragraph (b) of this section shall include the following:

(1) A summary of the unacceptable adverse effects that could occur from use of the disposal site for the proposed discharge;

(2) Recommendations regarding a final determination to prohibit, deny, restrict, or withdraw, which shall confirm or modify the proposed determination, with a statement of reasons.

(e) The administrative record shall consist of the following:

(1) A copy of the proposed determination, public notice, written comments on the public notice and written submissions in the hearing file;

(2) A transcript or recording of the public hearing, where a hearing was held;

(3) The recommended determination;

(4) Where possible a copy of the record of the Corps or the state pertaining to the site in question;

(5) Any other information considered by the Regional Administrator or his designee.

### §231.6 Administrator's final determinations.

After reviewing the recommendations of the Regional Administrator or his designee, the Administrator shall within 30 days of receipt of the recommendations and administrative record initiate consultation with the Chief of Engineers, the owner of record, and, where applicable, the State and the applicant, if any. They shall have 15 days to notify the Administrator of their intent to take corrective action to prevent an unacceptable adverse effect(s), satisfactory to the Administrator. Within 60 days of receipt of the recommendations and record, the Administrator shall make a final determination affirming, modifying, or rescinding the recommended determination. The final determination shall describe the satisfactory corrective action, if any, make findings, and state the reasons for the final determination. Notice of such final determination shall be published as provided in §231.3, and shall be given to all persons who participated in the public hearing. Notice of the Administrator's final determination shall also be published in the FEDERAL REGISTER. For purposes of judicial review, a final determination constitutes final agency action under section 404(c) of the Act.

### §231.7 Emergency procedure.

Where a permit has already been issued, and the Administrator has reason to believe that a discharge under

the permit presents an imminent danger of irreparable harm to municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas) wildlife, or recreational areas, and that the public health, interest, or safety requires, the Administrator may ask the Chief of Engineers to suspend the permit under 33 CFR 325.7, or the state, pending completion of proceedings under Part 231. The Administrator may also take appropriate action as authorized under section 504 of the Clean Water Act. If a permit is suspended, the Administrator and Regional Administrator (or his designee) may, where appropriate, shorten the times allowed by these regulations to take particular actions.

### § 231.8 Extension of time.

The Administrator or the Regional Administrator may, upon a showing of good cause, extend the time requirements in these regulations. Notice of any such extension shall be published in the FEDERAL REGISTER and, as appropriate, through other forms of notice.

## PART 232—404 PROGRAM DEFINITIONS; EXEMPT ACTIVITIES NOT REQUIRING 404 PERMITS

Sec.
232.1 Purpose and scope of this part.
232.2 Definitions.
232.3 Activities not requiring permits.

AUTHORITY: 33 U.S.C. 1344.

SOURCE: 53 FR 20773, June 6, 1988, unless otherwise noted.

### § 232.1 Purpose and scope of this part.

Part 232 contains definitions applicable to the section 404 program for discharges of dredged or fill material. These definitions apply to both the federally operated program and State administered programs after program approval. This part also describes those activities which are exempted from regulation. Regulations prescribing the substantive environmental criteria for issuance of section 404 permits appear at 40 CFR part 230. Regulations establishing procedures to be followed by the EPA in denying or restricting a disposal site appear at 40 CFR part 231. Regulations containing the procedures and policies used by the Corps in administering the 404 program appear at 33 CFR parts 320–330. Regulations specifying the procedures EPA will follow, and the criteria EPA will apply in approving, monitoring, and withdrawing approval of section 404 State programs appear at 40 CFR part 233.

### § 232.2 Definitions.

*Administrator* means the Administrator of the Environmental Protection Agency or an authorized representative.

*Application* means a form for applying for a permit to discharge dredged or fill material into waters of the United States.

*Approved program* means a State program which has been approved by the Regional Administrator under part 233 of this chapter or which is deemed approved under section 404(h)(3), 33 U.S.C. 1344(h)(3).

*Best management practices* (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States from discharges of dredged or fill material. BMPs include methods, measures, practices, or design and performance standards which facilitate compliance with the section 404(b)(1) Guidelines (40 CFR part 230), effluent limitations or prohibitions under section 307(a), and applicable water quality standards.

*Discharge of dredged material.* (1) Except as provided below in paragraph (2), the term *discharge of dredged material* means any addition of dredged material into, including any redeposit of dredged material within, the waters of the United States. The term includes, but is not limited to, the following:

(i) The addition of dredged material to a specified discharge site located in waters of the United States;

(ii) The runoff or overflow, associated with a dredging operation, from a contained land or water disposal area; and

(iii) Any addition, including any redeposit, of dredged material, including excavated material, into waters of the United States which is incidental to any activity, including mechanized

landclearing, ditching, channelization, or other excavation.

(2) The term *discharge of dredged material* does not include the following:

(i) Discharges of pollutants into waters of the United States resulting from the onshore subsequent processing of dredged material that is extracted for any commercial use (other than fill). These discharges are subject to section 402 of the Clean Water Act even though the extraction and deposit of such material may require a permit from the Corps or applicable state.

(ii) Activities that involve only the cutting or removing of vegetation above the ground (e.g., mowing, rotary cutting, and chainsawing) where the activity neither substantially disturbs the root system nor involves mechanized pushing, dragging, or other similar activities that redeposit excavated soil material.

(3) Section 404 authorization is not required for the following:

(i) Any incidental addition, including redeposit, of dredged material associated with any activity that does not have or would not have the effect of destroying or degrading an area of waters of the U.S. as defined in paragraphs (4) and (5) of this definition; however, this exception does not apply to any person preparing to undertake mechanized landclearing, ditching, channelization and other excavation activity in a water of the United States, which would result in a redeposit of dredged material, unless the person demonstrates to the satisfaction of the Corps, or EPA as appropriate, prior to commencing the activity involving the discharge, that the activity would not have the effect of destroying or degrading any area of waters of the United States, as defined in paragraphs (4) and (5) of this definition. The person proposing to undertake mechanized landclearing, ditching, channelization or other excavation activity bears the burden of demonstrating that such activity would not destroy or degrade any area of waters of the United States.

(ii) Incidental movement of dredged material occurring during normal dredging operations, defined as dredging for navigation in *navigable waters of the United States,* as that term is defined in 33 CFR part 329, with proper authorization from the Congress or the Corps pursuant to 33 CFR part 322; however, this exception is not applicable to dredging activities in wetlands, as that term is defined at § 232.2(r) of this chapter.

(iii) Those discharges of dredged material associated with ditching, channelization or other excavation activities in waters of the United States, including wetlands, for which Section 404 authorization was not previously required, as determined by the Corps district in which the activity occurs or would occur, *provided* that prior to August 25, 1993, the excavation activity commenced or was under contract to commence work and that the activity will be completed no later that August 25, 1994. This provision does not apply to discharges associated with mechanized landclearing. For those excavation activities that occur on an ongoing basis (either continuously or periodically), e.g., mining operations, the Corps retains the authority to grant, on a case-by-case basis, an extension of this 12-month grandfather provision *provided* that the discharger has submitted to the Corps within the 12-month period an individual permit application seeking Section 404 authorization for such excavation activity. In no event can the grandfather period under this paragraph extend beyond August 25, 1996.

(iv) Certain discharges, such as those associated with normal farming, silviculture, and ranching activities, are not prohibited by or otherwise subject to regulation under Section 404. See 40 CFR 232.3 for discharges that do not require permits.

(4) For purposes of this section, an activity associated with a discharge of dredged material destroys an area of waters of the United States if it alters the area in such a way that it would no longer be a water of the United States.

NOTE: Unauthorized discharges into waters of the United States do not eliminate Clean Water Act jurisdiction, even where such unauthorized discharges have the effect of destroying waters of the United States.

(5) For purposes of this section, an activity associated with a discharge of dredged material degrades an area of waters of the United States if it has

more than a *de minimis* (i.e., inconsequential) effect on the area by causing an identifiable individual or cumulative adverse effect on any aquatic function.

*Discharge of fill material.* (1) The term *discharge of fill material* means the addition of fill material into waters of the United States. The term generally includes, without limitation, the following activities: Placement of fill that is necessary for the construction of any structure in a water of the United States; the building of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for structures such as sewage treatment facilities, intake and outfall pipes associated with power plants and subaqueous utility lines; and artificial reefs.

(2) In addition, placement of pilings in waters of the United States constitutes a discharge of fill material and requires a Section 404 permit when such placement has or would have the effect of a discharge of fill material. Examples of such activities that have the effect of a discharge of fill material include, but are not limited to, the following: Projects where the pilings are so closely spaced that sedimentation rates would be increased; projects in which the pilings themselves effectively would replace the bottom of a waterbody; projects involving the placement of pilings that would reduce the reach or impair the flow or circulation of waters of the United States; and projects involving the placement of pilings which would result in the adverse alteration or elimination of aquatic functions.

(i) Placement of pilings in waters of the United States that does not have or would not have the effect of a discharge of fill material shall not require a Section 404 permit. Placement of pilings for linear projects, such as bridges, elevated walkways, and powerline structures, generally does not have the effect of a discharge of fill material. Furthermore, placement of pilings in waters of the United States for piers, wharves, and an individual house on stilts generally does not have the effect of a discharge of fill material. All pilings, however, placed in the *navigable waters of the United States,* as that term is defined in 33 CFR part 329, require authorization under section 10 of the Rivers and Harbors Act of 1899 (see 33 CFR part 322).

(ii) [Reserved]

*Dredged material* means material that is excavated or dredged from waters of the United States.

*Effluent* means dredged material or fill material, including return flow from confined sites.

*Federal Indian reservation* means all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation.

*Fill material* means any ''pollutant'' which replaces portions of the ''waters of the United States'' with dry land or which changes the bottom elevation of a water body for any purpose.

*General permit* means a permit authorizing a category of discharges of dredged or fill material under the Act. General permits are permits for categories of discharge which are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment.

*Indian Tribe* means any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian reservation.

*Owner or operator* means the owner or operator of any activity subject to regulation under the 404 program.

*Permit* means a written authorization issued by an approved State to implement the requirements of part 233, or by the Corps under 33 CFR parts 320–330. When used in these regulations, ''permit'' includes ''general permit'' as well as individual permit.

*Person* means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

*Regional Administrator* means the Regional Administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

*Secretary* means the Secretary of the Army acting through the Chief of Engineers.

*State* means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe as defined in this part, which meet the requirements of § 233.60.

*State regulated waters* means those waters of the United States in which the Corps suspends the issuance of section 404 permits upon approval of a State's section 404 permit program by the Administrator under section 404(h). The program cannot be transferred for those waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to the high tide line, including wetlands adjacent thereto. All other waters of the United States in a State with an approved program shall be under jurisdiction of the State program, and shall be identified in the program description as required by part 233.

*Waters of the United States* means:

All waters which are currently used, were used in the past, or may be susceptible to us in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

All interstate waters including interstate wetlands.

All other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would or could affect interstate or foreign commerce including any such waters:

Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

Which are used or could be used for industrial purposes by industries in interstate commerce.

All impoundments of waters otherwise defined as waters of the United States under this definition;

Tributaries of waters identified in paragraphs (g)(1)–(4) of this section;

The territorial sea; and

Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (q)(1)–(6) of this section.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Act (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

*Wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

[53 FR 20773, June 6, 1988, as amended at 58 FR 8182, Feb. 11, 1993; 58 FR 45037, Aug. 25, 1993]

### § 232.3 Activities not requiring permits.

Except as specified in paragraphs (a) and (b) of this section, any discharge of dredged or fill material that may result from any of the activities described in paragraph (c) of this section is not prohibited by or otherwise subject to regulation under this part.

(a) If any discharge of dredged or fill material resulting from the activities listed in paragraph (c) of this section contains any toxic pollutant listed under section 307 of the Act, such discharge shall be subject to any applicable toxic effluent standard or prohibition, and shall require a section 404 permit.

(b) Any discharge of dredged or fill material into waters of the United States incidental to any of the activities identified in paragraph (c) of this section must have a permit if it is part of an activity whose purpose is to convert an area of the waters of the United States into a use to which it was not previously subject, where the flow or circulation of waters of the United States may be impaired or the reach of such waters reduced. Where the proposed discharge will result in significant discernable alterations to flow or circulation, the presumption is that flow or circulation may be impaired by such alteration.

NOTE: For example, a permit will be required for the conversion of a cypress swamp to some other use or the conversion of a wetland from silvicultural to agricultural use when there is a discharge of dredged or fill material into waters of the United States in conjunction with constuction of dikes, drainage ditches or other works or structures used to effect such conversion. A conversion of section 404 wetland to a non-wetland is a change in use of an area of waters of the U.S. A discharge which elevates the bottom of waters of the United States without converting it to dry land does not thereby reduce the reach of, but may alter the flow or circulation of, waters of the United States.

(c) The following activities are exempt from section 404 permit requirements, except as specified in paragraphs (a) and (b) of this section:

(1)(i) Normal farming, silviculture and ranching activities such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices, as defined in paragraph (d) of this section.

(ii)(A) To fall under this exemption, the activities specified in paragraph (c)(1) of this section must be part of an established (i.e., ongong) farming, silviculture, or ranching operation, and must be in accordance with definitions in paragraph (d) of this section. Activities on areas lying fallow as part of a conventional rotational cycle are part of an established operation.

(B) Activities which bring an area into farming, silviculture or ranching use are not part of an established operation. An operation ceases to be established when the area in which it was conducted has been converted to another use or has lain idle so long that modifications to the hydrological regime are necessary to resume operation. If an activity takes place outside the waters of the United States, or if it does not involve a discharge, it does not need a section 404 permit whether or not it was part of an established farming, silviculture or ranching operation.

(2) Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design. Emergency reconstruction must occur within a reasonable period of time after damage occurs in order to qualify for this exemption.

(3) Construction or maintenance of farm or stock ponds or irrigation ditches or the maintenance (but not construction) of drainage ditches. Discharge associated with siphons, pumps, headgates, wingwalls, wiers, diversion structures, and such other facilities as are appurtenant and functionally related to irrigation ditches are included in this exemption.

(4) Construction of temporary sedimentation basins on a construction site which does not include placement of fill material into waters of the United States. The term ''construction site'' refers to any site involving the erection of buildings, roads, and other discrete structures and the installation of support facilities necessary for construction and utilization of such structures. The term also includes any other land areas which involve land-disturbing excavation activities, including quarrying or other mining activities,

where an increase in the runoff of sediment is controlled through the use of temporary sedimentation basins.

(5) Any activity with respect to which a State has an approved program under section 208(b)(4) of the Act which meets the requirements of section 208(b)(4)(B) and (C).

(6) Construction or maintenance of farm roads, forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained in accordance with best management practices (BMPs) to assure that flow and circulation patterns and chemical and biological characteristics of waters of the United States are not impaired, that the reach of the waters of the United States is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized. The BMPs which must be applied to satisfy this provision include the following baseline provisions:

(i) Permanent roads (for farming or forestry activities), temporary access roads (for mining, forestry, or farm purposes) and skid trails (for logging) in waters of the United States shall be held to the minimum feasible number, width, and total length consistent with the purpose of specific farming, silvicultural or mining operations, and local topographic and climatic conditions;

(ii) All roads, temporary or permanent, shall be located sufficiently far from streams or other water bodies (except for portions of such roads which must cross water bodies) to minimize discharges of dredged or fill material into waters of the United States;

(iii) The road fill shall be bridged, culverted, or otherwise designed to prevent the restriction of expected flood flows;

(iv) The fill shall be properly stabilized and maintained to prevent erosion during and following construction;

(v) Discharges of dredged or fill material into waters of the United States to construct a road fill shall be made in a manner that minimizes the encroachment of trucks, tractors, bulldozers, or other heavy equipment within the waters of the United States (including adjacent wetlands) that lie outside the lateral boundaries of the fill itself;

(vi) In designing, constructing, and maintaining roads, vegetative disturbance in the waters of the United States shall be kept to a minimum;

(vii) The design, construction and maintenance of the road crossing shall not disrupt the migration or other movement of those species of aquatic life inhabiting the water body;

(viii) Borrow material shall be taken from upland sources whenever feasible;

(ix) The discharge shall not take, or jeopardize the continued existence of, a threatened or endangered species as defined under the Endangered Species Act, or adversely modify or destroy the critical habitat of such species;

(x) Discharges into breeding and nesting areas for migratory waterfowl, spawning areas, and wetlands shall be avoided if practical alternatives exist;

(xi) The discharge shall not be located in the proximity of a public water supply intake;

(xii) The discharge shall not occur in areas of concentrated shellfish production;

(xiii) The discharge shall not occur in a component of the National Wild and Scenic River System;

(xiv) The discharge of material shall consist of suitable material free from toxic pollutants in toxic amounts; and

(xv) All temporary fills shall be removed in their entirety and the area restored to its original elevation.

(d) For purpose of paragraph (c)(1) of this section, cultivating, harvesting, minor drainage, plowing, and seeding are defined as follows:

(1) Cultivating means physical methods of soil treatment employed within established farming, ranching and silviculture lands on farm, ranch, or forest crops to aid and improve their growth, quality, or yield.

(2) Harvesting means physical measures employed directly upon farm, forest, or ranch crops within established agricultural and silvicultural lands to bring about their removal from farm, forest, or ranch land, but does not include the construction of farm, forest, or ranch roads.

(3)(i) Minor drainage means:

(A) The discharge of dredged or fill material incidental to connecting upland drainage facilities to waters of the United States, adequate to effect the

removal of excess soil moisture from upland croplands. Construction and maintenance of upland (dryland) facilities, such as ditching and tiling, incidental to the planting, cultivating, protecting, or harvesting of crops, involve no discharge of dredged or fill material into waters of the United States, and as such never require a section 404 permit;

(B) The discharge of dredged or fill material for the purpose of installing ditching or other water control facilities incidental to planting, cultivating, protecting, or harvesting of rice, cranberries or other wetland crop species, where these activities and the discharge occur in waters of the United States which are in established use for such agricultural and silvicultural wetland crop production;

(C) The discharge of dredged or fill material for the purpose of manipulating the water levels of, or regulating the flow or distribution of water within, existing impoundments which have been constructed in accordance with applicable requirements of the Act, and which are in established use for the production or rice, cranberries, or other wetland crop species.

NOTE: The provisions of paragraphs (d)(3)(i)(B) and (C) of this section apply to areas that are in established use exclusively for wetland crop production as well as areas in established use for conventional wetland/non-wetland crop rotation (e.g., the rotations of rice and soybeans) where such rotation results in the cyclical or intermittent temporary dewatering of such areas.

(D) The discharge of dredged or fill material incidental to the emergency removal of sandbars, gravel bars, or other similar blockages which are formed during flood flows or other events, where such blockages close or constrict previously existing drainageways and, if not promptly removed, would result in damage to or loss of existing crops or would impair or prevent the plowing, seeding, harvesting or cultivating of crops on land in established use for crop production. Such removal does not include enlarging or extending the dimensions of, or changing the bottom elevations of, the affected drainageway as it existed prior to the formation of the blockage. Removal must be accomplished within one year after such blockages are discovered in order to be eligible for exemption.

(ii) Minor drainage in waters of the United States is limited to drainage within areas that are part of an established farming or silviculture operation. It does not include drainage associated with the immediate or gradual conversion of a wetland to a non-wetland (e.g., wetland species to upland species not typically adequate to life in saturated soil conditions), or conversion from one wetland use to another (for example, silviculture to farming).

In addition, minor drainage does not include the construction of any canal, ditch, dike or other waterway or structure which drains or otherwise significantly modifies a stream, lake, swamp, bog or any other wetland or aquatic area constituting waters of the United States. Any discharge of dredged or fill material into the waters of the United States incidental to the construction of any such structure or waterway requires a permit.

(4) Plowing means all forms of primary tillage, including moldboard, chisel, or wide-blade plowing, discing, harrowing, and similar physical means used on farm, forest or ranch land for the breaking up, cutting, turning over, or stirring of soil to prepare it for the planting of crops. Plowing does not include the redistribution of soil, rock, sand, or other surficial materials in a manner which changes any area of the waters of the United States to dryland. For example, the redistribution of surface materials by blading, grading, or other means to fill in wetland areas is not plowing. Rock crushing activities which result in the loss of natural drainage characteristics, the reduction of water storage and recharge capabilities, or the overburden of natural water filtration capacities do not constitute plowing. Plowing, as described above, will never involve a discharge of dredged or fill material.

(5) Seeding means the sowing of seed and placement of seedlings to produce farm, ranch, or forest crops and includes the placement of soil beds for seeds or seedlings on established farm and forest lands.

(e) Federal projects which qualify under the criteria contained in section

404(r) of the Act are exempt from section 404 permit requirements, but may be subject to other State or Federal requirements.

# PART 233—404 STATE PROGRAM REGULATIONS

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AUTHORITY: 33 U.S.C. 1251 *et seq.*

SOURCE: 53 FR 20776, June 1, 1988, unless otherwise noted.

## Subpart A—General

### §233.1 Purpose and scope.

(a) This part specifies the procedures EPA will follow, and the criteria EPA will apply, in approving, reviewing, and withdrawing approval of State programs under section 404 of the Act.

(b) Except as provided in §232.3, a State program must regulate all discharges of dredged or fill material into waters regulated by the State under section 404(g)–(1). Partial State programs are not approvable under section 404. A State's decision not to assume existing Corps' general permits does not constitute a partial program. The discharges previously authorized by general permit will be regulated by State individual permits. However, in many cases, States other than Indian Tribes will lack authority to regulate activities on Indian lands. This lack of authority does not impair that State's ability to obtain full program approval in accordance with this part, i.e., inability of a State which is not an Indian Tribe to regulate activities on Indian lands does not constitute a partial program. The Secretary of the Army acting through the Corps of Engineers will continue to administer the program on Indian lands if a State which is not an Indian Tribe does not seek and have authority to regulate activities on Indian lands.

(c) Nothing in this part precludes a State from adopting or enforcing requirements which are more stringent or from operating a program with greater scope, than required under this part. Where an approved State program has a greater scope than required by Federal law, the additional coverage is

not part of the Federally approved program and is not subject to Federal oversight or enforcement.

NOTE: State assumption of the section 404 program is limited to certain waters, as provided in section 404(g)(1). The Federal program operated by the Corps of Engineers continues to apply to the remaining waters in the State even after program approval. However, this does not restrict States from regulating discharges of dredged or fill material into those waters over which the Secretary retains section 404 jurisdiction.

(d) Any approved State Program shall, at all times, be conducted in accordance with the requirements of the Act and of this part. While States may impose more stringent requirements, they may not impose any less stringent requirements for any purpose.

[53 FR 20776, June 1, 1988, as amended at 58 FR 8183, Feb. 11, 1993]

### § 233.2 Definitions.

The definitions in parts 230 and 232 as well as the following definitions apply to this part.

*Act* means the Clean Water Act (33 U.S.C. 1251 *et seq.*).

*Corps* means the U.S. Army Corps of Engineers.

*Federal Indian reservation* means all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation.

*FWS* means the U.S. Fish and Wildlife Service.

*Indian Tribe* means any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian reservation.

*Interstate agency* means an agency of two or more States established by or under an agreement or compact approved by the Congress, or any other agency of two or more States having substantial powers or duties pertaining to the control of pollution.

*NMFS* means the National Marine Fisheries Service.

*State* means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe, as defined in this part, which meet the requirements of § 233.60. For purposes of this part, the word State also includes any interstate agency requesting program approval or administering an approved program.

*State Director* (*Director*) means the chief administrative officer of any State or interstate agency operating an approved program, or the delegated representative of the Director. If responsibility is divided among two or more State or interstate agencies, Director means the chief administrative officer of the State or interstate agency authorized to perform the particular procedure or function to which reference is made.

*State 404 program* or *State program* means a State program which has been approved by EPA under section 404 of the Act to regulate the discharge of dredged or fill material into certain waters as defined in § 232.2(p).

[53 FR 20776, June 1, 1988, as amended at 58 FR 8183, Feb. 11, 1993]

### § 233.3 Confidentiality of information.

(a) Any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter at the time of submittal and a final determination as to that claim will be made in accordance with the procedures of 40 CFR part 2 and paragraph (c) of this section.

(b) Any information submitted to the Director may be claimed as confidential in accordance with State law, subject to paragraphs (a) and (c) of this section.

(c) Claims of confidentiality for the following information will be denied:

(1) The name and address of any permit applicant or permittee,

(2) Effluent data,

(3) Permit application, and

(4) Issued permit.

### § 233.4 Conflict of interest.

Any public officer or employee who has a direct personal or pecuniary interest in any matter that is subject to decision by the agency shall make known such interest in the official records of the agency and shall refrain

from participating in any manner in such decision.

## Subpart B—Program Approval

### § 233.10 Elements of a program submission.

Any State that seeks to administer a 404 program under this part shall submit to the Regional Administrator at least three copies of the following:

(a) A letter from the Governor of the State requesting program approval.

(b) A complete program description, as set forth in § 233.11.

(c) An Attorney General's statement, as set forth in § 233.12.

(d) A Memorandum of Agreement with the Regional Administrator, as set forth in § 233.13.

(e) A Memorandum of Agreement with the Secretary, as set forth in § 233.14.

(f) Copies of all applicable State statutes and regulations, including those governing applicable State administrative procedures.

### § 233.11 Program description.

The program description as required under § 233.10 shall include:

(a) A description of the scope and structure of the State's program. The description should include extent of State's jurisdiction, scope of activities regulated, anticipated coordination, scope of permit exemptions if any, and permit review criteria;

(b) A description of the State's permitting, administrative, judicial review, and other applicable procedures;

(c) A description of the basic organization and structure of the State agency (agencies) which will have responsibility for administering the program. If more than one State agency is responsible for the administration of the program, the description shall address the responsibilities of each agency and how the agencies intend to coordinate administration and evaluation of the program;

(d) A description of the funding and manpower which will be available for program administration;

(e) An estimate of the anticipated workload, e.g., number of discharges.

(f) Copies of permit application forms, permit forms, and reporting forms;

(g) A description of the State's compliance evaluation and enforcement programs, including a description of how the State will coordinate its enforcement strategy with that of the Corps and EPA;

(h) A description of the waters of the United States within a State over which the State assumes jurisdiction under the approved program; a description of the waters of the United States within a State over which the Secretary retains jurisdiction subsequent to program approval; and a comparison of the State and Federal definitions of wetlands.

NOTE: States should obtain from the Secretary an identification of those waters of the U.S. within the State over which the Corps retains authority under section 404(g) of the Act.

(i) A description of the specific best management practices proposed to be used to satisfy the exemption provisions of section 404(f)(1)(E) of the Act for construction or maintenance of farm roads, forest roads, or temporary roads for moving mining equipment.

### § 233.12 Attorney General's statement.

(a) Any State that seeks to administer a program under this part shall submit a statement from the State Attorney General (or the attorney for those State or interstate agencies which have independence legal counsel), that the laws and regulations of the State, or an interstate compact, provide adequate authority to carry out the program and meet the applicable requirements of this part. This statement shall cite specific statutes and administrative regulations which are lawfully adopted at the time the statement is signed and which shall be fully effective by the time the program is approved, and, where appropriate, judicial decisions which demonstrate adequate authority. The attorney signing the statement required by this section must have authority to represent the State agency in court on all matters pertaining to the State program.

(b) If a State seeks approval of a program covering activities on Indian lands, the statement shall contain an

analysis of the State's authority over such activities.

(c) The State Attorney General's statement shall contain a legal analysis of the effect of State law regarding the prohibition on taking private property without just compensation on the successful implementation of the State's program.

(d) In those States where more than one agency has responsibility for administering the State program, the statement must include certification that each agency has full authority to administer the program within its category of jurisdiction and that the State, as a whole, has full authority to administer a complete State section 404 program.

### § 233.13 Memorandum of Agreement with Regional Administrator.

(a) Any State that seeks to administer a program under this part shall submit a Memorandum of Agreement executed by the Director and the Regional Administrator. The Memorandum of Agreement shall become effective upon approval of the State program. When more than one agency within a State has responsibility for administering the State program, Directors of each of the responsible State agencies shall be parties to the Memorandum of Agreement.

(b) The Memorandum of Agreement shall set out the State and Federal responsibilities for program administration and enforcement. These shall include, but not be limited to:

(1) Provisions specifying classes and categories of permit applications for which EPA will waive Federal review (as specified in § 233.51).

(2) Provisions specifying the frequency and content of reports, documents and other information which the State may be required to submit to EPA in addition to the annual report, as well as a provision establishing the submission date for the annual report. The State shall also allow EPA routinely to review State records, reports and files relevant to the administration and enforcement of the approved program.

(3) Provisions addressing EPA and State roles and coordination with respect to compliance monitoring and enforcement activities.

(4) Provisions addressing modification of the Memorandum of Agreement.

### § 233.14 Memorandum of Agreement with the Secretary.

(a) Before a State program is approved under this part, the Director shall enter into a Memorandum of Agreement with the Secretary. When more than one agency within a State has responsibility for administering the State program, Directors of each of the responsible agencies shall be parties of the Memorandum of Agreement.

(b) The Memorandum of Agreement shall include:

(1) A description of waters of the United States within the State over which the Secretary retains jurisdiction, as identified by the Secretary.

(2) Procedures whereby the Secretary will, upon program approval, transfer to the State pending 404 permit applications for discharges in State regulated waters and other relevant information not already in the possession of the Director.

NOTE:—Where a State permit program includes coverage of those traditionally navigable waters in which only the Secretary may issue section 404 permits, the State is encouraged to establish in this MOA procedures for joint processing of Federal and State permits, including joint public notices and public hearings.

(3) An identification of all general permits issued by the Secretary the terms and conditions of which the State intends to administer and enforce upon receiving approval of its program, and a plan for transferring responsibility for these general permits to the State, including procedures for the prompt transmission from the Secretary to the Director of relevant information not already in the possession of the Director, including support files for permit issuance, compliance reports and records of enforcement actions.

**§ 233.15 Procedures for approving State programs.**

(a) The 120 day statutory review period shall commence on the date of receipt of a complete State program submission as set out in § 233.10 of this part. EPA shall determine whether the submission is complete within 30 days of receipt of the submission and shall notify the State of its determination. If EPA finds that a State's submission is incomplete, the statutory review period shall not begin until all the necessary information is received by EPA.

(b) If EPA determines the State significantly changes its submission during the review period, the statutory review period shall begin again upon the receipt of a revised submission.

(c) The State and EPA may extend the statutory review period by agreement.

(d) Within 10 days of receipt of a complete State section 404 program submission, the Regional Administrator shall provide copies of the State's submission to the Corps, FWS, and NMFS (both Headquarters and appropriate Regional organizations.)

(e) After determining that a State program submission is complete, the Regional Administrator shall publish notice of the State's application in the FEDERAL REGISTER and in enough of the largest newspapers in the State to attract statewide attention. The Regional Administrator shall also mail notice to persons known to be interested in such matters. Existing State, EPA, Corps, FWS, and NMFS mailing lists shall be used as a basis for this mailing. However, failure to mail all such notices shall not be grounds for invalidating approval (or disapproval) of an otherwise acceptable (or unacceptable) program. This notice shall:

(1) Provide for a comment period of not less than 45 days during which interested members of the public may express their views on the State program.

(2) Provide for a public hearing within the State to be held not less than 30 days after notice of hearing is published in the FEDERAL REGISTER;

(3) Indicate where and when the State's submission may be reviewed by the public;

(4) Indicate whom an interested member of the public with questions should contact; and

(5) Briefly outline the fundamental aspects of the State's proposed program and the process for EPA review and decision.

(f) Within 90 days of EPA's receipt of a complete program submission, the Corps, FWS, and NMFS shall submit to EPA any comments on the State's program.

(g) Within 120 days of receipt of a complete program submission (unless an extension is agreed to by the State), the Regional Administrator shall approve or disapprove the program based on whether the State's program fulfills the requirements of this part and the Act, taking into consideration all comments received. The Regional Administrator shall prepare a responsiveness summary of significant comments received and his response to these comments. The Regional Administrator shall respond individually to comments received from the Corps, FWS, and NMFS.

(h) If the Regional Administrator approves the State's section 404 program, he shall notify the State and the Secretary of the decision and publish notice in the FEDERAL REGISTER. Transfer of the program to the State shall not be considered effective until such notice appears in the FEDERAL REGISTER. The Secretary shall suspend the issuance by the Corps of section 404 permits in State regulated waters on such effective date.

(i) If the Regional Administrator disapproves the State's program based on the State not meeting the requirements of the Act and this part, the Regional Administrator shall notify the State of the reasons for the disapproval and of any revisions or modifications to the State's program which are necessary to obtain approval. If the State resubmits a program submission remedying the identified problem areas, the approval procedure and statutory review period shall begin upon receipt of the revised submission.

**§ 233.16 Procedures for revision of State programs.**

(a) The State shall keep the Regional Administrator fully informed of any

proposed or actual changes to the State's statutory or regulatory authority or any other modifications which are significant to administration of the program.

(b) Any approved program which requires revision because of a modification to this part or to any other applicable Federal statute or regulation shall be revised within one year of the date of promulgation of such regulation, except that if a State must amend or enact a statute in order to make the required revision, the revision shall take place within two years.

(c) States with approved programs shall notify the Regional Administrator whenever they propose to transfer all or part of any program from the approved State agency to any other State agency. The new agency is not authorized to administer the program until approved by the Regional Administrator under paragraph (d) of this section.

(d) Approval of revision of a State program shall be accomplished as follows:

(1) The Director shall submit a modified program description or other documents which the Regional Administrator determines to be necessary to evaluate whether the program complies with the requirements of the Act and this part.

(2) Notice of approval of program changes which are not substantial revisions may be given by letter from the Regional Administrator to the Governor or his designee.

(3) Whenever the Regional Administrator determines that the proposed revision is substantial, he shall publish and circulate notice to those persons known to be interested in such matters, provide opportunity for a public hearing, and consult with the Corps, FWS, and NMFS. The Regional Administrator shall approve or disapprove program revisions based on whether the program fulfills the requirements of the Act and this part, and shall publish notice of his decision in the FEDERAL REGISTER. For purposes of this paragraph, substantial revisions include, but are not limited to, revisions that affect the area of jurisdiction, scope of activities regulated, criteria for review of permits, public participation, or enforcement capability.

(4) Substantial program changes shall become effective upon approval by the Regional Administrator and publication of notice in the FEDERAL REGISTER.

(e) Whenever the Regional Administrator has reason to believe that circumstances have changed with respect to a State's program, he may request and the State shall provide a supplemental Attorney General's statement, program description, or such other documents or information as are necessary to evaluate the program's compliance with the requirements of the Act and this part.

## Subpart C—Permit Requirements

### § 233.20 Prohibitions.

No permit shall be issued by the Director in the following circumstances:

(a) When permit does not comply with the requirements of the Act or regulations thereunder, including the section 404(b)(1) Guidelines (part 230 of this chapter).

(b) When the Regional Administrator has objected to issuance of the permit under § 233.50 and the objection has not been resolved.

(c) When the proposed discharges would be in an area which has been prohibited, withdrawn, or denied as a disposal site by the Administrator under section 404(c) of the Act, or when the discharge would fail to comply with a restriction imposed thereunder.

(d) If the Secretary determines, after consultation with the Secretary of the Department in which the Coast Guard is operating, that anchorage and navigation of any of the navigable waters would be substantially impaired.

### § 233.21 General permits.

(a) Under section 404(h)(5) of the Act, States may, after program approval, administer and enforce general permits previously issued by the Secretary in State regulated waters.

NOTE: If States intend to assume existing general permits, they must be able to ensure compliance with existing permit conditions an any reporting monitoring, or prenotification requirements.

(b) The Director may issue a general permit for categories of similar activities if he determines that the regulated activities will cause only minimal adverse environmental effects when performed separately and will have only minimal cumulative adverse effects on the environment. Any general permit issued shall be in compliance with the section 404(b)(1) Guidelines.

(c) In addition to the conditions specified in §233.23, each general permit shall contain:

(1) A specific description of the type(s) of activities which are authorized, including limitations for any single operation. The description shall be detailed enough to ensure that the requirements of paragraph (b) of this section are met. (This paragraph supercedes §233.23(c)(1) for general permits.)

(2) A precise description of the geographic area to which the general permit applies, including limitations on the type(s) of water where operations may be conducted sufficient to ensure that the requirements of paragraph (b) of this section are met.

(d) Predischarge notification or other reporting requirements may be required by the Director on a permit-by-permit basis as appropriate to ensure that the general permit will comply with the requirement (section 404(e) of the Act) that the regulated activities will cause only minimal adverse environmental effects when performed separately and will have only minimal cumulative adverse effects on the environment.

(e) The Director may, without revoking the general permit, require any person authorized under a general permit to apply for an individual permit. This discretionary authority will be based on concerns for the aquatic environment including compliance with paragraph (b) of this section and the 404(b)(1) Guidelines (40 CFR part 230.)

(1) This provision in no way affects the legality of activities undertaken pursuant to the general permit prior to notification by the Director of such requirement.

(2) Once the Director notifies the discharger of his decision to exercise discretionary authority to require an individual permit, the discharger's activity is no longer authorized by the general permit.

### §233.22 Emergency permits.

(a) Notwithstanding any other provision of this part, the Director may issue a temporary emergency permit for a discharge of dredged or fill material if unacceptable harm to life or severe loss of physical property is likely to occur before a permit could be issued or modified under procedures normally required.

(b) Emergency permits shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of §233.23.

(1) Any emergency permit shall be limited to the duration of time (typically no more than 90 days) required to complete the authorized emergency action.

(2) The emergency permit shall have a condition requiring appropriate restoration of the site.

(c) The emergency permit may be terminated at any time without process (§233.36) if the Director determines that termination is necessary to protect human health or the environment.

(d) The Director shall consult in an expeditious manner, such as by telephone, with the Regional Administrator, the Corps, FWS, and NMFS about issuance of an emergency permit.

(e) The emergency permit may be oral or written. If oral, it must be followed within 5 days by a written emergency permit. A copy of the written permit shall be sent to the Regional Administrator.

(f) Notice of the emergency permit shall be published and public comments solicited in accordance with §233.32 as soon as possible but no later than 10 days after the issuance date.

### §233.23 Permit conditions.

(a) For each permit the Director shall establish conditions which assure compliance with all applicable statutory and regulatory requirements, including the 404(b)(1) Guidelines, applicable section 303 water quality standards, and applicable section 307 effluent standards and prohibitions.

(b) Section 404 permits shall be effective for a fixed term not to exceed 5 years.

(c) Each 404 permit shall include conditions meeting or implementing the following requirements:

(1) A specific identification and complete description of the authorized activity including name and address of permittee, location and purpose of discharge, type and quantity of material to be discharged. (This subsection is not applicable to general permits).

(2) Only the activities specifically described in the permit are authorized.

(3) The permittee shall comply with all conditions of the permit even if that requires halting or reducing the permitted activity to maintain compliance. Any permit violation constitutes a violation of the Act as well as of State statute and/or regulation.

(4) The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit.

(5) The permittee shall inform the Director of any expected or known actual noncompliance.

(6) The permittee shall provide such information to the Director, as the Director requests, to determine compliance status, or whether cause exists for permit modification, revocation or termination.

(7) Monitoring, reporting and recordkeeping requirements as needed to safeguard the aquatic environment. (Such requirements will be determined on a case-by-case basis, but at a minimum shall include monitoring and reporting of any expected leachates, reporting of noncompliance, planned changes or transfer of the permit.)

(8) Inspection and entry. The permittee shall allow the Director, or his authorized representative, upon presentation of proper identification, at reasonable times to:

(i) Enter upon the permittee's premises where a regulated activity is located or where records must be kept under the conditions of the permit,

(ii) Have access to and copy any records that must be kept under the conditions of the permit,

(iii) Inspect operations regulated or required under the permit, and

(iv) Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

(9) Conditions assuring that the discharge will be conducted in a manner which minimizes adverse impacts upon the physical, chemical and biological integrity of the waters of the United States, such as requirements for restoration or mitigation.

## Subpart D—Program Operation

### § 233.30 Application for a permit.

(a) Except when an activity is authorized by a general permit issued pursuant to § 233.21 or is exempt from the requirements to obtain a permit under § 232.3, any person who proposes to discharge dredged or fill material into State regulated waters shall complete, sign and submit a permit application to the Director. Persons proposing to discharge dredged or fill material under the authorization of a general permit must comply with any reporting requirements of the general permit.

(b) A complete application shall include:

(1) Name, address, telephone number of the applicant and name(s) and address(es) of adjoining property owners.

(2) A complete description of the proposed activity including necessary drawings, sketches or plans sufficient for public notice (the applicant is not generally expected to submit detailed engineering plans and specifications); the location, purpose and intended use of the proposed activity; scheduling of the activity; the location and dimensions of adjacent structures; and a list of authorizations required by other Federal, interstate, State or local agencies for the work, including all approvals received or denials already made.

(3) The application must include a description of the type, composition, source and quantity of the material to be discharged, the method of discharge, and the site and plans for disposal of the dredged or fill material.

(4) A certification that all information contained in the application is true and accurate and acknowledging

awareness of penalties for submitting false information.

(5) All activities which the applicant plans to undertake which are reasonably related to the same project should be included in the same permit application.

(c) In addition to the information indicated in § 233.30(b), the applicant will be required to furnish such additional information as the Director deems appropriate to assist in the evaluation of the application. Such additional information may include environmental data and information on alternate methods and sites as may be necessary for the preparation of the required environmental documentation.

(d) The level of detail shall be reasonably commensurate with the type and size of discharge, proximity to critical areas, likelihood of long-lived toxic chemical substances, and potential level of environmental degradation.

NOTE: EPA encourages States to provide permit applicants guidance regarding the level of detail of information and documentation required under this subsection. This guidance can be provided either through the application form or on an individual basis. EPA also encourages the State to maintain a program to inform potential applicants for permits of the requirements of the State program and of the steps required to obtain permits for activities in State regulated waters.

### § 233.31 Coordination requirements.

(a) If a proposed discharge may affect the biological, chemical, or physical integrity of the waters of any State(s) other than the State in which the discharge occurs, the Director shall provide an opportunity for such State(s) to submit written comments within the public comment period and to suggest permit conditions. If these recommendations are not accepted by the Director, he shall notify the affected State and the Regional Administrator prior to permit issuance in writing of his failure to accept these recommendations, together with his reasons for so doing. The Regional Administrator shall then have the time provided for in § 233.50(d) to comment upon, object to, or make recommendations.

(b) State section 404 permits shall be coordinated with Federal and Federal-State water related planning and review processes.

### § 233.32 Public notice.

(a) Applicability.

(1) The Director shall give public notice of the following actions:

(i) Receipt of a permit application.

(ii) Preparation of a draft general permit.

(iii) Consideration of a major modification to an issued permit.

(iv) Scheduling of a public hearing.

(v) Issuance of an emergency permit.

(2) Public notices may describe more than one permit or action.

(b) Timing.

(1) The public notice shall provide a reasonable period of time, normally at least 30 days, within which interested parties may express their views concerning the permit application.

(2) Public notice of a public hearing shall be given at least 30 days before the hearing.

(3) The Regional Administrator may approve a program with shorter public notice timing if the Regional Administrator determines that sufficient public notice is provided for.

(c) The Director shall give public notice by each of the following methods:

(1) By mailing a copy of the notice to the following persons (any person otherwise entitled to receive notice under this paragraph may waive his rights to receive notice for any classes or categories of permits):

(i) The applicant.

(ii) Any agency with jurisdiction over the activity or the disposal site, whether or not the agency issues a permit.

(iii) Owners of property adjoining the property where the regulated activity will occur.

(iv) All persons who have specifically requested copies of public notices. (The Director may update the mailing list from time to time by requesting written indication of continued interest from those listed. The Director may delete from the list the name of any person who fails to respond to such a request.)

(v) Any State whose waters may be affected by the proposed discharge.

(2) In addition, by providing notice in at least one other way (such as advertisement in a newspaper of sufficient circulation) reasonably calculated to cover the area affected by the activity.

(d) All public notices shall contain at least the following information:

(1) The name and address of the applicant and, if different, the address or location of the activity(ies) regulated by the permit.

(2) The name, address, and telephone number of a person to contact for further information.

(3) A brief description of the comment procedures and procedures to request a public hearing, including deadlines.

(4) A brief description of the proposed activity, its purpose and intended use, so as to provide sufficient information concerning the nature of the activity to generate meaningful comments, including a description of the type of structures, if any, to be erected on fills, and a description of the type, composition and quantity of materials to be discharged.

(5) A plan and elevation drawing showing the general and specific site location and character of all proposed activities, including the size relationship of the proposed structures to the size of the impacted waterway and depth of water in the area.

(6) A paragraph describing the various evaluation factors, including the 404(b)(1) Guidelines or State-equivalent criteria, on which decisions are based.

(7) Any other information which would significantly assist interested parties in evaluating the likely impact of the proposed activity.

(e) Notice of public hearing shall also contain the following information:

(1) Time, date, and place of hearing.

(2) Reference to the date of any previous public notices relating to the permit.

(3) Brief description of the nature and purpose of the hearing.

### § 233.33 Public hearing.

(a) Any interested person may request a public hearing during the public comment period as specified in § 233.32. Requests shall be in writing and shall state the nature of the issues proposed to be raised at the hearing.

(b) The Director shall hold a public hearing whenever he determines there is a significant degree of public interest in a permit application or a draft general permit. He may also hold a hearing, at his discretion, whenever he determines a hearing may be useful to a decision on the permit application.

(c) At a hearing, any person may submit oral or written statements or data concerning the permit application or draft general permit. The public comment period shall automatically be extended to the close of any public hearing under this section. The presiding officer may also extend the comment period at the hearing.

(d) All public hearings shall be reported verbatim. Copies of the record of proceedings may be purchased by any person from the Director or the reporter of such hearing. A copy of the transcript (or if none is prepared, a tape of the proceedings) shall be made available for public inspection at an appropriate State office.

### § 233.34 Making a decision on the permit application.

(a) The Director will review all applications for compliance with the 404(b)(1) Guidelines and/or equivalent State environmental criteria as well as any other applicable State laws or regulations.

(b) The Director shall consider all comments received in response to the public notice, and public hearing if a hearing is held. All comments, as well as the record of any public hearing, shall be made part of the official record on the application.

(c) After the Director has completed his review of the application and consideration of comments, the Director will determine, in accordance with the record and all applicable regulations, whether or not the permit should be issued. No permit shall be issued by the Director under the circumstances described in § 233.20. The Director shall prepare a written determination on each application outlining his decision and rationale for his decision. The determination shall be dated, signed and included in the official record prior to final action on the application. The official record shall be open to the public.

**§233.35 Issuance and effective date of permit.**

(a) If the Regional Administrator comments on a permit application or draft general permit under §233.50, the Director shall follow the procedures specified in that section in issuing the permit.

(b) If the Regional Administrator does not comment on a permit application or draft general permit, the Director shall make a final permit decision after the close of the public comment period and shall notify the applicant.

(1) If the decision is to issue a permit, the permit becomes effective when it is signed by the Director and the applicant.

(2) If the decision is to deny the permit, the Director will notify the applicant in writing of the reason(s) for denial.

**§233.36 Modification, suspension or revocation of permits.**

(a) *General.* The Director may reevaluate the circumstances and conditions of a permit either on his own motion or at the request of the permittee or of a third party and initiate action to modify, suspend, or revoke a permit if he determines that sufficient cause exists. Among the factors to be considered are:

(1) Permittee's noncompliance with any of the terms or conditions of the permit;

(2) Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at the time;

(3) Information that activities authorized by a general permit are having more than minimal individual or cumulative adverse effect on the environment, or that the permitted activities are more appropriately regulated by individual permits;

(4) Circumstances relating to the authorized activity have changed since the permit was issued and justify changed permit conditions or temporary or permanent cessation of any discharge controlled by the permit;

(5) Any significant information relating to the activity authorized by the permit if such information was not available at the time the permit was issued and would have justified the imposition of different permit conditions or denial at the time of issuance;

(6) Revisions to applicable statutory or regulatory authority, including toxic effluent standards or prohibitions or water quality standards.

(b) *Limitations.* Permit modifications shall be in compliance with §233.20.

(c) *Procedures.* (1) The Director shall develop procedures to modify, suspend or revoke permits if he determines cause exists for such action (§233.36(a)). Such procedures shall provide opportunity for public comment (§233.32), coordination with the Federal review agencies (§233.50), and opportunity for public hearing (§233.33) following notification of the permittee. When permit modification is proposed, only the conditions subject to modification need be reopened.

(2) Minor modification of permits. The Director may, upon the consent of the permittee, use abbreviated procedures to modify a permit to make the following corrections or allowance for changes in the permitted activity:

(i) Correct typographical errors;

(ii) Require more frequent monitoring or reporting by permittee;

(iii) Allow for a change in ownership or operational control of a project or activity where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director;

(iv) Provide for minor modification of project plans that do not significantly change the character, scope, and/or purpose of the project or result in significant change in environmental impact;

(v) Extend the term of a permit, so long as the modification does not extend the term of the permit beyond 5 years from its original effective date and does not result in any increase in the amount of dredged or fill material allowed to be discharged.

**§233.37 Signatures on permit applications and reports.**

The application and any required reports must be signed by the person who

desires to undertake the proposed activity or by that person's duly authorized agent if accompanied by a statement by that person designating the agent. In either case, the signature of the applicant or the agent will be understood to be an affirmation that he possesses or represents the person who possesses the requisite property interest to undertake the activity proposed in the application.

### § 233.38 Continuation of expiring permits.

A Corps 404 permit does not continue in force beyond its expiration date under Federal law if, at that time, a State is the permitting authority. States authorized to administer the 404 Program may continue Corps or State-issued permits until the effective date of the new permits, if State law allows. Otherwise, the discharge is being conducted without a permit from the time of expiration of the old permit to the effective date of a new State-issued permit, if any.

## Subpart E—Compliance Evaluation and Enforcement

### § 233.40 Requirements for compliance evaluation programs.

(a) In order to abate violations of the permit program, the State shall maintain a program designed to identify persons subject to regulation who have failed to obtain a permit or to comply with permit conditions.

(b) The Director and State officers engaged in compliance evaluation, upon presentation of proper identification, shall have authority to enter any site or premises subject to regulation or in which records relevant to program operation are kept in order to copy any records, inspect, monitor or otherwise investigate compliance with the State program.

(c) The State program shall provide for inspections to be conducted, samples to be taken and other information to be gathered in a manner that will produce evidence admissible in an enforcement proceeding.

(d) The State shall maintain a program for receiving and ensuring proper consideration of information submitted by the public about violations.

### § 233.41 Requirements for enforcement authority.

(a) Any State agency administering a program shall have authority:

(1) To restrain immediately and effectively any person from engaging in any unauthorized activity;

(2) To sue to enjoin any threatened or continuing violation of any program requirement;

(3) To assess or sue to recover civil penalties and to seek criminal remedies, as follows:

(i) The agency shall have the authority to assess or recover civil penalties for discharges of dredged or fill material without a required permit or in violation of any section 404 permit condition in an amount of at least $5,000 per day of such violation.

(ii) The agency shall have the authority to seek criminal fines against any person who willfully or with criminal negligence discharges dredged or fill material without a required permit or violates any permit condition issued under section 404 in the amount of at least $10,000 per day of such violation.

(iii) The agency shall have the authority to seek criminal fines against any person who knowingly makes false statements, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act, these regulations or the approved State program, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit, in an amount of at least $5,000 for each instance of violation.

(b)(1) The approved maximum civil penalty or criminal fine shall be assessable for each violation and, if the violation is continuous, shall be assessable in that maximum amount for each day of violation.

(2) The burden of proof and degree of knowledge or intent required under State law for establishing violations under paragraph (a)(3) of this section, shall be no greater than the burden of proof or degree of knowledge or intent EPA must bear when it brings an action under the Act.

(c) The civil penalty assessed, sought, or agreed upon by the Director under

paragraph (a)(3) of this section shall be appropriate to the violation.

NOTE: To the extent that State judgments or settlements provide penalties in amounts which EPA believes to be substantially inadequate in comparison to the amounts which EPA would require under similar facts, EPA may, when authorized by section 309 of the Act, commence separate action for penalties.

(d)(1) The Regional Administrator may approve a State program where the State lacks authority to recover penalties of the levels required under paragraphs (a)(3)(i)–(iii) of this section only if the Regional Administrator determines, after evaluating a record of at least one year for an alternative enforcement program, that the State has an alternate, demonstrably effective method of ensuring compliance which has both punitive and deterrence effects.

(2) States whose programs were approved via waiver of monetary penalties shall keep the Regional Administrator informed of all enforcement actions taken under any alternative method approved pursuant to paragraph (d)(1) of this section. The manner of reporting will be established in the Memorandum of Agreement with the Regional Administrator (§ 233.13).

(e) Any State administering a program shall provide for public participation in the State enforcement process by providing either:

(1) Authority which allows intervention of right in any civil or administrative action to obtain remedies specified in paragraph (a)(3) of this section by any citizen having an interest which is or may be adversely affected, or

(2) Assurance that the State agency or enforcement authority will:

(i) Investigate and provide written responses to all citizen complaints submitted pursuant to State procedures;

(ii) Not oppose intervention by any citizen when permissive intervention may be authorized by statute, rule, or regulation; and

(iii) Publish notice of and provide at least 30 days for public comment on any proposed settlement of a State enforcement action.

(f) *Provision for Tribal criminal enforcement authority.* To the extent that an Indian Tribe does not assert or is precluded from asserting criminal enforcement authority (§ 233.41(a)(3) (ii) and (iii)), the Federal government will continue to exercise primary criminal enforcement responsibility. The Tribe, with the EPA Region and Corps District(s) with jurisdiction, shall develop a system where the Tribal agency will refer such a violation to the Regional Administrator or the District Engineer(s), as agreed to by the parties, in an appropriate and timely manner. This agreement shall be incorporated into joint or separate Memorandum of Agreement with the EPA Region and the Corps District(s), as appropriate.

[53 FR 20776, June 1, 1988, as amended at 58 FR 8183, Feb. 11, 1993]

## Subpart F—Federal Oversight

### § 233.50 Review of and objection to State permits.

(a) The Director shall promptly transmit to the Regional Administrator:

(1) A copy of the public notice for any complete permit applications received by the Director, except those for which permit review has been waived under § 233.51. The State shall supply the Regional Administrator with copies of public notices for permit applications for which permit review has been waived whenever requested by EPA.

(2) A copy of a draft general permit whenever the State intends to issue a general permit.

(3) Notice of every significant action taken by the State agency related to the consideration of any permit application except those for which Federal review has been waived or draft general permit.

(4) A copy of every issued permit.

(5) A copy of the Director's response to another State's comments/recommendations, if the Director does not accept these recommendations (§ 233.32(a)).

(b) Unless review has been waived under § 233.51, the Regional Administrator shall provide a copy of each public notice, each draft general permit, and other information needed for review of the application to the Corps, FWS, and NMFS, within 10 days of receipt. These agencies shall notify the Regional Administrator within 15 days

of their receipt if they wish to comment on the public notice or draft general permit. Such agencies should submit their evaluation and comments to the Regional Administrator within 50 days of such receipt. The final decision to comment, object or to require permit conditions shall be made by the Regional Administrator. (These times may be shortened by mutual agreement of the affected Federal agencies and the State.)

(c) If the information provided is inadequate to determine whether the permit application or draft general permit meets the requirements of the Act, these regulations, and the 404(b)(1) Guidelines, the Regional Administrator may, within 30 days of receipt, request the Director to transmit to the Regional Administrator the complete record of the permit proceedings before the State, or any portions of the record, or other information, including a supplemental application, that the Regional Administrator determines necessary for review.

(d) If the Regional Administrator intends to comment upon, object to, or make recommendations with respect to a permit application, draft general permit, or the Director's failure to accept the recommendations of an affected State submitted pursuant to § 233.31(a), he shall notify the Director of his intent within 30 days of receipt. If the Director has been so notified, the permit shall not be issued until after the receipt of such comments or 90 days of the Regional Administrator's receipt of the public notice, draft general permit or Director's response (§ 233.31(a)), whichever comes first. The Regional Administrator may notify the Director within 30 days of receipt that there is no comment but that he reserves the right to object within 90 days of receipt, based on any new information brought out by the public during the comment period or at a hearing.

(e) If the Regional Administrator has given notice to the Director under paragraph (d) of this section, he shall submit to the Director, within 90 days of receipt of the public notice, draft general permit, or Director's response (§ 233.31(a)), a written statement of his comments, objections, or recommendations; the reasons for the comments, objections, or recommendations; and the actions that must be taken by the Director in order to eliminate any objections. Any such objection shall be based on the Regional Administrator's determination that the proposed permit is (1) the subject of an interstate dispute under § 233.31(a) and/or (2) outside requirements of the Act, these regulations, or the 404(b)(1) Guidelines. The Regional Administrator shall make available upon request a copy of any comment, objection, or recommendation on a permit application or draft general permit to the permit applicant or to the public.

(f) When the Director has received an EPA objection or requirement for a permit condition to a permit application or draft general permit under this section, he shall not issue the permit unless he has taken the steps required by the Regional Administrator to eliminate the objection.

(g) Within 90 days of receipt by the Director of an objection or requirement for a permit condition by the Regional Administrator, the State or any interested person may request that the Regional Administrator hold a public hearing on the objection or requirement. The Regional Administrator shall conduct a public hearing whenever requested by the State proposing to issue the permit, or if warranted by significant public interest based on requests received.

(h) If a public hearing is held under paragraph (g) of this section, the Regional Administrator shall, following that hearing, reaffirm, modify or withdraw the objection or requirement for a permit condition, and notify the Director of this decision.

(1) If the Regional Administrator withdraws his objection or requirement for a permit condition, the Director may issue the permit.

(2) If the Regional Administrator does not withdraw the objection or requirement for a permit condition, the Director must issue a permit revised to satisfy the Regional Administrator's objection or requirement for a permit condition or notify EPA of its intent to deny the permit within 30 days of receipt of the Regional Administrator's notification.

(i) If no public hearing is held under paragraph (g) of this section, the Director within 90 days of receipt of the objection or requirement for a permit condition shall either issue the permit revised to satisfy EPA's objections or notify EPA of its intent to deny the permit.

(j) In the event that the Director neither satisfies EPA's objections or requirement for a permit condition nor denies the permit, the Secretary shall process the permit application.

[53 FR 20776, June 1, 1988; 53 FR 41649, Oct. 24, 1988]

**§ 233.51 Waiver of review.**

(a) The MOA with the Regional Administrator shall specify the categories of discharge for which EPA will waive Federal review of State permit applications. After program approval, the MOA may be modified to reflect any additions or deletions of categories of discharge for which EPA will waive review. The Regional Administrator shall consult with the Corps, FWS, and NMFS prior to specifying or modifying such categories.

(b) With the following exceptions, any category of discharge is eligible for consideration for waiver:

(1) Draft general permits;

(2) Discharges with reasonable potential for affecting endangered or threatened species as determined by FWS;

(3) Discharges with reasonable potential for adverse impacts on waters of another State;

(4) Discharges known or suspected to contain toxic pollutants in toxic amounts (section 101(a)(3) of the Act) or hazardous substances in reportable quantities (section 311 of the Act);

(5) Discharges located in proximity of a public water supply intake;

(6) Discharges within critical areas established under State or Federal law, including but not limited to National and State parks, fish and wildlife sanctuaries and refuges, National and historical monuments, wilderness areas and preserves, sites identified or proposed under the National Historic Preservation Act, and components of the National Wild and Scenic Rivers System.

(c) The Regional Administrator retains the right to terminate a waiver as to future permit actions at any time by sending the Director written notice of termination.

**§ 233.52 Program reporting.**

(a) The starting date for the annual period to be covered by reports shall be established in the Memorandum of Agreement with the Regional Administrator (§ 233.13.)

(b) The Director shall submit to the Regional Administrator within 90 days after completion of the annual period, a draft annual report evaluating the State's administration of its program identifying problems the State has encountered in the administration of its program and recommendations for resolving these problems. Items that shall be addressed in the annual report include an assessment of the cumulative impacts of the State's permit program on the integrity of the State regulated waters; identification of areas of particular concern and/or interest within the State; the number and nature of individual and general permits issued, modified, and denied; number of violations identified and number and nature of enforcement actions taken; number of suspected unauthorized activities reported and nature of action taken; an estimate of extent of activities regulated by general permits; and the number of permit applications received but not yet processed.

(c) The State shall make the draft annual report available for public inspection.

(d) Within 60 days of receipt of the draft annual report, the Regional Administrator will complete review of the draft report and transmit comments, questions, and/or requests for additional evaluation and/or information to the Director.

(e) Within 30 days of receipt of the Regional Administrator's comments, the Director will finalize the annual report, incorporating and/or responding to the Regional Administrator's comments, and transmit the final report to the Regional Administrator.

(f) Upon acceptance of the annual report, the Regional Administrator shall publish notice of availability of the final annual report.

**§ 233.53 Withdrawal of program approval.**

(a) A State with a program approved under this part may voluntarily transfer program responsibilities required by Federal law to the Secretary by taking the following actions, or in such other manner as may be agreed upon with the Administrator.

(1) The State shall give the Administrator and the Secretary 180 days notice of the proposed transfer. The State shall also submit a plan for the orderly transfer of all relevant program information not in the possession of the Secretary (such as permits, permit files, reports, permit applications) which are necessary for the Secretary to administer the program.

(2) Within 60 days of receiving the notice and transfer plan, the Administrator and the Secretary shall evaluate the State's transfer plan and shall identify for the State any additional information needed by the Federal government for program administration.

(3) At least 30 days before the transfer is to occur the Administrator shall publish notice of transfer in the FEDERAL REGISTER and in a sufficient number of the largest newspapers in the State to provide statewide coverage, and shall mail notice to all permit holders, permit applicants, other regulated persons and other interested persons on appropriate EPA, Corps and State mailing lists.

(b) The Administrator may withdraw program approval when a State program no longer complies with the requirements of this part, and the State fails to take corrective action. Such circumstances include the following:

(1) When the State's legal authority no longer meets the requirements of this part, including:

(i) Failure of the State to promulgate or enact new authorities when necessary; or

(ii) Action by a State legislature or court striking down or limiting State authorities.

(2) When the operation of the State program fails to comply with the requirements of this part, including:

(i) Failure to exercise control over activities required to be regulated under this part, including failure to issue permits;

(ii) Issuance of permits which do not conform to the requirements of this part; or

(iii) Failure to comply with the public participation requirements of this part.

(3) When the State's enforcement program fails to comply with the requirements of this part, including:

(i) Failure to act on violations of permits or other program requirements;

(ii) Failure to seek adequate enforcement penalties or to collect administrative fines when imposed, or to implement alternative enforcement methods approved by the Administrator; or

(iii) Failure to inspect and monitor activities subject to regulation.

(4) When the State program fails to comply with the terms of the Memorandum of Agreement required under § 233.13.

(c) The following procedures apply when the Administrator orders the commencement of proceedings to determine whether to withdraw approval of a State program:

(1) *Order.* The Administrator may order the commencement of withdrawal proceedings on the Administrator's initiative or in response to a petition from an interested person alleging failure of the State to comply with the requirements of this part as set forth in subsection (b) of this section. The Administrator shall respond in writing to any petition to commence withdrawal proceedings. He may conduct an informal review of the allegations in the petition to determine whether cause exists to commence proceedings under this paragraph. The Administrator's order commencing proceedings under this paragraph shall fix a time and place for the commencement of the hearing, shall specify the allegations against the State which are to be considered at the hearing, and shall be published in the FEDERAL REGISTER. Within 30 days after publication of the Administrator's order in the FEDERAL REGISTER, the State shall admit or deny these allegations in a written answer. The party seeking withdrawal of the State's program shall have the burden of coming forward with the evidence in a hearing under this paragraph.

(2) *Definitions.* For purposes of this paragraph the definition of *Administrative Law Judge, Hearing Clerk,* and *Presiding Officer* in 40 CFR 22.03 apply in addition to the following:

(i) *Party* means the petitioner, the State, the Agency, and any other person whose request to participate as a party is granted.

(ii) *Person* means the Agency, the State and any individual or organization having an interest in the subject matter of the proceedings.

(iii) *Petitioner* means any person whose petition for commencement of withdrawal proceedings has been granted by the Administrator.

(3) *Procedures.* (i) The following provisions of 40 CFR Part 22 [Consolidated Rules of Practice] are applicable to proceedings under this paragraph:

(A) Section 22.02—(use of number/gender);

(B) Section 22.04—(authorities of Presiding Officer);

(C) Section 22.06—(filing/service of rulings and orders);

(D) Section 22.09—(examination of filed documents);

(E) Section 22.19 (a), (b) and (c)—(prehearing conference);

(F) Section 22.22—(evidence);

(G) Section 22.23—(objections/offers of proof);

(H) Section 22.25—(filing the transcript; and

(I) Section 22.26—(findings/conclusions).

(ii) The following provisions are also applicable:

(A) Computation and extension of time.

(*1*) *Computation.* In computing any period of time prescribed or allowed in these rules of practice, except as otherwise provided, the day of the event from which the designated period begins to run shall not be included. Saturdays, Sundays, and Federal legal holidays shall be included. When a stated time expires on a Saturday, Sunday or Federal legal holiday, the stated time period shall be extended to include the next business day.

(*2*) *Extensions of time.* The Administrator, Regional Administrator, or Presiding Officer, as appropriate, may grant an extension of time for the filing of any pleading, document, or motion (*i*) upon timely motion of a party to the proceeding, for good cause shown and after consideration of prejudice to other parties, or (*ii*) upon his own motion. Such a motion by a party may only be made after notice to all other parties, unless the movant can show good cause why serving notice is impracticable. The motion shall be filed in advance of the date on which the pleading, document or motion is due to be filed, unless the failure of a party to make timely motion for extension of time was the result of excusable neglect.

(*3*) The time for commencement of the hearing shall not be extended beyond the date set in the Administrator's order without approval of the Administrator.

(B) Ex parte discussion of proceeding. At no time after the issuance of the order commencing proceedings shall the Administrator, the Regional Administrator, the Regional Judicial Officer, the Presiding Officer, or any other person who is likely to advise these officials in the decisions on the case, discuss ex parte the merits of the proceeding with any interested person outside the Agency, with any Agency staff member who performs a prosecutorial or investigative function in such proceeding or a factually related proceeding, or with any representative of such person. Any ex parte memorandum or other communication addressed to the Administrator, the Regional Administrator, the Regional Judicial Officer, or the Presiding Officer during the pendency of the proceeding and relating to the merits thereof, by or on behalf of any party shall be regarded as argument made in the proceeding and shall be served upon all other parties. The other parties shall be given an opportunity to reply to such memorandum or communication.

(C) Intervention—(*1*) *Motion.* A motion for leave to intervene in any proceeding conducted under these rules of practice must set forth the grounds for the proposed intervention, the position and interest of the movant and the likely impact that intervention will have on the expeditious progress of the proceeding. Any person already a party to the proceeding may file an answer to a motion to intervene, making specific

reference to the factors set forth in the foregoing sentence and paragraph (b)(3)(ii)(C)(*3*) of this section, within ten (10) days after service of the motion for leave to intervene.

(*2*) However, motions to intervene must be filed within 15 days from the date the notice of the Administrator's order is published in the FEDERAL REGISTER.

(*3*) *Disposition*. Leave to intervene may be granted only if the movant demonstrates that (*i*) his presence in the proceeding would not unduly prolong or otherwise prejudice the adjudication of the rights of the original parties; (*ii*) the movant will be adversely affected by a final order; and (*iii*) the interests of the movant are not being adequately represented by the original parties. The intervenor shall become a full party to the proceeding upon the granting of leave to intervene.

(*4*) *Amicus curiae*. Persons not parties to the proceeding who wish to file briefs may so move. The motion shall identify the interest of the applicant and shall state the reasons why the proposed amicus brief is desirable. If the motion is granted, the Presiding Officer or Administrator shall issue an order setting the time for filing such brief. An amicus curiae is eligible to participate in any briefing after his motion is granted, and shall be served with all briefs, reply briefs, motions, and orders relating to issues to be briefed.

(*D*) Motions—(*1*) *General*. All motions, except those made orally on the record during a hearing, shall (*i*) be in writing; (*ii*) state the grounds therefore with particularity; (*iii*) set forth the relief or order sought; and (*iv*) be accompanied by any affidavit, certificate, other evidence, or legal memorandum relied upon. Such motions shall be served as provided by paragraph (b)(4) of this section.

(*2*) *Response to motions*. A party's response to any written motion must be filed within ten (10) days after service of such motion, unless additional time is allowed for such response. The response shall be accompanied by any affidavit, certificate, other evidence, or legal memorandum relied upon. If no response is filed within the designated period, the parties may be deemed to have waived any objection to the granting of the motion. The Presiding Officer, Regional Administrator, or Administrator, as appropriate, may set a shorter time for response, or make such other orders concerning the disposition of motions as they deem appropriate.

(*3*) *Decision*. The Administrator shall rule on all motions filed or made after service of the recommended decision upon the parties. The Presiding Officer shall rule on all other motions. Oral argument on motions will be permitted where the Presiding Officer, Regional Administrator, or the Administrator considers it necessary or desirable.

(*4*) *Record of proceedings*. (*i*) The hearing shall be either stenographically reported verbatim or tape recorded, and thereupon transcribed by an official reporter designated by the Presiding Officer;

(*ii*) All orders issued by the Presiding Officer, transcripts of testimony, written statements of position, stipulations, exhibits, motions, briefs, and other written material of any kind submitted in the hearing shall be a part of the record and shall be available for inspection or copying in the Office of the Hearing Clerk, upon payment of costs. Inquiries may be made at the Office of the Administrative Law Judges, Hearing Clerk, 401 M Street SW., Washington, DC 20460;

(*iii*) Upon notice to all parties the Presiding Officer may authorize corrections to the transcript which involve matters of substance;

(*iv*) An original and two (2) copies of all written submissions to the hearing shall be filed with the Hearing Clerk;

(*v*) A copy of each such submission shall be served by the person making the submission upon the Presiding Officer and each party of record. Service under this paragraph shall take place by mail or personal delivery;

(*vi*) Every submission shall be accompanied by acknowledgement of service by the person served or proof of service in the form of a statement of the date, time, and manner of service and the names of the persons served, certified by the person who made service; and

(*vii*) The Hearing Clerk shall maintain and furnish to any person upon request, a list containing the name, service address, and telephone number of all parties and their attorneys or duly authorized representatives.

(*5*) *Participation by a person not a party*. A person who is not a party may, in the discretion of the Presiding Officer, be permitted to make a limited appearance by making an oral or written statement of his/her position on the issues within such limits and on such conditions as may be fixed by the Presiding Officer, but he/she may not otherwise participate in the proceeding.

(*6*) *Rights of parties*. (i) All parties to the proceeding may:

(A) Appear by counsel or other representative in all hearing and prehearing proceedings;

(B) Agree to stipulations of facts which shall be made a part of the record.

(7) *Recommended decision*. (i) Within 30 days after the filing of proposed findings and conclusions and reply briefs, the Presiding Officer shall evaluate the record before him/her, the proposed findings and conclusions and any briefs filed by the parties, and shall prepare a recommended decision, and shall certify the entire record, including the recommended decision, to the Administrator.

(ii) Copies of the recommended decision shall be served upon all parties.

(iii) Within 20 days after the certification and filing of the record and recommended decision, all parties may file with the Administrator exceptions to the recommended decision and a supporting brief.

(8) *Decision by Administrator*. (i) Within 60 days after certification of the record and filing of the Presiding Officer's recommended decision, the Administrator shall review the record before him and issue his own decision.

(ii) If the Administrator concludes that the State has administered the program in conformity with the Act and this part, his decision shall constitute ''final agency action'' within the meaning of 5 U.S.C. 704.

(iii) If the Administrator concludes that the State has not administered the program in conformity with the Act and regulations, he shall list the deficiencies in the program and provide the State a reasonable time, not to exceed 90 days, to take such appropriate corrective action as the Administrator determines necessary.

(iv) Within the time prescribed by the Administrator the State shall take such appropriate corrective action as required by the Administrator and shall file with the Administrator and all parties a statement certified by the State Director that appropriate corrective action has been taken.

(v) The Administrator may require a further showing in addition to the certified statement that corrective action has been taken.

(vi) If the state fails to take appropriate corrective action and file a certified statement thereof within the time prescribed by the Administrator, the Administrator shall issue a supplementary order withdrawing approval of the State program. If the State takes appropriate corrective action, the Administrator shall issue a supplementary order stating that approval of authority is not withdrawn.

(vii) The Administrator's supplementary order shall constitute final Agency action within the meaning of 5 U.S. 704.

(d) Withdrawal of authorization under this section and the Act does not relieve any person from complying with the requirements of State law, nor does it affect the validity of actions taken by the State prior to withdrawal.

[53 FR 20776, June 1, 1988, as amended at 57 FR 5346, Feb. 13, 1992]

## Subpart G—Eligible Indian Tribes

SOURCE: 58 FR 8183, Feb. 11, 1993, unless otherwise noted.

### § 233.60 Requirements for eligibility.

Section 518(e) of the CWA, 33 U.S.C. 1378(e), authorizes the Administrator to treat an Indian Tribe as eligible to apply for the 404 permit program under section 404(g)(1) if it meets the following criteria:

(a) The Indian Tribe is recognized by the Secretary of the Interior.

(b) The Indian Tribe has a governing body carrying out substantial governmental duties and powers.

(c) The functions to be exercised by the Indian Tribe pertain to the management and protection of water resources which are held by an Indian Tribe, held by the Untied States in trust for the Indians, held by a member of an Indian Tribe if such property interest is subject to a trust restriction an alienation, or otherwise within the borders of the Indian reservation.

(d) The Indian Tribe is reasonably expected to be capable, in the Administrator's judgment, of carrying out the functions to be exercised, in a manner consistent with the terms and purposes of the Act and applicable regulations, of an effective section 404 dredge and fill permit program.

[58 FR 8183, Feb. 11, 1993, as amended at 59 FR 64345, Dec. 14, 1994]

### § 233.61 Determination of Tribal eligibility.

An Indian Tribe may apply to the Regional Administrator for a determination that it meets the statutory criteria which authorize EPA to treat the Tribe in a manner similar to that in which it treats a State, for purposes of the section 404 program. The application shall be concise and describe how the Indian Tribe will meet each of the requirements of § 233.60. The application should include the following information:

(a) A statement that the Tribe is recognized by the Secretary of the Interior.

(b) A descriptive statement demonstrating that the Tribal governing body is currently carrying out substantial governmental duties and powers over a defined area. This Statement should:

(1) Describe the form of the Tribal government.

(2) Describe the types of governmental functions currently performed by the Tribal governing body, such as, but not limited to, the exercise of police powers affecting (or relating to) the health, safety, and welfare of the affected population; taxation; and the exercise of the power of eminent domain; and

(3) Identify the source of the Tribal government's authority to carry out the governmental functions currently being performed.

(c)(1) A map or legal description of the area over which the Indian Tribe asserts regulatory authority pursuant to section 518(e)(2) of the CWA and § 233.60(c);

(2) A statement by the Tribal Attorney General (or equivalent official) which describes the basis for the Tribe's assertion under section 518(e)(2) (including the nature or subject matter of the asserted regulatory authority) which may include a copy of documents such as Tribal constitutions, bylaws, charters, executive orders, codes, ordinances, and/or resolutions which support the Tribe's assertion of authority;

(d) A narrative statement describing the capability of the Indian Tribe to administer an effective 404 permit program. The Statement may include:

(1) A description of the Indian Tribe's previous management experience which may include the administration of programs and services authorized by the Indian Self Determination & Education Act (25 U.S.C. 450 *et seq.*), The Indian Mineral Development Act (25 U.S.C. 2101 *et seq.*), or the Indian Sanitation Facility Construction Activity Act (42 U.S.C. 2004a).

(2) A list of existing environmental or public health programs administered by the Tribal governing body, and a copy of related Tribal laws, regulations, and policies;

(3) A description of the entity (or entities) which exercise the executive, legislative, and judicial functions of the Tribal government.

(4) A description of the existing, or proposed, agency of the Indian Tribe which will assume primary responsibility for establishing and administering a section 404 dredge and fill permit program or plan which proposes how the Tribe will acquire additional administrative and technical expertise. The plan must address how the Tribe will obtain the funds to acquire the administrative and technical expertise.

(5) A description of the technical and administrative abilities of the staff to administer and manage an effective,

environmentally sound 404 dredge and fill permit program.

(e) The Administrator may, at his discretion, request further documentation necessary to support a Tribal application.

(f) If the Administrator has previously determined that a Tribe has met the requirements for eligibility or for ''treatment as a State'' for programs authorized under the Safe Drinking Water Act or the Clean Water Act, then that Tribe need only provide additional information unique to the particular statute or program for which the Tribe is seeking additional authorization.

(Approved by the Office of Management and Budget under control number 2040–0140)

[58 FR 8183, Feb. 11, 1993, as amended at 59 FR 64345, Dec. 14, 1994]

### § 233.62 Procedures for processing an Indian Tribe's application.

(a) The Regional Administrator shall process an application of an Indian Tribe submitted pursuant to § 233.61 in a timely manner. He shall promptly notify the Indian Tribe of receipt of the application.

(b) The Regional Administrator shall follow the procedures described in § 233.15 in processing a Tribe's request to assume the 404 dredge and fill permit program.

[58 FR 8183, Feb. 11, 1993, as amended at 59 FR 64346, Dec. 14, 1994]

## Subpart H—Approved State Programs

### § 233.70 Michigan.

The applicable regulatory program for discharges of dredged or fill material into waters of the United States in Michigan that are not presently used, or susceptible for use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to the ordinary high water mark, including wetlands adjacent thereto, except those on Indian lands, is the program administered by the Michigan Department of Natural Resources, approved by EPA, pursuant to section 404 of the CWA. Notice of this approval was published in the FEDERAL REGISTER on October 2, 1984; the effective date of this program is October 16, 1984. This program consists of the following elements, as submitted to EPA in the State's program application.

(a) *Incorporation by reference.* The requirements set forth in the State statutes and regulations cited in this paragraph are hereby incorporated by reference and made a part of the applicable 404 Program under the CWA for the State of Michigan. This incorporation by reference was approved by the Director of the Federal Register on October 16, 1984.

(1) The Great Lakes Submerged Lands Act, MCL 322.701 *et seq.*, reprinted in Michigan 1983 Natural Resources Law.

(2) The Water Resources Commission Act, MCL 323.1 *et seq.*, reprinted in Michigan 1983 Natural Resources Law.

(3) The Goemaere-Anderson Wetland Protection Act, MCL 281.701 *et seq.*, reprinted in Michigan 1983 Natural Resources Law.

(4) The Inland Lakes and Stream Act, MCL 281.951 *et seq.*, reprinted in Michigan 1983 Natural Resources Law.

(5) The Michigan Administrative Procedures Act of 1969, MCL 24–201 *et seq.*

(6) An act concerning the Erection of Dams, MCL 281.131 *et seq.*, reprinted in Michigan 1983 Natural Resources Law.

(7) R 281.811 through R 281.819 inclusive, R 281.821, R 281.823, R 281.824, R 281.832 through R 281.839 inclusive, and R 281.841 through R 281.845 inclusive of the Michigan Administrative Code (1979 ed., 1982 supp.).

(b) *Other Laws.* The following statutes and regulations, although not incorporated by reference, also are part of the approved State-administered program:

(1) Administrative Procedures Act, MCLA 24.201 *et seq.*

(2) Freedom of Information Act, MCLA 15.231 *et seq.*

(3) Open Meetings Act, MCLA 15.261 *et seq.*

(4) Michigan Environmental Protection Act, MCLA 691.1201 *et seq.*

(c) *Memoranda of Agreement.* (1) The Memorandum of Agreement between EPA Region V and the Michigan Department of Natural resources, signed

by the EPA Region V Administrator on December 9, 1983.

(2) The Memorandum of Agreement between the U.S. Army Corps of Engineers and the Michigan Department of Natural Resources, signed by the Commander, North Central Division, on March 27, 1984.

(d) *Statement of Legal Authority.* (1) ''Attorney General Certification section 404/State of Michigan'', signed by Attorney General of Michigan, as submitted with the request for approval of ''The State of Michigan 404 Program'', October 26, 1983.

(e) The Program description and any other materials submitted as part of the original application or supplements thereto.

(33 U.S.C. 13344, CWA 404)

[49 FR 38948, Oct. 2, 1984. Redesignated at 53 FR 20776, June 6, 1988. Redesignated at 58 FR 8183, Feb. 11, 1993]

### § 233.71 New Jersey.

The applicable regulatory program for discharges of dredged or fill material into waters of the United States in New Jersey that are not presently used, or susceptible for use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to the ordinary high water mark, including wetlands adjacent thereto, except those on Indian lands, is the program administered by the New Jersey Department of Environmental Protection and Energy, approved by EPA, pursuant to section 404 of the CWA. The program becomes effective March 2, 1994. This program consists of the following elements, as submitted to EPA in the State's program application:

(a) *Incorporation by reference.* The requirements set forth in the State statutes and regulations cited in paragraph (b) of this section are hereby incorporated by reference and made a part of the applicable 404 Program under the CWA for the State of New Jersey, for incorporation by reference by the Director of the Federal Register in accordance with 552(a) and 1 CFR part 51. Material is incorporated as it exists at 1 p.m. on March 2, 1994 and notice of any change in the material will be published in the FEDERAL REGISTER.

(b) Copies of materials incorporated by reference may be inspected at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC. Copies of materials incorporated by reference may be obtained or inspected at the EPA OUST Docket, 401 M Street, SW., Washington, DC 20460, and at the Library of the Region 2 Regional Office, Federal Office Building, 26 Federal Plaza, New York, NY 10278.

(1) New Jersey Statutory Requirements Applicable to the Freshwater Wetlands Program, 1994.

(2) New Jersey Regulatory Requirements Applicable to the Freshwater Wetlands Program, 1994.

(c) *Other laws.* The following statutes and regulations, although not incorporated by reference, also are part of the approved State-administered program:

(1) Administrative Procedure Act, N.J.S.A. 52:14B–1 *et seq.*

(2) New Jersey Uniform Administrative Procedure Rules, N.J.A.C. 1:1–1.1 *et seq.*

(3) Open Public Meetings Act, N.J.S.A. 10:4–6 *et seq.*

(4) Examination and Copies of Public Records, N.J.S.A. 47:1A–1 *et seq.*

(5) Environmental Rights Act, N.J.S.A. 2A:35A–1 *et seq.*

(6) Department of Environmental Protection (and Energy), N.J.S.A. 13:1D–1 *et seq.*

(7) Water Pollution Control Act, N.J.S.A. 58:10A–1 *et seq.*

(d) *Memoranda of agreement.* The following memoranda of agreement, although not incorporated by reference also are part of the approved State administered program:

(1) The Memorandum of Agreement between EPA Region II and the New Jersey Department of Environmental Protection and Energy, signed by the EPA Region II Acting Regional Administrator on June 15, 1993.

(2) The Memorandum of Agreement between the U.S. Army Corps of Engineers and the New Jersey Department of Environmental Protection and Energy, signed by the Division Engineer on March 4, 1993.

(3) The Memorandum of Agreement between EPA Region II, the New Jersey Department of Environmental Protection and Energy, and the U.S. Fish and Wildlife Service, signed by all parties on December 22, 1993.

(e) *Statement of legal authority*. The following documents, although not incorporated by reference, also are part of the approved State administered program:

(1) Attorney General's Statement, signed by the Attorney General of New Jersey, as submitted with the request for approval of The State of New Jersey's 404 Program.

(2) The program description and any other materials submitted as part of the original application or supplements thereto.

[59 FR 9933, Mar. 2, 1994]

# PART 238—DEGRADABLE PLASTIC RING CARRIERS

## Subpart A—General Provisions

Sec.
238.10 Purpose and applicability.
238.20 Definitions.

## Subpart B—Requirement

238.30 Requirement.

AUTHORITY: 42 U.S.C. 6914b–1.

SOURCE: 59 FR 9870, Mar. 1, 1994, unless otherwise noted.

## Subpart A—General Provisions

### § 238.10 Purpose and applicability.

The purpose of this part is to require that plastic ring carriers be made of degradable materials as described in §§ 238.20 and 238.30. The requirements of this part apply to all processors and importers of plastic ring carriers in the United States as defined in § 238.20.

### § 238.20 Definitions.

For the purpose of this part:

*Percent elongation at break* means the percent increase in length of the plastic material caused by a tensile load. Percent elongation at break shall be calculated by dividing the extension at the moment of rupture of the specimen by the initial gage length of the specimen and multiplying by 100.

*Processor* means the persons or entities that produce ring carriers ready for use as beverage carriers.

*Ring carrier* means any plastic ring carrier device that contains at least one hole greater than 1¾ inches in diameter which is made, used, or designed for the purpose of packaging, transporting, or carrying multipackaged cans or bottles.

## Subpart B—Requirement

### § 238.30 Requirement.

(a) No processor or person shall manufacture or import, in bulk, ring carriers intended for use in the United States unless they are designed and manufactured so that the ring carriers degrade to the point of 5 percent elongation at break, when tested in accordance with ASTM D–3826–91, ''Standard Practice for Determining Degradation End Point in Degradable Polyolefins Using a Tensile Test'', after the ring carrier is exposed to, either:

(1) 250 light-hours of UV in accordance with ASTM D–5208–91,'' Standard Practice for Operating Fluorescent Ultraviolet (UV) and Condensation Apparatus for Exposure of Photodegradable Plastics'', using cycle A; or

(2) 35 days, during June and July, to marine conditions in a location below the latitude 26 degrees North, in continental United States waters.

(b) The incorporation by reference of ASTM D–3826–91, ''Standard Practice for Determining Degradation End Point in Degradable Polyolefins Using a Tensile Test'', and ASTM D–5208–91, ''Standard Practice for Operating Fluorescent Ultraviolet (UV) and Condensation Apparatus for Exposure of Photodegradable Plastics,'' was approved by the director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies are available from the American Society of Testing and Materials, 1916 Race Street, Philadelphia, PA 19103. Copies may be inspected at the Resource Conservation and Recovery Act (RCRA) Docket Information Center, (5305), U.S. Environmental Protection Agency Headquarters, 401 M Street, SW., Washington, DC 20460 or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

These materials are incorporated as they exist on the date of the approval and notice of any change in these materials will be published in the FEDERAL REGISTER.

# SUBCHAPTER I—SOLID WASTES

## PART 240—GUIDELINES FOR THE THERMAL PROCESSING OF SOLID WASTES

### Subpart A—General Provisions

Sec.
240.100 Scope.
240.101 Definitions.

### Subpart B—Requirements and Recommended Procedures

240.200 Solid wastes accepted.
240.200–1 Requirement.
240.200–2 Recommended procedures: Design.
240.200–3 Recommended procedures: Operations.
240.201 Solid wastes excluded.
240.201–1 Requirement.
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240.202 Site selection.
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240.202–2 Recommended procedures: Design.
240.202–3 Recommended procedures: Operations.
240.203 General design.
240.203–1 Requirement.
240.203–2 Recommended procedures: Design.
240.203–3 Recommended procedures: Operations.
240.204 Water quality.
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240.205–1 Requirement.
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240.205–3 Recommended procedures: Operations.
240.206 Vectors.
240.206–1 Requirement.
240.206–2 Recommended procedures: Design.
240.206–3 Recommended procedures: Operations.
240.207 Aesthetics.
240.207–1 Requirement.
240.207–2 Recommended procedures: Design.
240.207–3 Recommended procedures: Operations.
240.208 Residue.
240.208–1 Requirement.
240.208–2 Recommended procedures: Design.
240.208–3 Recommended procedures: Operations.
240.209 Safety.
240.209–1 Requirement.
240.209–2 Recommended procedures: Design.
240.209–3 Recommended procedures: Operations.
240.210 General operations.
240.210–1 Requirement.
240.210–2 Recommended procedures: Design.
240.210–3 Recommended procedures: Operations.
240.211 Records.
240.211–1 Requirement.
240.211–2 Recommended procedures: Design.
240.211–3 Recommended procedures: Operations.

APPENDIX TO PART 240—RECOMMENDED BIBLIOGRAPHY

AUTHORITY: Sec. 209(a), Solid Waste Disposal Act of 1965 (Pub. L. 89–272); as amended by the Resource Recovery Act of 1970 (Pub. L. 91–512).

SOURCE: 39 FR 29329, Aug. 14, 1974, unless otherwise noted.

## Subpart A—General Provisions

### § 240.100 Scope.

(a) The prescribed guidelines are applicable to thermal processing facilities designed to process or which are processing 50 tons or more per day of municipal-type solid wastes. The application of this capacity criterion will be interpreted to mean any facility designed to process or actually processing 50/24 tons or more per hour. However, the guidelines do not apply to hazardous, agricultural, and mining wastes because of the lack of sufficient information upon which to base recommended procedures.

(b) The requirement sections contained herein delineate minimum levels of performance required of any solid waste thermal processing operation. The recommended procedures sections are presented to suggest preferred methods by which the objectives of the requirements can be realized. The recommended procedures are based on the practice of incineration at large facilities (50 tons per day or more) processing municipal solid waste. If techniques other than the recommended procedures are used or wastes other than municipal wastes are processed, it is the obligation of the facility's owner and operator to demonstrate to the responsible agency in advance by means of engineering calculations, pilot plant

data, etc., that the techniques employed will satisfy the requirements.

(c) Thermal processing residue must be disposed of in an environmentally acceptable manner. Where a land disposal facility is employed, it must be in accordance with the Environmental Protection Agency's Guidelines for the Land Disposal of Solid Wastes for both residues from the thermal processing operation and those non-hazardous wastes which cannot be thermally processed for reasons of health, safety, or technological limitation.

(d) Pursuant to section 211 of the Solid Waste Disposal Act, as amended, these guidelines are mandatory for Federal agencies. In addition, they are recommended to State, interstate, regional, and local government agencies for use in their activities.

(e) The guidelines are intended to apply equally to all solid waste generated by Federal agencies, regardless of whether processed or disposed of on or off Federal property; and solid waste generated by non-Federal entities, but processed or disposed of on Federal property. However, in the case of many Federal facilities such as Post Offices, military recruiting stations, and other offices, local community solid waste processing and disposal facilities are utilized, and processing and disposal is not within the management control of the Federal agency. Thus, implementation of the guidelines can be expected only in those situations where the Federal agency is able to exercise direct management control over the processing and disposal operations. However, every effort must be made by the responsible agency, where offsite facilities are utilized, to attain processing and disposal facilities that are in compliance with the guidelines. Where non-Federal generated solid waste is processed and disposed of on Federal land and/or facilities, those facilities and/or sites must be in compliance with these guidelines. Determination of compliance to meet the requirements of the guidelines rests with the responsible agency, and they have the authority to determine how such compliance may occur.

**§ 240.101 Definitions.**

As used in these guidelines:

(a) *Air: Overfire air* means air, under control as to quantity and direction, introduced above or beyond a fuel bed by induced or forced draft. ''Underfire air'' means any forced or induced air, under control as to quantity and direction, that is supplied from beneath and which passes through the solid wastes fuel bed.

(b) *Bottom ash* means the solid material that remains on a hearth or falls off the grate after thermal processing is complete.

(c) *Combustibles* means materials that can be ignited at a specific temperature in the presence of air to release heat energy.

(d) *Design capacity* means the weight of solid waste of a specified gross calorific value that a thermal processing facility is designed to process in 24 hours of continuous operation; usually expressed in tons per day.

(e) *Discharge* means water-borne pollutants released to a receiving stream directly or indirectly or to a sewerage system.

(f) *Emission* means gas-borne pollutants released to the atmosphere.

(g) *Facility* means all thermal processing equipment, buildings, and grounds at a specific site.

(h) *Fly ash* means suspended particles, charred paper, dust, soot, and other partially oxidized matter carried in the products of combustion.

(i) *Free moisture* means liquid that will drain freely by gravity from solid materials.

(j) *Furnace* means the chambers of the combustion train where drying, ignition, and combustion of waste material and evolved gases occur.

(k) *Grate siftings* means the materials that fall from the solid waste fuel bed through the grate openings.

(l) *Gross calorific value* means heat liberated when waste is burned completely and the products of combustion are cooled to the initial temperature of the waste. Usually expressed in British thermal units per pound.

(m) *Hazardous waste* means any waste or combination of wastes which pose a substantial present or potential hazard to human health or living organisms because such wastes are nondegradable or persistent in nature or because they

can be biologically magnified, or because they can be lethal, or because they may otherwise cause or tend to cause detrimental cumulative effects.

(n) *Incineration* means the controlled process which combustible solid, liquid, or gaseous wastes are burned and changed into noncombustible gases.

(o) *Incinerator* means a facility consisting of one or more furnaces in which wastes are burned.

(p) *Infectious waste* means: (1) Equipment, instruments, utensils, and fomites of a disposable nature from the rooms of patients who are suspected to have or have been diagnosed as having a communicable disease and must, therefore, be isolated as required by public health agencies; (2) laboratory wastes such as pathological specimens (e.g., all tissues, specimens of blood elements, excreta, and secretions obtained from patients or laboratory animals) and disposable fomites (any substance that may harbor or transmit pathogenic organisms) attendant thereto; (3) surgical operating room pathologic specimens and disposable fomites attendant thereto and similar disposable materials from outpatient areas and emergency rooms.

(q) *Municipal solid wastes* means normally, residential and commercial solid wastes generated within a community.

(r) *Open burning* means burning of solid wastes in the open, such as in an open dump.

(s) *Open dump* means a land disposal site at which solid wastes are disposed of in a manner that does not protect the environment, are susceptible to open burning, and are exposed to the elements, vectors, and scavengers.

(t) *Plans* means reports and drawings, including a narrative operating description, prepared to describe the facility and its proposed operation.

(u) *Residue* means all the solids that remain after completion of thermal processing, including bottom ash, fly ash, and grate siftings.

(v) *Responsible agency* means the organizational element that has the legal duty to ensure that owners, operators, or users of facilities comply with these guidelines.

(w) *Sanitary landfill* means a land disposal site employing an engineered method of disposing of solid wastes on land in a manner that minimizes environmental hazards by spreading the solid wastes in thin layers, compacting the solid wastes to the smallest practical volume, and applying and compacting cover material at the end of each operating day.

(x) *Sludge* means the accumulated semiliquid suspension of settled solids deposited from wastewaters or other fluids in tanks or basins. It does not include solids or dissolved material in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents, dissolved materials in irrigation return flows or other common water pollutants.

(y) *Solid wastes* means garbage, refuse, sludges, and other discarded solid materials resulting from industrial and commercial operations and from community activities. It does not include solids or dissolved material in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents, dissolved materials in irrigation return flows or other common water pollutants.

(z) *Special wastes* means nonhazardous solid wastes requiring handling other than that normally used for municipal solid waste.

(aa) *Thermal processing* means processing of waste material by means of heat.

(bb) *Vector* means a carrier, usually an arthropod, that is capable of transmitting a pathogen from one organism to another.

## Subpart B—Requirements and Recommended Procedures

### § 240.200 Solid wastes accepted.

### § 240.200–1 Requirement.

In consultation with the responsible agencies, the owner/operator shall determine what wastes shall be accepted and shall identify any special handling required. In general, only wastes for which the facility has been specifically designed shall be accepted; however, other wastes may be accepted if it has been demonstrated to the responsible agency that they can be satisfactorily

processed within the design capability of the facility or after appropriate facility modifications.

### § 240.200–2 Recommended procedures: Design.

(a) In addition to the residential and commercial wastes normally processed at municipal-scale incinerators, certain special wastes might be considered for processing. These include: Certain bulky wastes (e.g., combustible demolition and construction debris, tree stumps, large timbers, furniture, and major appliances), digested and dewatered sludges from waste water treatment facilities, raw sewage sludges, and septic tank pumpings.

(b) If the facility is designed to handle special wastes, special areas should be provided where appropriate for storage while they await processing.

### § 240.200–3 Recommended procedures: Operations.

(a) Storage areas for special wastes should be clearly marked.

(b) Facility personnel should be thoroughly trained in any unusual handling required by acceptance of Special Wastes.

## § 240.201 Solid wastes excluded.

### § 240.201–1 Requirement.

Using information provided to them by the waste generator/owner, the responsible agency and the facility owner/operator shall jointly determine specific wastes to be excluded and shall identify them in the plans. The generator/owner of excluded wastes shall consult with the responsible agency in determining an alternative method of disposal for excluded wastes. The criteria used in considering whether a waste is unacceptable shall include the facility's capabilities, alternative methods available, the chemical and biological characteristics of the waste, environmental and health effects, and the safety of personnel. Disposal of pesticides and pesticide containers shall be consistent with the Federal Environmental Pesticides Control Act of 1972 (Pub. L. 92–516) and recommended procedures promulgated thereunder.

### § 240.201–2 Recommended procedures: Design.

(a) Provision for storing, handling, and removing hazardous or excluded wastes inadvertently left at the facility should be considered in design.

(b) Examples of wastes which should be considered for exclusion from the facility include: Hazardous wastes, very large carcasses, automobile bodies, dewatered sludges from water treatment plants, and industrial process wastes.

### § 240.201–3 Recommended procedures: Operations.

(a) Regular users of the facility should be given a list of excluded materials. The list should also be displayed prominently at the facility entrance. If a regular user persists in making unacceptable deliveries, he should be barred from the installation and reported to the responsible agency.

(b) The operating plan should specify the procedures and precautions to be taken if unacceptable wastes are delivered to the facility or are improperly left there. Operating personnel should be thoroughly trained in such procedures.

## § 240.202 Site selection.

### § 240.202–1 Requirement.

Site selection and utilization shall be consistent with public health and welfare, and air and water quality standards and adaptable to appropriate land-use plans.

### § 240.202–2 Recommended procedures: Design.

(a) Whenever possible, thermal processing facilities should be located in areas zoned for industrial use and having adequate utilities to serve the facility.

(b) The site should be accessible by permanent roads leading from the public road system.

(c) Environmental factors, climatological conditions, and socioeconomic factors should be given full consideration as selection criteria.

### § 240.202–3 Recommended procedures: Operations.

Not applicable.

### § 240.203 General design.

#### § 240.203–1 Requirement.

A plan for the design of new facilities or modifications to existing facilities shall be prepared or approved by a professional engineer. A list of major considerations and the rationale for the decision on each consideration shall be approved by the responsible agency prior to authorization for construction. This information shall remain available for review.

#### § 240.203–2 Recommended procedures: Design.

(a) The types, amounts (by weight and volume), and characteristics of all solid wastes expected to be processed should be determined by survey and analysis. The gross calorific value of the solid wastes to be processed should be determined to serve as a basis for design.

(b) Resource recovery in the form of heat utilization or direct recovery of materials should be considered in the design.

(c) The facility should be designed to be compatible with the surrounding area, easy to maintain, and consistent with the land use of the area.

(d) Employee convenience facilities and plant maintenance facilities should be provided. Adequate lighting should be provided throughout the facility.

(e) The corrosive and erosive action of once-through and recirculated process waters should be controlled either by treating them or by using materials capable of withstanding the adverse effects of the waters.

(f) Facility design capacity should consider such items as waste quantity and characteristics, variations in waste generation, equipment downtime, and availability of alternate storage, processing, or disposal capability.

(g) Facility systems and subsystems should be designed to assure standby capability in the event of breakdown. Provision for standby water and power should also be considered.

(h) Instrumentation should be provided to determine such factors as: The weight of incoming and outgoing materials (the same scale system may be used for both); total combustion airflow rates; underfire and overfire airflows and the quantitative distribution of each; selected temperatures and pressures in the furnace, along gas passages, in the particulate collection device, and in the stack; electrical power and water consumption of critical units; and rate of operation. The smoke density, the concentration of carbon monoxide, or the concentration of hydrocarbons in the stack gases should be monitored. Measurement of the pH should be considered for effluent waters. Continuously recording instrumentation should be used as much as possible.

(i) Audible signals should be provided to alert operating personnel of critical operating unit malfunctions.

(j) Sampling capability should be designed into the facility so that each process stream can be sampled, and the utilities required to do so should be close at hand. The sampling sites should be so designed that personnel can sample safely without interfering with normal plant operations.

(k) A laboratory should be included in the design, or provision should be made for laboratory analyses to be performed by an outside source acceptable to the responsible agency.

#### § 240.203–3 Recommended procedures: Operations.

Not applicable.

### § 240.204 Water quality.

#### § 240.204–1 Requirement.

All waters discharged from the facility shall be sufficiently treated to meet the most stringent of applicable water quality standards, established in accordance with or effective under the provisions of the Federal Water Pollution Control Act, as amended.

#### § 240.204–2 Recommended procedures: Design.

(a) Effluent waters should not be discharged indiscriminately. Consideration should be given to onsite treatment of process and waste waters before discharge.

(b) Recirculation of process waters should be considered.

**§ 240.204–3 Recommended procedures: Operations.**

(a) When monitoring instrumentation indicates excessive discharge contamination, appropriate adjustments should be made to lower the concentrations to acceptable levels.

(b) In the event of an accidental spill, the local regulatory agency should be notified immediately.

**§ 240.205 Air quality.**

**§ 240.205–1 Requirement.**

Emissions shall not exceed applicable existing emission standards established by the U.S. Environmental Protection Agency (as published in parts 52, 60, 61 and 76 of this chapter) under the authority of the Clean Air Act, as amended, or State or local emission standards effective under that Act, if the latter are more stringent.

**§ 240.205–2 Recommended procedures: Design.**

(a) These requirements should be met by using appropriate air pollution control technology.

(b) All emissions, including dust from vents, should be controlled.

**§ 240.205–3 Recommended procedures: Operations.**

When monitoring instrumentation indicates excessive emissions, appropriate adjustments should be made to lower the emission to acceptable levels.

**§ 240.206 Vectors.**

**§ 240.206–1 Requirement.**

Conditions shall be maintained that are unfavorable for the harboring, feeding, and breeding of vectors.

**§ 240.206–2 Recommended procedures: Design.**

Thermal processing facilities should be designed for ease of cleaning. Areas favorable for breeding of vectors should be avoided.

**§ 240.206–3 Recommended procedures: Operations.**

(a) A housekeeping schedule should be established and maintained. As a minimum the schedule should provide for cleaning the tipping and residue areas as spillages occur, emptying the solid waste storage area at least weekly, and routinely cleaning the remainder of the facility.

(b) Solid waste and residue should not be allowed to accumulate at the facility for more than one week.

**§ 240.207 Aesthetics.**

**§ 240.207–1 Requirement.**

The incinerator facility shall be designed and operated at all times in an aesthetically acceptable manner.

**§ 240.207–2 Recommended procedures: Design.**

The facility should be designed so that it is physically attractive. The tipping, residue discharge, and waste salvage areas should be screened from public view, and the grounds should be landscaped.

**§ 240.207–3 Recommended procedures: Operations.**

(a) A routine housekeeping and litter removal schedule should be established and implemented so that the facility regularly presents a neat and clean appearance.

(b) Solid wastes that cannot be processed by the facility should be removed from the facility at least weekly. Open burning or open dumping of this material should be prohibited.

**§ 240.208 Residue.**

**§ 240.208–1 Requirement.**

Residue and other solid waste products resulting from a thermal process shall be disposed of in an environmentally acceptable manner. Where land disposal is employed, practices must be in conformance with the U.S. Environmental Protection Agency's Guidelines for the Land Disposal of Solid Wastes. Unwanted residue materials remaining after the recovery operation shall be disposed of in a manner which protects the environment. Where land disposal is employed, practices must be in conformance with the U.S. Environmental Protection Agency's Guidelines for the Land Disposal of Solid Wastes.

**§ 240.208–2 Recommended procedures: Design.**

Thermal processing facilities should be so designed as to allow for removal from the site of residue or other solids in a manner that protects the environment.

**§ 240.208–3 Recommended procedures: Operations.**

(a) The furnace operator should visually observe the quality of the bottom ash at least twice per shift and record in the operating log the estimated percentage of unburned combustibles.

(b) If residue or fly ash is collected in a wet condition, it should be drained of free moisture. Transportation of residue and fly ash should be by means that prevent the loads from shifting, falling, leaking, or blowing from the container.

**§ 240.209 Safety.**

**§ 240.209–1 Requirement.**

Incinerators shall be designed, operated, and maintained in a manner to protect the health and safety of personnel associated with the operation of the facility. Pertinent provisions of the Occupational Safety and Health Act of 1970 (Pub. L. 91–596) and regulations promulgated thereunder shall apply.

**§ 240.209–2 Recommended procedures: Design.**

(a) Attention should be given to the safety of operators and vehicles through the provision of safety devices.

(b) Fire control equipment should be provided.

(c) Methods and/or equipment for removal of an injured person from the storage pit should be available.

**§ 240.209–3 Recommended procedures: Operations.**

(a) Detailed procedures should be developed for operation during such emergency situations as power failure, air or water supply failure, equipment breakdowns, and fire. These procedures should be posted in prominent locations, implemented by the staff as required, and upgraded and revised periodically.

(b) Approved respirators or self-contained breathing apparatus should be available at convenient locations. Their use should be reviewed periodically with facility personnel. Information on this type equipment can be obtained from the Appalachian Laboratory for Occupational Respiratory Disease, National Institute for Occupational Safety and Health, Morgantown, W. Va.

(c) Training in first aid practices and emergency procedures should be given all personnel.

(d) Personal safety devices such as hard hats, gloves, safety glasses, and footwear should be provided for facility employees.

(e) If a regular user or employee persistently poses a safety hazard he should be barred from the facility and reported to the responsible agency.

**§ 240.210 General operations.**

**§ 240.210–1 Requirement.**

The thermal processing facility shall be operated and maintained in a manner that assures it will meet the design requirements. An operations manual describing the various tasks to be performed, operating procedures, and safety precautions for various areas of the facility shall be developed and shall be readily available for reference by plant personnel.

**§ 240.210–2 Recommended procedures: Design.**

Not applicable.

**§ 240.210–3 Recommended procedures: Operations.**

(a) The facility supervisor should be experienced in the operation of the type of facility designed or, in the case of an innovated design, be adequately trained by responsible personnel in the operation of the facility.

(b) Alternate and standby disposal and operating procedures should be established for implementation during emergencies, air pollution episodes, and shutdown periods.

(c) Upon completion of facility construction, provision should be made for instruction of the staff in proper operation and maintenance procedures.

(d) A routine maintenance schedule should be established and followed.

(e) As-built engineering drawings of the facility should be provided at the conclusion of construction of the facility. These should be updated to show modifications by the owner as changes are made and should be readily available. A schematic showing the relationships of the various subsystems should also be available.

(f) Key operational procedures should be prominently posted.

(g) Equipment manuals, catalogs, spare parts lists, and spare parts should be readily available at the facility.

(h) Training opportunities for facility operating personnel should be provided.

### § 240.211 Records.

#### § 240.211–1 Requirement.

The owner/operator of the thermal processing facility shall provide records and monitoring data as required by the responsible agency.

#### § 240.211–2 Recommended procedures: Design.

Continuously recording instrumentation should be used as much as possible.

#### § 240.211–3 Recommended procedures: Operations.

(a) Extensive monitoring and recordkeeping should be practiced during the first 12 to 18 months of operation of a new or renovated facility, during periods of high air pollution, and during periods of upset conditions at the facility.

(b) During other periods of more normal operation of the facility, less extensive monitoring and record keeping may be practiced if approved by the responsible agency.

(c) Operating records should be kept in a daily log and should include as a minimum:

(1) The total weight and volume (truck capacities may be used for volume determination) of solid waste received during each shift, including the number of loads received, the ownership or specific identity of delivery vehicles, the source and nature of the solid wastes accepted.

(2) Furnace and combustion chamber temperatures recorded at least every 60 minutes and as changes are made, including explanations for prolonged, abnormally high and low temperatures.

(3) Rate of operation, such as grate speed.

(4) Overfire and underfire air volumes and pressure and distribution recorded at least every 60 minutes and as changes are made.

(5) Weights of bottom ash, grate siftings, and fly ash, individually or combined, recorded at intervals appropriate to normal facility operation.

(6) Estimated percentages of unburned material in the bottom ash.

(7) Water used on each shift for bottom ash quenching and scrubber operation. Representative samples of process waters should be collected and analyzed as recommended by the responsible agency.

(8) Power produced and utilized each shift. If steam is produced, quality, production totals and consumption rates should be recorded.

(9) Auxiliary fuel used each shift.

(10) Gross calorific value of daily representative samples of bottom ash, grate siftings, and fly ash. (Sampling time should be varied so that all shifts are monitored on a weekly basis.)

(11) Emission measurements and laboratory analyses required by the responsible agency.

(12) Complete records of monitoring instruments.

(13) Problems encountered and methods of solution.

(d) An annual report should be prepared which includes at least the following information:

(1) Minimum, average, and maximum daily volume and weight of waste received and processed, summarized on a monthly basis.

(2) A summary of the laboratory analyses including at least monthly averages.

(3) Number and qualifications of personnel in each job category; total manhours per week; number of State certified or licensed personnel; staffing deficiencies; and serious injuries, their cause and preventive measures instituted.

(4) An identification and brief discussion of major operational problems and solutions.

(5) Adequacy of operation and performance with regard to environmental requirements, the general level of housekeeping and maintenance, testing and reporting proficiency, and recommendations for corrective actions.

(6) A copy of all significant correspondence, reports, inspection reports, and any other communications from enforcement agencies.

(e) Methodology for evaluating the facility's performance should be developed. Evaluation procedures recommended by the U.S. Environmental Protection Agency should be used whenever possible (see bibliography).

APPENDIX TO PART 240—RECOMMENDED BIBLIOGRAPHY

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# PART 243—GUIDELINES FOR THE STORAGE AND COLLECTION OF RESIDENTIAL, COMMERCIAL, AND INSTITUTIONAL SOLID WASTE

## Subpart A—General Provisions

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APPENDIX TO PART 243—RECOMMENDED BIBLIOGRAPHY

AUTHORITY: Sec. 209(a) of the Solid Waste Disposal Act of 1965 (Pub. L. 89–272), as amended by the Resource Recovery Act of 1970 (Pub. L. 91–512).

SOURCE: 41 FR 6769, Feb. 13, 1976, unless otherwise noted.

## Subpart A—General Provisions

### § 243.100 Scope.

(a) These guidelines are promulgated in partial fulfillment of section 209(a) of the Solid Waste Disposal Act, as amended (Pub. L. 89–272).

(b) The guidelines apply to the collection of residential, commercial, and institutional solid wastes and street wastes. Explicitly excluded are mining, agricultural, and industrial solid wastes; hazardous wastes; sludges; construction and demolition wastes; and infectious wastes.

(c) The ''Requirement'' sections contained herein delineate minimum levels of performance required of solid waste collection operations. Under section 211 of the Solid Waste Disposal Act, as amended, and Executive Order 11752, the ''Requirement'' sections of these guidelines are mandatory for Federal agencies. In addition, they are recommended to State, interstate, regional, and local governments for use in their activities.

(d) The ''Recommended procedures'' sections are presented to suggest additional actions or preferred methods by which the objectives of the requirements can be realized. The ''Recommended procedures'' are not mandatory for Federal agencies.

(e) The guidelines apply equally to Federal agencies generating solid waste whether the solid waste is actually collected by a Federally operated or non-Federally operated collection system, except in the case of isolated Federal facilities such as post offices, military recruiting stations, and other offices where local community solid waste collection systems are utilized, which are not within the managerial control of the Federal agency.

(f) The guidelines shall be implemented in those situations where the Federal agency is able to exercise direct managerial control over the collection system through operation of the system or by contracting for collection service. Where non-Federal collection systems are utilized, service contracts should require conformance with the guidelines requirements unless service meeting such requirements is not reasonably available. It is left to the head of the responsible agency to decide how the requirements of the guidelines will be met.

(g) The Environmental Protection Agency will give technical assistance and other guidance to Federal agencies when requested to do so under section 3(D)1 of Executive Order 11752.

(h) Within 1 year after the final promulgation of these guidelines, Federal agencies shall decide what actions shall be taken to adopt the requirements of these guidelines and shall, within 60 days of this decision, submit to the Administrator a schedule of such actions.

(i) Federal agencies that decide not to adopt the requirements contained herein, for whatever reason, shall make available to the Administrator a report of the analysis and rationale used in making that decision. The Administrator shall publish notice of availability of this report in the FEDERAL REGISTER. EPA considers the following reasons to be valid for purposes of noncompliance: costs so high as to render compliance economically impracticable, and the technical inhibitions to compliance specifically described in the guidelines.

(1) The following points are to be covered in the report.

(i) A description of the proposed or on-going practices which will not be in compliance with these guidelines. This statement should identify all agency facilities which will be affected by noncompliance including a brief description of how such facilities will be affected.

(ii) A description of the alternative actions considered with emphasis on those alternatives which, if taken, would be in compliance with these guidelines.

(iii) The rationale for the action chosen by the agency including technical data and policy considerations used in arriving at this decision.

In covering these points, agencies should make every effort to present the information succinctly in a form easily understood, but in sufficient detail so that the Administrator and the public may understand the factors influencing the decision not to adopt the requirements of these guidelines.

(2) The report shall be submitted to the Administrator as soon as possible after a final agency decision has been made not to adopt the requirements of these guidelines, but in no case later than 60 days after the final decision. The Administrator will indicate to the agency his concurrence/nonconcurrence with the agency's decision, including his reasons.

(3) Implementation of actions not in compliance with these guidelines shall be deferred, where feasible, in order to give the Administrator time to receive, analyze, and seek clarification of the required report.

(4) It is recommended that where the report on non-compliance concerns an action for which an Environmental Impact Statement (EIS) is required by the National Environmental Policy Act, that the report be circulated simultaneously with the EIS, since much of the information to satisfy the requirements of the report will be useful in the preparation of the EIS.

**§ 243.101 Definitions.**

As used in these guidelines:

(a) *Alley collection* means the collection of solid waste from containers placed adjacent to or in an alley.

(b) *Agricultural solid waste* means the solid waste that is generated by the rearing of animals, and the producing and harvesting of crops or trees.

(c) *Bulky waste* means large items of solid waste such as household appliances, furniture, large auto parts, trees, branches, stumps, and other oversize wastes whose large size precludes or complicates their handling by normal solid wastes collection, processing, or disposal methods.

(d) *Carryout collection* means collection of solid waste from a storage area proximate to the dwelling unit(s) or establishment.

(e) *Collection* means the act of removing solid waste (or materials which have been separated for the purpose of recycling) from a central storage point.

(f) *Collection frequency* means the number of times collection is provided in a given period of time.

(g) *Commercial solid waste* means all types of solid wastes generated by stores, offices, restaurants, warehouses, and other non-manufacturing activities, excluding residential and industrial wastes.

(h) *Compactor collection vehicle* means a vehicle with an enclosed body containing mechanical devices that convey solid waste into the main compartment of the body and compress it into a smaller volume of greater density.

(i) *Construction and demolition waste* means the waste building materials, packaging, and rubble resulting from construction, remodeling, repair, and demolition operations on pavements, houses, commercial buildings, and other structures.

(j) *Curb collection* means collection of solid waste placed adjacent to a street.

(k) *Federal facility* means any building, installation, structure, land, or public work owned by or leased to the Federal Government. Ships at sea, aircraft in the air, land forces on maneuvers, and other mobile facilities are not considered ''Federal facilities'' for the purpose of these guidelines. United States Government installations located on foreign soil or on land outside the jurisdiction of the United States Government are not considered ''Federal facilities'' for the purpose of these guidelines.

(l) *Food waste* means the organic residues generated by the handling, storage, sale, preparation, cooking, and serving of foods, commonly called garbage.

(m) *Generation* means the act or process of producing solid waste.

(n) *Hazardous waste* means a waste or combination of wastes of a solid, liquid, contained gaseous, or semisolid form which may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness, taking into account the toxicity of such waste, its persistence and degradability in nature, its potential for accumulation or concentration in tissue, and other factors that may otherwise cause or contribute to adverse acute or chronic effects on the health of persons or other organisms.

(o) *Industrial solid waste* means the solid waste generated by industrial processes and manufacturing.

(p) *Infectious waste* means: (1) Equipment, instruments, utensils, and formites of a disposable nature from the rooms of patients who are suspected to have or have been diagnosed as having a communicable disease and must, therefore, be isolated as required by public health agencies; (2) laboratory wastes, such as pathological specimens (e.g., all tissues, specimens of blood elements, excreta, and secretions obtained from patients or laboratory animals) and disposable fomites (any substance that may harbor or transmit pathogenic organisms) attendant thereto; (3) surgical operating room pathologic specimens and disposable fomites attendant thereto, and similar

disposable materials from outpatient areas and emergency rooms.

(q) *Institutional solid waste* means solid wastes generated by educational, health care, correctional, and other institutional facilities.

(r) *Mining wastes* means residues which result from the extraction of raw materials from the earth.

(s) *Residential solid waste* means the wastes generated by the normal activities of households, including, but not limited to, food wastes, rubbish, ashes, and bulky wastes.

(t) *Responsible agency* means the organizational element that has the legal duty to ensure compliance with these guidelines.

(u) *Rubbish* means a general term for solid waste, excluding food wastes and ashes, taken from residences, commercial establishments, and institutions.

(v) *Satellite vehicle* means a small collection vehicle that transfers its load into a larger vehicle operating in conjunction with it.

(w) *Scavenging* means the uncontrolled and unauthorized removal of materials at any point in the solid waste management system.

(x) *Sludge* means the accumulated semiliquid suspension of settled solids deposited from wastewaters or other fluids in tanks or basins. It does not include solids or dissolved material in domestic sewage or other significant pollutants in water resources, such as silt, dissolved materials in irrigation return flows or other common water pollutants.

(y) *Solid waste* means garbage, refuse, sludges, and other discarded solid materials, including solid waste materials resulting from industrial, commercial, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents, dissolved materials in irrigation return flows or other common water pollutants. Unless specifically noted otherwise, the term ''solid waste'' as used in these guidelines shall not include mining, agricultural, and industrial solid wastes; hazardous wastes; sludges; construction and demolition wastes; and infectious wastes.

(z) *Stationary compactor* means a powered machine which is designed to compact solid waste or recyclable materials, and which remains stationary when in operation.

(aa) *Storage* means the interim containment of solid waste after generation and prior to collection for ultimate recovery or disposal.

(bb) *Solid waste storage container* means a receptacle used for the temporary storage of solid waste while awaiting collection.

(cc) *Street wastes* means materials picked up by manual or mechanical sweepings of alleys, streets, and sidewalks; wastes from public waste receptacles; and material removed from catch basins.

(dd) *Transfer station* means a site at which solid wastes are concentrated for transport to a processing facility or land disposal site. A transfer station may be fixed or mobile.

(ee) *Vector* means a carrier that is capable of transmitting a pathogen from one organism to another.

## Subpart B—Requirements and Recommended Procedures

### § 243.200 Storage.

#### § 243.200–1 Requirement.

(a) All solid wastes (or materials which have been separated for the purpose of recycling) shall be stored in such a manner that they do not constitute a fire, health, or safety hazard or provide food or harborage for vectors, and shall be contained or bundled so as not to result in spillage. All solid waste containing food wastes shall be securely stored in covered or closed containers which are nonabsorbent, leakproof, durable, easily cleanable (if reusable), and designed for safe handling. Containers shall be of an adequate size and in sufficient numbers to contain all food wastes, rubbish, and ashes that a residence or other establishment generates in the period of time between collections. Containers shall be maintained in a clean condition so that they do not constitute a nuisance, and to retard the harborage, feeding, and breeding of vectors. When

serviced, storage containers should be emptied completely of all solid waste.

(b) Storage of bulky wastes shall include, but is not limited to, removing all doors from large household appliances and covering the item(s) to reduce the problems of an attractive nuisance, and the accumulation of solid waste and water in and around the bulky items.

(c) Reusable waste containers which are emptied manually shall not exceed 75 pounds (34.05 kg) when filled, and shall be capable of being serviced without the collector coming into physical contact with the solid waste.

(d) In the design of all buildings or other facilities which are constructed, modified, or leased after the effective date of these guidelines, there shall be provisions for storage in accordance with these guidelines which will accommodate the volume of solid waste anticipated, which may be easily cleaned and maintained, and which will allow for efficient, safe collection.

### § 243.200–2 Recommended procedures: Design.

(a) Reusable waste containers should be constructed of corrosion resistant metal or other material which will not absorb water, grease, or oil. The containers should be leakproof, including sides, seams, and bottoms, and be durable enough to withstand anticipated usage without rusting, cracking, or deforming in a manner that would impair serviceability. The interior of the container should be smooth without interior projections or rough seams which would make it difficult to clean or interfere with its emptying. The exterior of the container should be safe for handling with no cracks, holes, or jagged edges. Containers should be stored on a firm, level, well-drained surface which is large enough to accommodate all of the containers and which is maintained in a clean, spillage-free condition.

(1) Reusable waste containers which are emptied manually should have a capacity of no more than 35 gallons (132.51) in volume, unless they are mounted on casters and can be serviced by being rolled to the collection vehicle and tilted for emptying. The containers should be constructed with rounded edges and tapered sides with the larger diameter at the top of the container to facilitate discharge of the solid waste by gravity. Containers should have two handles or bails located directly opposite one another on the sides of the container. Containers should have covers which are tight-fitting to resist the intrusion of water and vectors, and should be equipped with a suitable handle. Containers should be designed so that they cannot be tipped over easily.

(2) Reusable waste containers which are emptied mechanically should be designed or equipped to prevent spillage or leakage during on-site storage, collection, or transport. The container should be easily cleanable and designed to allow easy access for depositing the waste and removing it by gravity or by mechanical means. The containers should be easily accessible to the collection vehicle in an area which can safely accommodate the dimensions and weight of the vehicle.

(b) Single-use plastic and paper bags should meet the National Sanitation Foundation Standard No. 31 for polyethylene refuse bags and Standard No. 32 for paper refuse bags, respectively. However, such bags do not need to have been certified by the National Sanitation Foundation. Single-use bags containing food wastes should be stored within the confines of a building or container between collection periods.

## § 243.201 Safety.

### § 243.201–1 Requirement.

Collection systems shall be operated in such a manner as to protect the health and safety of personnel associated with the operation.

### § 243.201–2 Recommended procedures: Operations.

(a) All solid waste collection personnel should receive instructions and training in safe container and waste handling techniques, and in the proper operation of collection equipment, such as those presented in *Operation Responsible: Safe Refuse Collection*.

(b) Personal protective equipment such as gloves, safety glasses, respirators, and footwear should be used

by collection employees, as appropriate. This equipment should meet the applicable provisions of the Occupational Safety and Health Administration Standards for Subpart I—Personal Protective Equipment (29 CFR 1910.132 through 1910.137).

(c) Scavenging should be prohibited at all times to avoid injury and to prevent interference with collection operations.

(d) When conducting carryout collection, a leakproof and puncture-proof carrying container should be used to minimize the potential for physical contact between the collector and the solid waste or the liquids which may derive from it.

## § 243.202 Collection equipment.

### § 243.202–1 Requirement.

(a) All vehicles used for the collection and transportation of solid waste (or materials which have been separated for the purpose of recycling) which are considered to be operating in interstate or foreign commerce shall meet all applicable standards established by the Federal Government, including, but not limited to, Motor Carrier Safety Standards (49 CFR parts 390 through 396) and Noise Emission Standards for Motor Carriers Engaged in Interstate Commerce (40 CFR part 202). Federally owned collection vehicles shall be operated in compliance with Federal Motor Vehicle Safety Standards (49 CFR parts 500 through 580).

(b) All vehicles used for the collection and transportation of solid waste (or materials which have been separated for the purpose of recycling) shall be enclosed or adequate provisions shall be made for suitable cover, so that while in transit there can be no spillage.

(c) The equipment used in the compaction, collection, and transportation of solid waste (or materials which have been separated for the purpose of recycling) shall be constructed, operated, and maintained in such a manner as to minimize health and safety hazards to solid waste management personnel and the public. This equipment shall be maintained in good condition and kept clean to prevent the propagation or attraction of vectors and the creation of nuisances.

(d) Collection equipment of the following types used for the collection, storage, and transportation of solid waste (or materials which have been separated for the purpose of recycling) shall meet the standards established by the American National Standards Institute (ANSI Z245.1, Safety Standards for Refuse Collection Equipment) as of the effective date(s) established in ANSI Z245.1:

(1) Rear-loading compaction equipment.

(2) Side-loading compaction equipment.

(3) Front-loading compaction equipment.

(4) Tilt-frame equipment.

(5) Hoist-type equipment.

(6) Satellite vehicles.

(7) Special collection compaction equipment.

(8) Stationary compaction equipment.

In the procurement of new collection equipment before the effective dates of ANSI Z245.1, equipment which meets the standards shall be obtained if available.

### § 243.202–2 Recommended procedures: Design.

(a) Whenever possible, enclosed, metal, leak-resistant compactor vehicles should be used for the collection of solid wastes.

(b) Safety devices, including, but not limited to, the following should be provided on all collection vehicles:

(1) Exterior rear-view mirrors.

(2) Back-up lights.

(3) Four-way emergency flashers.

(4) Easily accessible first aid equipment.

(5) Easily accessible fire extinguisher.

(6) Audible reverse warning device.

(c) If crew members ride outside the cab of the collection vehicle for short trips the vehicle should be equipped with handholds and platforms big enough to safeguard against slipping.

(d) Vehicle size should take into consideration: Local weight and height limits for all roads over which the vehicle will travel; turning radius; and

loading height in the unloading position to insure overhead clearance in transfer stations, service buildings, incinerators, or other facilities.

(e) Engines which conserve fuel and minimize pollution should be used in collection vehicles to reduce fuel consumption and air pollution.

### § 243.202–3 Recommended procedures: Operations.

(a) Collection vehicles should be maintained and serviced according to manufacturers' recommendations, and receive periodic vehicle safety checks, including, but not limited to, inspection of brakes, windshield wipers, taillights, backup lights, audible reverse warning devices, tires, and hydraulic systems. Any irregularities should be repaired before the vehicle is used. Vehicles should also be cleaned thoroughly at least once a week.

(b) Solid waste should not be allowed to remain in collection vehicles over 24 hours and should only be left in a vehicle overnight when this practice does not constitute a fire, health, or safety hazard.

## § 243.203 Collection frequency.

### § 243.203–1 Requirement.

Solid wastes (or materials which have been separated for the purpose of recycling) shall be collected with frequency sufficient to inhibit the propagation or attraction of vectors and the creation of nuisances. Solid wastes which contain food wastes shall be collected at a minimum of once during each week. Bulky wastes shall be collected at a minimum of once every 3 months.

### § 243.203–2 Recommended procedures: Operations.

(a) The minimum collection frequency consistent with public health and safety should be adopted to minimize collection costs and fuel consumption. In establishing collection frequencies, generation rates, waste composition, and storage capacity should be taken into consideration.

(b) When solid wastes are separated at the point of storage into various categories for the purpose of resource recovery, a collection frequency should be designated for each waste category.

## § 243.204 Collection management.

### § 243.204–1 Requirement.

The collection of solid wastes (or materials which have been separated for the purpose of recycling) shall be conducted in a safe, efficient manner, strictly obeying all applicable traffic and other laws. The collection vehicle operator shall be responsible for immediately cleaning up all spillage caused by his operations, for protecting private and public property from damage resulting from his operations, and for creating no undue disturbance of the peace and quiet in residential areas in and through which he operates.

### § 243.204–2 Recommended procedures: Operations.

(a) Records should be maintained detailing all costs (capital, operating, and maintenance) associated with the collection system. These records should be used for scheduling maintenance and replacement, for budgeting, and for system evaluation and comparison.

(b) The collection system should be reviewed on a regular schedule to assure that environmentally adequate, economical, and efficient service is maintained.

(c) Solid waste collection systems should be operated in a manner designed to minimize fuel consumption, including, but not limited to, the following procedures.

(1) Collection vehicle routes should be designed to minimize driving distances and delays.

(2) Collection vehicles should receive regular tuneups, tires should be maintained at recommended pressures, and compaction equipment should be serviced regularly to achieve the most efficient compaction.

(3) Compactor trucks should be used to reduce the number of trips to the disposal site.

(4) When the distance or travel time from collection routes to disposal sites is great, transfer stations should be used when cost effective.

(5) Residential solid waste containers which are serviced manually should be

placed at the curb or alley for collection.

(6) For commercial wastes which do not contain food wastes, storage capacity should be increased in lieu of more frequent collection.

APPENDIX TO PART 243—RECOMMENDED BIBLIOGRAPHY

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# PART 244—SOLID WASTE MANAGEMENT GUIDELINES FOR BEVERAGE CONTAINERS

### Subpart A—General Provisions

Sec.
244.100 Scope.
244.101 Definitions.

### Subpart B—Requirements

244.200 Requirements.
244.201 Use of returnable beverage containers.
244.202 Information.
244.203 Implementation decisions and reporting.

APPENDIX TO PART 244—RECOMMENDED BIBLIOGRAPHY

AUTHORITY: Secs. 1008 and 6004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6907, 6964).

SOURCE: 62 FR 24051, May 2, 1997, unless otherwise noted.

## Subpart A—General Provisions

### § 244.100 Scope.

(a) The ''Requirement'' sections contained herein delineate minimum actions for Federal agencies for reducing beverage container waste.

(b) Section 211 of the Act and Executive Order 11752 make the ''Requirements'' section of the guidelines mandatory upon Federal agencies. They are recommended for adoption by State and local governments and private agencies.

(c) *Intent and objectives.* (1) These Guidelines for Beverage Containers are intended to achieve a reduction in beverage container solid waste and litter, resulting in savings in waste collection and disposal costs to the Federal Government. They are also intended to

achieve the conservation and more efficient use of energy and material resources through the development of effective beverage distribution and container collection systems.

(2) The guidelines are intended to achieve these goals by making all beverage containers returnable and encouraging reuse of recycling of the returned containers. To accomplish the return of beverage containers, a deposit of at least five cents on each returnable beverage container is to be paid upon purchase by the consumer and refunded to the consumer when the empty container is returned to the dealer. This refund value provides a positive incentive for consumers to return the empty containers. Once containers are returned, nonrefillable containers can be recycled and refillable bottles can be reused.

(3) The minimum deposit of five cents has been chosen because it is deemed a large enough incentive to induce the return of most containers, and it is the most widely used deposit amount in present deposit systems. Because this action is intended to be compatible with present deposit systems, it is recommended that Federal facilities apply higher deposit levels in localities where higher levels are ordinarily used and lower deposit levels if the local area has an established return system with a minimum deposit level, for some or all beverage containers, of less than five cents.

(4) Final determination of how the requirements of the guidelines will be met rests with the head of each Federal agency.

(5) Federal facilities implementing the guidelines must charge refundable deposits on both refillable beverage containers and nonrefillable ones. Use of a refillable beverage container system will achieve the objectives of this guideline and will also most likely result in lower beverage prices for consumers. However, placing refundable deposits on nonrefillable containers, which are subsequently returned and recycled, also achieves the objectives of the guidelines.

(d) *Nonimplementation for Federal Facilities.* (1) The objectives of these guidelines are to reduce solid waste and litter and to conserve energy and materials through the use of a return system for beverage containers. In order to have a substantial impact on solid waste and litter created by beverage containers and to effect the concomitant energy and materials savings in a cost-effective manner, three conditions will be necessary: First, that consumers continue to purchase beverages from dealers at Federal facilities; second, that empty containers be returned and then reused or recycled; third, that the costs of implementation are not prohibitive. The head of each agency should consider these factors in order to make a determination regarding implementation of these guidelines.

(2) The Administrator recognizes that the requirements of these guidelines may not be practical at some Federal facilities due to geographic or logistic problems of a local nature. Further, he recognizes that the use of a returnable beverage container system will accomplish nothing if all reasonable efforts to implement such a system have failed to induce consumers to buy beverages in returnable containers or to return them when empty. When these situations persist, agencies may determine not to continue implementation of these guidelines.

(3) Federal agencies that make the determination not to use returnable containers shall provide to the Administrator the analysis and rationale used in making that determination as required by § 244.100(f)(3). The Administrator will publish notice of availability of this report in the FEDERAL REGISTER.

The following conditions are considered to be valid reasons for not using returnable beverage containers.

(i) Situations in which, after a trial implementation, there is no alternative available that results in meeting the objectives of the guidelines in a cost effective manner. Examples of indications of this situation include, but are not limited to:

(A) Data indicating a substantial and persistent reduction in beverage sales that is not directly attributable to any other cause; and

(B) Failure to establish a beverage container return rate that effectively achieves the objectives of these guidelines.

(ii) Situations in which no viable alternative can be found which avoids excessive, irrecoverable costs to the facility or the Agency. These conditions may prevail at either part or all of a facility. It is expected that facilities will use returnable beverage containers in those portions of their beverage distribution systems where it is effective to do so. However, it is recognized that in some situations, such as for unattended vending machines where it is impractical to establish refund locations, or in small remote outlets where the majority of consumers are transient, it may not be possible to use returnable containers effectively. The provisions for nonimplementation can be applied to those portions of a facility.

(e) The Environmental Protection Agency will render technical assistance and other guidance to Federal agencies when requested to do so pursuant to section 3(d)(1) of Executive Order 11752.

(f) *Reports*—(1) *Implementation Schedule Report.* This report is to advise the EPA of plans for the implementation of these guidelines. It is to be submitted to the Administrator within 60 days following an agency's determination to implement, and should include a list of planned implementation actions and a schedule indicating when those actions will be taken.

(2) [Reserved]

(3) *Nonimplementation Report.* Nonimplementation reports are to be submitted to the Administrator as soon as possible after a final agency determination has been made not to use returnable beverage containers but not later than sixty days after this determination. The Administrator will indicate to the reporting agency his concurrence or nonconcurrence with the agency's decision, including his reasons therefor. This concurrence or nonconcurrence is advisory. Nonimplementation reports should include:

(i) A description of alternative actions considered or implemented, including those actions which, if taken or continued, would have involved a deposit or return system.

(ii) A description of ongoing actions that will be continued and actions taken or proposed that would preclude future implementation of a returnable beverage container system. This statement should identify all agency facilities or categories of facilities that will be affected.

(iii) An analysis in support of the determination not to implement a deposit system, including technical data, market studies, and policy considerations used in making that determination. If the determination not to implement is based on inability to achieve a cost-effective system, this analysis should include such things as sales volume, impact on total overhead costs, administrative costs, other costs of implementation, percentage of containers sold that are returned, solid waste and litter reduction, energy and materials saved, and retail prices (before and after implementation).

### § 244.101 Definitions.

(a) *Beverage* means carbonated natural or mineral waters; soda water and similar carbonated soft drinks; and beer or other carbonated malt drinks in liquid form and intended for human consumption.

(b) *Beverage container* means an airtight container containing a beverage under pressure of carbonation. Cups and other open receptacles are specifically excluded from this definition.

(c) *Consumer* means any person who purchases a beverage in a beverage container for final use or consumption.

(d) *Dealer* means any person who engages in the sale of beverages in beverage containers to a consumer.

(e) *Deposit* means the sum paid to the dealer by the consumer when beverages are purchased in returnable beverage containers, and which is refunded when the beverage container is returned.

(f) *Distributor* means any person who engages in the sale of beverages, in beverage containers, to a dealer, including any manufacturer who engages in such sale.

(g) *Federal Agency* means any department, agency, establishment, or instrumentality of the executive branch of the United States Government.

(h) *Federal facility* means any building, installation, structure, land, or public work owned by or leased to the

Federal Government. Ships at sea, aircraft in the air, land forces on maneuvers, and other mobile facilities; and United States Government installations located on foreign soil or on land outside the jurisdiction of the United States Government are not considered ''Federal facilities'' for the purpose of these guidelines.

(i) *On-Premise Sales* means sales transactions in which beverages are purchased by a consumer for immediate consumption within the area under control of the dealer.

(j) *Recycling* means the process by which recovered materials are transformed into new products.

(k) *Refillable Beverage Container* means a beverage container that when returned to a distributor or bottler is refilled with a beverage and reused.

(l) *Refund* means the sum, equal to the deposit, that is given to the consumer or the dealer or both in exchange for empty returnable beverage containers.

(m) *Returnable Beverage Container* means a beverage container for which a deposit is paid upon purchase and for which a refund of equal value is payable upon return.

## Subpart B—Requirements

### § 244.200 Requirements.

### § 244.201 Use of returnable beverage containers.

(a) All beverages in beverage containers sold or offered for sale shall be sold in returnable beverage containers. On-premise sales are specifically excluded from this requirement provided that empty beverage containers are returned to the distributor for refilling, or are recycled, either by the dealer or by the distributor when markets for recyclable materials are available.

(b) The deposit shall be at least five (5) cents unless the local area has an established return system in operation with a lower minimum deposit level. In these specific areas, Federal facilities may adopt a minimum deposit equal to the local deposit level.

(c) A dealer shall accept from a consumer any empty beverage containers of the kind, size and brand sold by the dealer, and pay the consumer the refund value of the beverage container, provided the container is refillable or is labelled in accordance with § 244.202(a).

(d) The refund shall be provided at the place of sale whenever possible or as close to that place as practicable, and in any event, on the premises of the particular federal facility involved. Refund locations shall be conspicuously labelled as refund centers. If they are not in the immediate vicinity of the place of sale, notice of their location shall be prominently posted at that place of sale.

(e) A dealer shall not procure beverages in beverage containers from distributors who refuse to: Accept from the dealer any returnable beverage containers of the kind, size and brand sold by the distributor; pay to the dealer the refund value of the beverage containers; and reuse the returned containers or recycle them where markets for recyclable materials are available.

(f) Returned refillable beverage containers shall be returned to the distributor for refilling. Nonrefillable beverage containers shall be returned to the appropriate distributor or recycled, where markets for recyclable materials are available.

### § 244.202 Information.

(a) With the exception of refillable beverage containers, every returnable beverage container sold or offered for sale by a dealer shall clearly and conspicuously indicate, by embossing or by stamp, or by a label securely affixed to the beverage container, the refund value of the container and that the container is returnable.

(b) Dealers shall inform consumers that beverages are sold in returnable beverage containers by placing a sign, or a shelf label, or both, in close proximity to any sales display of beverages in returnable containers. That sign or label shall indicate that all containers are returnable, separately list the beverage price and deposit to be paid by the consumer, and shall indicate where the empty beverage containers may be returned for refund of the deposit.

### § 244.203 Implementation decisions and reporting.

Federal agencies are to determine whether or not to implement these guidelines by October 20, 1977. Reporting of that determination shall be in accordance with the following requirements:

(a) Federal agencies that plan to implement these guidelines shall report that decision to the Administrator in accordance with the procedures described in § 244.100(f)(1).

(b) Agencies that determine not to implement these guidelines shall provide to the Administrator a nonimplementation report in accordance with § 244.100(f)(3). This report shall include the reasons for nonimplementation, based on concepts presented in § 244.100(d).

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# PART 246—SOURCE SEPARATION FOR MATERIALS RECOVERY GUIDELINES

## Subpart A—General Provisions

Sec.
246.100 Scope.
246.101 Definitions.

## Subpart B—Requirements and Recommended Procedures

246.200 High-grade paper recovery.
246.200–1 Requirements.
246.200–2 Recommended procedures: High-grade paper recovery from smaller offices.
246.200–3 Recommended procedures: Market study.
246.200–4 Recommended procedures: Levels of separation.
246.200–5 Recommended procedures: Methods of separation and collection.
246.200–6 Recommended procedures: Storage.
246.200–7 Recommended procedures: Transportation.
246.200–8 Recommended procedures: Cost analysis.
246.200–9 Recommended procedures: Contracts.
246.200–10 Recommended procedures: Public information and education.
246.201 Residential materials recovery.
246.201–1 Requirement.
246.201–2 Recommended procedures: Newsprint recovery from smaller residential facilities.
246.201–3 Recommended procedures: Glass, can, and mixed paper separation.
246.201–4 Recommended procedures: Market study.
246.201–5 Recommended procedures: Methods of separation and collection.
246.201–6 Recommended procedures: Transportation to market.
246.201–7 Recommended procedures: Cost analysis.
246.201–8 Recommended procedures: Contracts.
246.201–9 Recommended procedures: Public information and education.
246.202 Corrugated container recovery.
246.202–1 Requirement.
246.202–2 Recommended procedures: Corrugated container recovery from smaller commercial facilities.
246.202–3 Recommended procedures: Market study.
246.202–4 Recommended procedures: Methods of separation and storage.
246.202–5 Recommended procedures: Transportation.
246.202–6 Recommended procedures: Cost analysis.
246.202–7 Recommended procedures: Establishment of purchase contract.
246.203 Reevaluation.

APPENDIX TO PART 246—RECOMMENDED BIBLIOGRAPHY

AUTHORITY: Secs. 1008 and 6004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6907, 6964).

SOURCE: 41 FR 16952, Apr. 23, 1976, unless otherwise noted.

## Subpart A—General Provisions

### § 246.100 Scope.

(a) These guidelines are applicable to the source separation of residential, commercial, and institutional solid wastes. Explicitly excluded are mining, agricultural, and industrial solid wastes; hazardous wastes; sludges; construction and demolition wastes; infectious wastes; classified waste.

(b) The ''Requirement'' sections contained herein delineate minimum actions for Federal agencies for the recovery of resources from solid waste through source separation. Pursuant to section 211 of the Solid Waste Disposal Act, as amended, and Executive Order 11752 section 4(a), the ''Requirement'' sections of these guidelines are mandatory for all Federal agencies that generate solid waste. In addition, they are recommended to State, interstate, regional, and local governments for use in their activities.

(c) The ''Recommended Procedures'' sections are presented to suggest actions or preferred methods by which the objectives of the requirements can be realized. The ''Recommended Procedures'' are not mandatory for Federal agencies.

(d) The Environmental Protection Agency will render technical assistance in the form of sample cost analysis formats, sample bid specifications, implementation guidance documents and other guidance to Federal agencies when requested to do so, pursuant to section 3(d)1 of Executive Order 11752.

(e) Within one year after the effective date of these guidelines, agencies shall make a final determination as to

what actions shall be taken to adopt the requirements of these guidelines and shall, within two months of such determination, submit to the Administrator a schedule of such actions.

(f) Federal agencies that make the determination not to source separate as described in §§ 246.200–1, 246.201–1, and 246.202–1, for whatever reason, shall make available to the Administrator the analysis and rationale used in making that determination. The Administrator shall publish notice of the availability of this report to the general public in the FEDERAL REGISTER. The following are considered to be valid reasons for not source separating under individual facts and circumstances: inability to sell the recovered materials due to lack of market, and costs so unreasonably high as to render source separation for materials recovery economically impracticable.

(1) The following points are to be covered in the report:

(i) A description of alternative actions considered with emphasis on those alternatives which involve source separation for materials recovery.

(ii) A description of ongoing actions which will be continued and new actions taken or proposed. This statement should identify all agency facilities which will be affected by these actions including a brief description of how such facilities will be affected.

(iii) An analysis in support of the action chosen by the agency including technical data, market studies, and policy considerations used in arriving at such a determination.

In covering the points above, agencies should make every effort to present information succinctly in a form easily understood, but in sufficient detail so that the factors influencing the decision not to source separate for materials recovery are clear.

(2) The above report shall be submitted to the Administrator as soon as possible after a final agency determination has been made not to adopt the requirements of these guidelines, but in no case later than sixty days after such final determination. The Administrator will indicate to the agency his concurrence/nonconcurrence with the agency's decision, including his reason therefor.

(3) Implementation of actions that would preclude source separation for materials recovery shall be deferred, for sixty days where feasible, in order to give the Administrator an opportunity to receive, analyze and seek clarification of the above required report.

(4) It is recommended that where the report required by § 246.100(f) concerns an action for which an Environmental Impact Statement (EIS) is required by the National Environmental Policy Act, that the report be circulated together with the EIS.

(g) The report required under § 246.100(e) and (f) shall be made on forms to be prescribed by the Administrator by notice in the FEDERAL REGISTER.

[41 FR 16952, Apr. 23, 1976, as amended at 47 FR 36603, Aug. 20, 1982]

### § 246.101 Definitions.

As used in these guidelines:

(a) *Agricultural solid waste* means the solid waste that is generated by the rearing of animals, and the producing and harvesting of crops or trees.

(b) *Baler* means a machine used to compress solid wastes, primary materials, or recoverable materials, with or without binding, to a density or from which will support handling and transportation as a material unit rather than requiring a disposable or reuseable container. This specifically excludes briquetters and stationary compaction equipment which is used to compact materials into disposable or reuseable containers.

(c) *Bulk container* means a large container that can either be pulled or lifted mechanically onto a service vehicle or emptied mechanically into a service vehicle.

(d) *Classified Waste* means waste material that has been given security classification in accordance with 50 U.S.C. 401 and Executive Order 11652.

(e) *Collection* means the act of removing solid waste (or materials which have been separated for the purpose of recycling) from a central storage point.

(f) *Commercial establishment* means stores, offices, restaurants, warehouses and other non-manufacturing activities.

(g) *Commercial solid waste* means all types of solid wastes generated by stores, offices, restaurants, warehouses and other non-manufacturing activities, and non-processing wastes such as office and packing wastes generated at industrial facilities.

(h) *Construction and demolition waste* means the waste building materials, packaging, and rubble resulting from construction, remodeling, repair, and demolition operations on pavements, houses, commercial buildings and other structures.

(i) *Compartmentalized vehicle* means a collection vehicle which has two or more compartments for placement of solid wastes or recyclable materials. The compartments may be within the main truck body or on the outside of that body as in the form of metal racks.

(j) *Corrugated container waste* means discarded corrugated boxes.

(k) *Corrugated box* means a container for goods which is composed of an inner fluting of material (corrugating medium) and one or two outer liners of material (linerboard).

(l) *Federal facility* means any building, installation, structure, land, or public work owned by or leased to the Federal Government. Ships at sea, aircraft in the air, land forces on maneuvers, and other mobile facilities are not considered Federal facilities for the purpose of these guidelines. United States Government installations located on foreign soil or on land outside the jurisdiction of the United States Government are not considered Federal facilities for the purpose of these guidelines.

(m) *Food waste* means the organic residues generated by the handling, storage, sale, preparation, cooking, and serving of foods; commonly called garbage.

(n) *Generation* means the act or process of producing solid waste.

(o) *High-grade paper* means letterhead, dry copy papers, miscellaneous business forms, stationery, typing paper, tablet sheets, and computer printout paper and cards, commonly sold as ''white ledger,'' ''computer printout'' and ''tab card'' grade by the wastepaper industry.

(p) *Industrial solid waste* means the solid waste generated by industrial processes and manufacturing.

(q) *Infectious waste* means: (1) Equipment, instruments, utensils, and fomites (any substance that may harbor or transmit pathogenic organisms) of a disposable nature from the rooms of patients who are suspected to have or have been diagnosed as having a communicable disease and must, therefore, be isolated as required by public health agencies; (2) laboratory wastes, such as pathological specimens (e.g. all tissues, specimens of blood elements, excreta, and secretions obtained from patients or laboratory animals) and disposable fomites attendant thereto; (3) surgical operating room pathologic specimens and disposable fomites attendant thereto and similar disposable materials from outpatient areas and emergency rooms.

(r) *Institutional solid waste* means solid wastes generated by educational, health care, correctional and other institutional facilities.

(s) *Mining wastes* means residues which result from the extraction of raw materials from the earth.

(t) *Post-consumer waste* (PCW) means a material or product that has served its intended use and has been discarded for disposal or recovery after passing through the hands of a final consumer.

(u) *Recoverable resources* means materials that still have useful physical, chemical, or biological properties after serving their original purpose and can, therefore, be reused or recycled for the same or other purposes.

(v) *Recovery* means the process of obtaining materials or energy resources from solid waste.

(w) *Recycled material* means a material that is used in place of a primary, raw or virgin material in manufacturing a product.

(x) *Recycling* means the process by which recovered materials are transformed into new products.

(y) *Residential solid waste* means the wastes generated by the normal activities of households, including but not limited to, food wastes, rubbish, ashes, and bulky wastes.

(z) *Separate collection* means collecting recyclable materials which have

been separated at the point of generation and keeping those materials separate from other collected solid waste in separate compartments of a single collection vehicle or through the use of separate collection vehicles.

(aa) *Sludge* means the accumulated semiliquid suspension of settled solids deposited from wastewaters or other fluids in tanks or basins. It does not include solid or dissolved material in domestic sewage or other significant pollutants in water resources, such as silt, dissolved material in irrigation return flows or other common water pollutants.

(bb) *Solid waste* means garbage, refuse, sludge, and other discarded solid materials, including solid waste materials resulting from industrial, commercial, and agricultural operations, and from community activities, but does not include solids or dissolved materials in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents, dissolved materials in irrigation return flows or other common water pollutants. Unless specifically noted otherwise, the term ''solid waste'' as used in these guidelines shall not include mining, agricultural, and industrial solid wastes; hazardous wastes; sludges; construction and demolition wastes; and infectious wastes.

(cc) *Source separation* means the setting aside of recyclable materials at their point of generation by the generator.

(dd) *Specification* means a clear and accurate description of the technical requirements for materials, products or services, identifying the minimum requirements for quality and construction of materials and equipment necessary for an acceptable product. In general, specifications are in the form of written descriptions, drawings, prints, commercial designations, industry standards, and other descriptive references.

(ee) *Stationary compactor* means a powered machine which is designed to compact solid waste or recyclable materials, and which remains stationary when in operation.

(ff) *Storage* means the interim containment of solid waste after generation and prior to collection for ultimate recovery or disposal.

(gg) *Virgin material* means a raw material used in manufacturing that has been mined or harvested and has not as yet become a product.

## Subpart B—Requirements and Recommended Procedures

### § 246.200 High-grade paper recovery.

#### § 246.200–1 Requirements.

High-grade paper generated by office facilities of over 100 office workers shall be separated at the source of generation, separately collected, and sold for the purpose of recycling.

#### § 246.200–2 Recommended procedures: High-grade paper recovery from smaller offices.

The recovery of high-grade paper generated by office facilities of less than 100 office workers should be investigated in conformance with the following recommended procedures and implemented where feasible.

#### § 246.200–3 Recommended procedures: Market study.

An investigation of markets should be made by the organization responsible for the sale of recyclable materials in each Federal agency and should include at a minimum:

(a) Identifying potential purchasers of the recovered paper through standard market research techniques;

(b) Directly contacting buyers, and determining the buyers' quality specifications, the exact types of paper to be recycled, potential transportation agreements and any minimum quantity criteria; and

(c) Determining the price that the buyer will pay for the recovered paper and the willingness of the buyer to sign a contract for purchase of the paper at a guaranteed minimum price.

#### § 246.200–4 Recommended procedures: Levels of separation.

A two-level separation is recommended for most facilities. This separation should consist of (a) high-grade wastepaper and (b) all other waste. Facilities that produce large enough

quantities of waste computer paper and cards to make their separation into a separate category cost effective may choose to implement three levels of separation: (1) Computer papers, (2) other high-grade papers, (3) all other wastes.

### § 246.200–5 Recommended procedures: Methods of separation and collection.

(a) Systems designed to recover high grades of office paper at the source of generation, i.e., the desk, are the desk-top system, the two-wastebasket system, and the office centralized container system.

(b) With the desk-top system, recyclable paper is placed by the generator in a container on his desk, while other waste is placed in a wastebasket. With the two-wastebasket system, recyclable paper is placed by the generator in one desk-side wastebasket, and all other waste is placed in another. In the centralized container system, large containers for the collection of recyclables are placed in centralized locations within the office areas of the building. Nonrecyclable waste is placed in desk-side wastebaskets.

(c) The recommended system is the desk-top system because it is designed to maximize recovery of high value material in an economically feasible manner. While the two-wastebasket system and centralized container system have been implemented with success in isolated instances, data indicate that, on the whole, these systems have experienced high levels of contamination, low levels of participation, and low revenues. The desk-top system has been designed to minimize these problems.

(d) The precise method of separation and collection used to implement the desk-top system will depend upon such things as the physical layout of the individual facility, the ease of collection, and the projected cost effectiveness of using various methods. The recommended desk-top system is carried out in the following manner:

(1) Workers are to deposit high-grade paper into a desk-top tray or other small desk-top holder to be supplied by the agency. This holder should be designed in such a way as to prevent it holding contaminants, such as food or beverage containers.

(2) At the office worker's convenience or when the tray is filled, the worker carries the paper to a conveniently located bulk container within the office area. This large container should be located in an area the worker frequents in the normal course of business.

(3) In locations where computer cards and printouts are to be collected separately, the receptacle for these wastes should be near the computer terminal or in some other logical, centrally located place.

(4) Collection of the high-grade paper from the bulk containers in the office area should be performed by the janitorial or general maintenance service.

The number of locations and the frequency of collection of these containers will be determined by office size and maintenance staff capacity.

(e) Mixed paper and some high-grade office papers have also been recovered for recycling by hand-picking in an individual building's trash room or at a centralized facility serving several buildings. With these hand-picking systems, recyclable waste is not separated at the source of generation, but is mixed with other waste in the usual manner and removed to a centralized location where recyclable paper is picked out of the mixed waste by hand. Facilities may choose to use this method of high-grade paper recovery if it is shown by analysis to be economically preferable to source separation.

### § 246.200–6 Recommended procedures: Storage.

Among the alternatives for paper storage are on-site bailing, the use of stationary compactors, or storage in corrugated boxes or normal waste containers. Stored paper should be protected from fire, inclement weather, theft, and vandalism.

### § 246.200–7 Recommended procedures: Transportation.

Transportation to market may be supplied by the facility, by a private hauler, or by the purchaser. Collection of the recyclable paper should be on a regular, established schedule.

**§ 246.200–8 Recommended procedures: Cost analysis.**

After potential markets have been located (but prior to initiation of formal bidding procedures), preliminary determinations of various separation methods, storage, and transportation costs have been made, and estimated tonnages of both recoverable high-grade paper and residual solid waste have been established, an analysis should be conducted which compares the costs of the present waste collection and disposal system with the proposed segregated systems. At a minimum, the study should include all capital, operating and overhead costs and take into account credits for revenue from paper sales and savings from diverting recycled materials from disposal. Potential costs to upgrade collection and disposal practices to comply with EPA's Guidelines for the Storage and Collection of Residential, Commercial and Institutional Solid Wastes (40 CFR part 243) and Thermal Processing and Land Disposal Guidelines (40 CFR parts 240 and 241) should be included in the analysis. In formulating a separation system and evaluating its costs, every effort should be made to use janitorial and waste collection resources efficiently. This cost analysis should enable the facility to determine the most cost effective method of implementing the requirement of this part.

**§ 246.200–9 Recommended procedures: Contracts.**

Formal bids should be requested for purchase of the recovered materials, such bids being solicited in conformance with bidding procedures established for the responsible agency. Contracts should include the buyer's quality specifications, quantity and transportation agreements, a guarantee that the material will be accepted for one year or more, and a guaranteed minimum purchase price.

**§ 246.200–10 Recommended procedures: Public information and education.**

A well-organized and well-executed public information and education program explaining the justification, goals, methods and level of separation should be conducted to inform and motivate office personnel and secure their cooperation in separating their waste. This public information and education program should precede the program and continue on a regular basis for its duration.

**§ 246.201 Residential materials recovery.**

**§ 246.201–1 Requirement.**

Separation of used newspapers at the source of residential generation in conjunction with separate collection shall be carried out at all facilities in which more than 500 families reside, and the newspapers shall be sold for the purpose of recycling.

**§ 246.201–2 Recommended procedures: Newsprint recovery from smaller residential facilities.**

The recovery of newsprint generated by residential facilities of less than 500 families should be investigated in conformance with the following recommended procedures and implemented where feasible.

**§ 246.201–3 Recommended procedures: Glass, can, and mixed paper separation.**

In areas where markets are available, it is recommended that glass, cans, and mixed paper be separated at the source of generation and separately collected for the purpose of recycling.

**§ 246.201–4 Recommended procedures: Market study.**

An investigation of markets should be made for each material by the organization responsible for sale of recyclable materials in each agency and should include at a minimum:

(a) Identifying potential purchasers of the recovered material through standard market research techniques.

(b) Directly contacting buyers and determining the buyers' quality specifications, potential transportation agreements and any minimum quantity criteria.

(c) Determining the prices that the buyer will pay for the recovered material and the willingness of the buyer to sign a contract for the purchase of the

material at guaranteed minimum prices.

### § 246.201–5 Recommended procedures: Methods of separation and collection.

Following separation within the home, any of the following methods of collection may be used:

(a) Materials may be placed at the curbside by the resident and may be collected from each household using separate trucks or compartmentalized vehicles.

(b) For multi-family dwellings, separated materials may be placed in bulk containers located outside of the building and collected by trucks dispatched to collect recyclables.

(c) Collection stations may be set up at convenient locations to which residents bring recyclables. These stations should provide separate bulk containers for each item to be recycled. The size and type of container will depend on the volume and type of material collected, the method of transportation to be used in hauling the materials to market and the frequency of removal.

### § 246.201–6 Recommended procedures: Transportation to market.

Transportation to market may be supplied by the facility or the community generating the waste, by a private hauler, or by the purchaser.

### § 246.201–7 Recommended procedures: Cost analysis.

After potential markets have been located (but prior to initiation of formal bidding procedures), preliminary determinations of various separation methods, storage and transportation costs have been made, and estimated tonnages of both recoverable materials and residual solid waste have been established, an analysis should be conducted which compares the costs of the present waste collection and disposal system with the proposed segregated systems. At a minimum this study should include all capital, operating and overhead costs and take into account credits for revenue from paper sales and savings from diverting recycled materials from disposal. Potential costs to upgrade collection and disposal practices to comply with EPA's Guidelines for the Storage and Collection of Residential, Commercial and Institutional Solid Wastes (40 CFR part 243) and Thermal Processing and Land Disposal Guidelines (40 CFR parts 240 and 241) should be included in the analysis. In formulating a separate collection system and evaluating its costs, every effort should be made to use idle equipment and underutilized collection manpower to reduce separate collection costs. This cost analysis should enable the facility to determine the most cost effective method if implementing the requirements of this part.

### § 246.201–8 Recommended procedures: Contracts.

Formal bids should be requested for purchase of the recovered materials, such bids being solicited in conformance with bidding procedures established for the responsible jurisdiction. Contracts should include the buyer's quality specifications, quantity and transportation agreements, a guarantee that the material will be accepted for one year or more and a guaranteed minimum purchase price.

### § 246.201–9 Recommended procedures: Public information and education.

A well organized and well executed public information and education program explaining the justification, goals, methods and level of separation should be conducted to inform and motivate householders and to secure their cooperation in separating their waste. This public information and education program should precede the program and continue on a regular basis for its duration.

## § 246.202 Corrugated container recovery.

### § 246.202–1 Requirement.

Any commercial establishment generating 10 or more tons of waste corrugated containers per month shall separately collect and sell this material for the purpose of recycling.

**§ 246.202–2 Recommended procedures: Corrugated container recovery from smaller commercial facilities.**

The recovery of corrugated containers from commercial facilities generating less than 10 tons per month should be investigated in conformance with the following recommended procedures and implemented where feasible.

**§ 246.202–3 Recommended procedures: Market study.**

An investigation of markets should be made by the organization responsible for sale of recyclable material in each Federal agency and should include at a minimum:

(a) Identifying potential purchasers of the recovered corrugated through standard market research techniques.

(b) Directly contacting buyers and determining the buyers' quality specifications, potential transportation agreements and any minimum quantity criteria.

(c) Determining the price that the buyer will pay for the recovered corrugated and the willingness of the buyer to sign a contract for purchase of the paper at a guaranteed minimum price.

**§ 246.202–4 Recommended procedures: Methods of separation and storage.**

The method selected will depend upon such variables as the physical layout of the individual generating facility, the rate at which the corrugated accumulates, the storage capacity of the facility, and the projected cost-effectiveness of using the various methods. All of the following suggested modes of separation and storage presuppose that the corrugated boxes will be accumulated at a central location in the facility after their contents are removed and that the boxes are flattened.

(a) Balers of various sizes: Corrugated boxes are placed in balers and compacted into bales. These bales may be stored inside or outside of the facility. The bales should be protected from fire, inclement weather, theft, and vandalism.

(b) Stationary compactors or bulk containers: Corrugated boxes are placed in a stationary compactor or bulk containers outside of the facility. The containers should be protected from fire, inclement weather, theft and vandalism.

**§ 246.202–5 Recommended procedures: Transportation.**

Transportation to market may be supplied by either the facility, a private hauler or the purchaser. In facilities to which goods are delivered from a central warehouse, corrugated may be backhauled by delivery trucks to the central facility and baled there for delivery to a user.

**§ 246.202–6 Recommended procedures: Cost analysis.**

After potential markets have been identified (but prior to initiation of formal bidding), preliminary determinations of various separation methods, storage and transportation costs have been made, and estimated tonnages of both recoverable material and residual solid waste have been established, an analysis should be conducted which compares the costs of the present waste collection and disposal system with the proposed segregated systems. At a minimum, the study should include all capital, operating and overhead costs and take into account credits for revenue from paper sales and savings from diverting recycled materials from disposal. Potential costs to upgrade collection and disposal practices to comply with EPA's Guidelines for the Storage and Collection of Residential, Commercial and Institutional Solid Wastes (40 CFR part 243) and Thermal Processing and Land Disposal Guidelines (40 CFR parts 240 and 241) should be included in the analysis. This cost analysis should enable the facility to determine the most cost effective method of implementing these guidelines.

**§ 246.202–7 Recommended procedures: Establishment of purchase contract.**

Formal bids should be requested for purchase of the recovered materials, such bids being solicited in conformance with bidding procedures established for the responsible agency. Contracts should include the buyer's quality specifications, transportation

agreements, a guarantee that the material will be accepted for one year or more and a guaranteed minimum purchase price.

### §246.203 Reevaluation.

APPENDIX TO PART 246—RECOMMENDED BIBLIOGRAPHY

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# PART 247—COMPREHENSIVE PROCUREMENT GUIDELINE FOR PRODUCTS CONTAINING RECOVERED MATERIALS

### Subpart A—General

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AUTHORITY: 42 U.S.C. 6912(a) and 6962; E.O. 12873, 58 FR 54911.

SOURCE: 60 FR 21381, May 1, 1995, unless otherwise noted.

## Subpart A—General

### §247.1 Purpose and scope.

(a) The purpose of this guideline is to assist procuring agencies in complying with the requirements of section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6962, and Executive Order 12873, as they apply to the procurement of the items designated in subpart B of this part.

(b) This guideline designates items that are or can be made with recovered materials and whose procurement by procuring agencies will carry out the objectives of section 6002 of RCRA. EPA's recommended practices with respect to the procurement of specific designated items are found in the companion Recovered Materials Advisory Notice(s).

(c) EPA believes that adherence to the recommendations in the Recovered Materials Advisory Notice(s) constitutes compliance with RCRA section 6002. However, procuring agencies may adopt other types of procurement programs consistent with RCRA section 6002.

### § 247.2 Applicability.

(a)(1) This guideline applies to all procuring agencies and to all procurement actions involving items designated by EPA in this part, where the procuring agency purchases $10,000 or more worth of one of these items during the course of a fiscal year, or where the cost of such items or of functionally equivalent items purchased during the preceding fiscal year was $10,000 or more.

(2) This guideline applies to Federal agencies, to State and local agencies using appropriated Federal funds to procure designated items, and to persons contracting with any such agencies with respect to work performed under such contracts. Federal procuring agencies should note that the requirements of RCRA section 6002 apply to them whether or not appropriated Federal funds are used for procurement of designated items.

(3) The $10,000 threshold applies to procuring agencies as a whole rather than to agency subgroups such as regional offices or subagencies of a larger department or agency.

(b) The term *procurement actions* includes:

(1) Purchases made directly by a procuring agency and purchases made directly by any person (e.g., a contractor) in support of work being performed for a procuring agency, and

(2) Any purchases of designated items made ''indirectly'' by a procuring agency, as in the case of procurements resulting from grants, loans, funds, and similar forms of disbursements of monies.

(c)(1) This guideline does not apply to purchases of designated items which are unrelated to or incidental to Federal funding, i.e., not the direct result of a contract or agreement with, or a grant, loan, or funds disbursement to, a procuring agency.

(2) This guideline also does not apply to purchases made by private party recipients (e.g., individuals, non-profit organizations) of Federal funds pursuant to grants, loans, cooperative agreements, and other funds disbursements.

(d) RCRA section 6002(c)(1) requires procuring agencies to procure designated items composed of the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, considering such guidelines. Procuring agencies may decide not to procure such items if they are not reasonably available in a reasonable period of time; fail to meet reasonable performance standards; or are only available at an unreasonable price.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60973, Nov. 13, 1997]

### § 247.3 Definitions.

As used in this procurement guideline and the related Recovered Materials Advisory Notice(s):

*Act* or *RCRA* means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended, 42 U.S.C 6901 *et seq;*

*Blanket insulation* means relatively flat and flexible insulation in coherent sheet form, furnished in units of substantial area. Batt insulation is included in this term;

*Board insulation* means semi-rigid insulation preformed into rectangular units having a degree of suppleness, particularly related to their geometrical dimensions;

*Building insulation* means a material, primarily designed to resist heat flow, which is installed between the conditioned volume of a building and adjacent unconditioned volumes or the outside. This term includes but is not limited to insulation products such as blanket, board, spray-in-place, and loose-fill that are used as ceiling, floor, foundation, and wall insulation;

*Cellulose fiber loose-fill* means a basic material of recycled wood-based cellulosic fiber made from selected paper, paperboard stock, or ground wood stock, excluding contaminated materials which may reasonably be expected to be retained in the finished product, with suitable chemicals introduced to

provide properties such as flame resistance, processing and handling characteristics. The basic cellulosic material may be processed into a form suitable for installation by pneumatic or pouring methods;

*Channelizers* means highly visible barrels or drums that can be positioned to direct traffic through detours;

*Delineator* means a highly visible pavement marker that can be positioned to direct traffic or define boundaries;

*Engine lubricating oils* means petroleum-based oils used for reducing friction in engine parts;

*Federal agency* means any department, agency, or other instrumentality of the Federal government; any independent agency or establishment of the Federal government including any government corporation; and the Government Printing Office;

*Fiberglass insulation* means insulation which is composed principally of glass fibers, with or without binders;

*Flexible delineator* means a highly visible marker that can be positioned to direct traffic or define boundaries and that will flex if struck by a vehicle to prevent damage to the vehicle or the delineator;

*Foam-in-place insulation* is rigid cellular foam produced by catalyzed chemical reactions that hardens at the site of the work. The term includes spray-applied and injected applications such as spray-in-place foam and pour-in-place;

*Garden hose* means a flexible tubing that conducts water to a specific location;

*Gear oils* means petroleum-based oils used for lubricating machinery gears;

*Hydraulic fluids* means petroleum-based hydraulic fluids;

*Hydraulic mulch* means a mulch that is a cellulose-based (paper or wood) protective covering that is mixed with water and applied through mechanical spraying in order to aid the germination of seeds and to prevent soil erosion;

*Hydroseeding* means the process of spraying seeds mixed with water through a mechanical sprayer (hydroseeder). Hydraulic mulch, fertilizer, a tacking agent, or a wetting agent can also be added to the water/seed mix for enhanced performance;

*Laminated paperboard* means board made from one or more plies of kraft paper bonded together, with or without facers, that is used for decorative, structural, or insulating purposes;

*Latex paint* means a water-based decorative or protective covering having a latex binder;

*Lawn edging* means a barrier used between lawns and landscaped areas or garden beds to prevent grass roots or weeds from spreading to the landscaped areas;

*Loose-fill insulation* means insulation in granular, nodular, fibrous, powdery, or similar form, designed to be installed by pouring, blowing or hand placement;

*Mineral fiber insulation* means insulation (rock wool or fiberglass) which is composed principally of fibers manufactured from rock, slag or glass, with or without binders;

*Pallet* means a portable platform for storing or moving cargo or freight;

*Paper* means one of two broad subdivisions of paper products, the other being paperboard. Paper is generally lighter in basis weight, thinner, and more flexible than paperboard. Sheets 0.012 inch or less in thickness are generally classified as paper. Its primary uses are for printing, writing, wrapping, and sanitary purposes. However, in this guideline, the term paper is also used as a generic term that includes both paper and paperboard.

*Paper product* means any item manufactured from paper or paperboard. The term paper product is used in this guideline to distinguish such items as boxes, doilies, and paper towels from printing and writing papers.

*Parking stop* means a barrier used to mark parking spaces and keep parked vehicles from rolling beyond a designated parking area;

*Perlite composite board* means insulation board composed of expanded perlite and fibers formed into rigid, flat, rectangular units with a suitable sizing material incorporated in the product. It may have on one or both surfaces a facing or coating to prevent excessive hot bitumen strike-in during roofing installation;

*Person* means an individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, Federal agency, State, municipality, commission, political subdivision of a State, or any interstate body;

*Phenolic insulation* means insulation made with phenolic plastics which are plastics based on resins made by the condensation of phenols, such as phenol or cresol, with aldehydes;

*Plastic fencing* means a barrier with an open-weave pattern that can be used to control drifting snow or sand by restricting the force of wind and to provide a warning or barrier in construction and other areas;

*Polyisocyanurate insulation* means insulation produced principally by the polymerization of polymeric polyisocyanates, usually in the presence of polyhydroxyl compounds with the addition of cell stabilizers, blowing agents, and appropriate catalyst to produce a polyisocyanurate chemical structure;

*Polystyrene insulation* means an organic foam composed principally of polymerized styrene resin processed to form a homogenous rigid mass of cells;

*Polyurethane insulation* means insulation composed principally of the catalyzed reaction product of polyisocyanates and polyhydroxyl compounds, processed usually with a blowing agent to form a rigid foam having a predominantly closed cell structure;

*Postconsumer material* means a material or finished product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer item. *Postconsumer material* is a part of the broader category of *recovered materials.*

*Postconsumer recovered paper* means:

(1) Paper, paperboard and fibrous wastes from retail stores, office buildings, homes and so forth, after they have passed through their end-usage as a consumer item including: Used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards and used cordage; and

(2) All paper, paperboard and fibrous wastes that enter and are collected from municipal solid waste;

*Practicable* means capable of being used consistent with: Performance in accordance with applicable specifications, availability at a reasonable price, availability within a reasonable period of time, and maintenance of a satisfactory level of competition;

*Printer ribbon* means a nylon fabric designed to hold ink and used in dot matrix and other types of impact printers;

*Procurement item* means any device, good, substance, material, product, or other item, whether real or personal property, which is the subject of any purchase, barter, or other exchange made to procure such item;

*Procuring agency* means any Federal agency, or any State agency or agency of a political subdivision of a State, which is using appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract;

*Purchasing* means the act of and the function of responsibility for the acquisition of equipment, materials, supplies, and services, including: Buying, determining the need, selecting the supplier, arriving at a fair and reasonable price and terms and conditions, preparing the contract or purchase order, and follow-up;

*Recovered materials* means waste materials and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process;

*Recovered materials,* for purposes of purchasing paper and paper products, means waste material and byproducts that have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process. In the case of paper and paper products, the term *recovered materials* includes:

(1) Postconsumer materials such as—

(i) Paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: Used corrugated boxes; old newspapers; old

magazines; mixed waste paper; tabulating cards; and used cordage; and

(ii) All paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste, and

(2) Manufacturing, forest residues, and other wastes such as—

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel in smaller rolls of rough sheets) including: Envelope cuttings, bindery trimmings, and other paper and paperboard waste, resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others;

(iii) Fibrous byproducts of harvesting, manufacturing, extractive, or wood-cutting processes, flax, straw, linters, bagasse, slash, and other forest residues;

(iv) Wastes generated by the conversion of goods made from fibrous material (that is, waste rope from cordage manufacture, textile mill waste, and cuttings); and

(v) Fibers recovered from waste water which otherwise would enter the waste stream.

*Re-refined oils* means used oils from which the physical and chemical contaminants acquired through previous use have been removed through a refining process;

*Restroom divider/partition* means a barrier used to provide privacy in public restroom facilities;

*Retread tire* means a worn automobile, truck, or other motor vehicle tire whose tread has been replaced;

*Rock wool insulation* means insulation which is composed principally from fibers manufactured from slag or natural rock, with or without binders;

*Shower divider/partition* means a water-proof barrier used to provide privacy in public shower facilities;

*Soaker hose* means a perforated flexible tubing that is used to deliver gentle irrigation to plants;

*Specification* means a description of the technical requirements for a material, product, or service that includes the criteria for determining whether these requirements are met. In general, specifications are in the form of written commercial designations, industry standards, and other descriptive references;

*Spray-in-place insulation* means insulation material that is sprayed onto a surface or into cavities and includes cellulose fiber spray-on as well as plastic rigid foam products;

*Spray-in-place foam* is rigid cellular polyurethane or polyisocyanurate foam produced by catalyzed chemical reactions that hardens at the site of the work. The term includes spray-applied and injected applications;

*State* means any of the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands;

*Structural fiberboard* means a fibrous-felted, homogenous panel made from lignocellulosic fibers (usually wood, cane, or paper) and having a density of less than 31 lbs/ft$^3$ but more than 10 lbs/ft$^3$. It is characterized by an integral bond which is produced by interfelting of the fibers, but which has not been consolidated under heat or pressure as a separate stage of manufacture;

*Tire* means the following types of tires: Passenger car tires, light- and heavy-duty truck tires, high-speed industrial tires, bus tires, and special service tires (including military, agricultural, off-the-road, and slow-speed industrial);

[60 FR 21381, May 1, 1995, as amended at 62 FR 60973, Nov. 13, 1997]

EFFECTIVE DATE NOTE: At 62 FR 60973, Nov. 13, 1997, § 247.3 was amended by adding the definitions ''*Channelizers, Delineator, Flexible delineator, Garden hose, Latex paint, Lawn edging, Pallet, Parking stop, Plastic fencing, Printer ribbon, Restroom divider/partition, Shower divider/partition,* and *Soaker hose*'', effective Nov. 13, 1998.

### § 247.4 Contracting officer requirements.

Within one year after the effective date of each item designation, contracting officers shall require that vendors:

(a) Certify that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by applicable specifications or other contractual requirements, and

(b) Estimate the percentage of total material utilized for the performance of the contract which is recovered materials.

### § 247.5 Specifications.

(a) RCRA section 6002(d)(1) required Federal agencies that have the responsibility for drafting or reviewing specifications for procurement items procured by Federal agencies to revise their specifications by May 8, 1986, to eliminate any exclusion of recovered materials and any requirement that items be manufactured from virgin materials.

(b) RCRA section 6002(d)(2) requires that within one year after the publication date of each item designation by the EPA, each procuring agency must assure that its specifications for these items require the use of recovered materials to the maximum extent possible without jeopardizing the intended end use of these items.

### § 247.6 Affirmative procurement programs.

RCRA section 6002(i) provides that each procuring agency which purchases items designated by EPA must establish an affirmative procurement program, containing the four elements listed below, for procuring such items containing recovered materials to the maximum extent practicable:

(a) Preference program for purchasing the designated items;

(b) Promotion program;

(c) Procedures for obtaining estimates and certifications of recovered materials content and for verifying the estimates and certifications; and

(d) Annual review and monitoring of the effectiveness of the program.

### § 247.7 Effective date.

Within one year after the date of publication of any item designation, procuring agencies which purchase that designated item must comply with the following requirements of RCRA: affirmative procurement of the designated item (6002(c)(1) and (i)), specifications revision (6002(d)(2)), vendor certification and estimation of recovered materials content of the item (6002(c)(3) and (i)(2)(C)), and verification of vendor estimates and certifications (6002(i)(2)C)).

## Subpart B—Item Designations

### § 247.10 Paper and paper products.

Paper and paper products, excluding building and construction paper grades.

### § 247.11 Vehicular products.

(a) Lubricating oils containing re-refined oil, including engine lubricating oils, hydraulic fluids, and gear oils, excluding marine and aviation oils.

(b) Tires, excluding airplane tires.

(c) Reclaimed engine coolants, excluding coolants used in non-vehicular applications.

### § 247.12 Construction products.

(a) Building insulation products, including the following items:

(1) Loose-fill insulation, including but not limited to cellulose fiber, mineral fibers (fiberglass and rock wool), vermiculite, and perlite;

(2) Blanket and batt insulation, including but not limited to mineral fibers (fiberglass and rock wool);

(3) Board (sheathing, roof decking, wall panel) insulation, including but not limited to structural fiberboard and laminated paperboard products, perlite composite board, polyurethane, polyisocyanurate, polystyrene, phenolics, and composites; and

(4) Spray-in-place insulation, including but not limited to foam-in-place polyurethane and polyisocyanurate, and spray-on cellulose.

(b) Structural fiberboard and laminated paperboard products for applications other than building insulation, including building board, sheathing, shingle backer, sound deadening board,

roof insulating board, insulating wallboard, acoustical and non-acoustical ceiling tile, acoustical and non-acoustical lay-in panels, floor underlayments, and roof overlay (coverboard).

(c) Cement and concrete, including concrete products such as pipe and block, containing coal fly ash or ground granulated blast furnace (GGBF) slag.

(d) Carpet made of polyester fiber for use in low- and medium-wear applications.

(e) Floor tiles and patio blocks containing recovered rubber or plastic.

(f) Shower and restroom dividers/partitions containing recovered plastic or steel.

(g)(1) Consolidated latex paint used for covering graffiti; and

(2) Reprocessed latex paint used for interior and exterior architectural applications such as wallboard, ceilings, and trim; gutter boards; and concrete, stucco, masonry, wood, and metal surfaces.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997]

EFFECTIVE DATE NOTE: At 62 FR 60974, Nov. 13, 1997, §247.12 was amended by adding paragraphs (f) and (g), effective Nov. 13, 1998.

### §247.13 Transportation products.

(a) Traffic barricades and traffic cones used in controlling or restricting vehicular traffic.

(b) Parking stops made from concrete or containing recovered plastic or rubber.

(c) Channelizers containing recovered plastic or rubber.

(d) Delineators containing recovered plastic, rubber, or steel.

(e) Flexible delineators containing recovered plastic.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997]

EFFECTIVE DATE NOTE: At 62 FR 60974, Nov. 13, 1997, §247.13 was amended by designating the existing text as paragraph (a) and adding paragraphs (b) through (e), effective Nov. 13, 1998.

### §247.14 Park and recreation products.

(a) Playground surfaces and running tracks containing recovered rubber or plastic.

(b) Plastic fencing containing recovered plastic for use in controlling snow or sand drifting and as a warning/safety barrier in construction or other applications.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997]

EFFECTIVE DATE NOTE: At 62 FR 60974, Nov. 13, 1997, §247.14 was amended by designating the existing text as paragraph (a) and adding paragraph (b), effective Nov. 13, 1998.

### §247.15 Landscaping products.

(a) Hydraulic mulch products containing recovered paper or recovered wood used for hydroseeding and as an over-spray for straw mulch in landscaping, erosion control, and soil reclamation.

(b) Compost made from yard trimmings, leaves, and/or grass clippings for use in landscaping, seeding of grass or other plants on roadsides and embankments, as a nutritious mulch under trees and shrubs, and in erosion control and soil reclamation.

(c) Garden and soaker hoses containing recovered plastic or rubber.

(d) Lawn and garden edging containing recovered plastic or rubber.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997]

EFFECTIVE DATE NOTE: At 62 FR 60974, Nov. 13, 1997, §247.15 was amended adding paragraphs (c) and (d), effective Nov. 13, 1998.

### §247.16 Non-paper office products.

(a) Office recycling containers and office waste receptacles.

(b) Plastic desktop accessories.

(c) Toner cartridges.

(d) Binders.

(e) Plastic trash bags.

(f) Printer ribbons.

(g) Plastic envelopes.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997]

EFFECTIVE DATE NOTE: At 62 FR 60974, Nov. 13, 1997, §247.16 was amended by adding paragraphs (f) and (g), effective Nov. 13, 1998.

### §247.17 Miscellaneous products.

(a) Pallets containing recovered wood, plastic, or paperboard.

(b) [Reserved]

[62 FR 60974, Nov. 13, 1997]

EFFECTIVE DATE NOTE: At 62 FR 60974, Nov. 13, 1997, §247.17 was added, effective Nov. 13, 1998.

## PART 254—PRIOR NOTICE OF CITIZEN SUITS

Sec.
254.1 Purpose.
254.2 Service of notice.
254.3 Contents of notice.

AUTHORITY: Sec. 7002, Pub. L. 94–580, 90 Stat. 2825 (42 U.S.C. 6972).

SOURCE: 42 FR 56114, Oct. 21, 1977, unless otherwise noted.

### §254.1 Purpose.

Section 7002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, authorizes suit by any person to enforce the Act. These suits may be brought where there is alleged to be a violation by any person (including (a) the United States, and (b) any other governmental instrumentality or agency, to the extent permitted by the eleventh amendment to the Constitution) of any permit, standard, regulation, condition, requirement, or order which has become effective under the Act, or a failure of the Administrator to perform any act or duty under the Act, which is not discretionary with the Administrator. These actions are to be filed in accordance with the rules of the district court in which the action is instituted. The purpose of this part is to prescribe procedures governing the notice requirements of subsections (b) and (c) of section 7002 as a prerequisite to the commencement of such actions.

### §254.2 Service of notice.

(a) Notice of intent to file suit under subsection 7002(a)(1) of the Act shall be served upon an alleged violator of any permit, standard, regulation, condition, requirement, or order which has become effective under this Act in the following manner:

(1) If the alleged violator is a private individual or corporation, service of notice shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the owner or site manager of the building, plant, installation, or facility alleged to be in violation. A copy of the notice shall be mailed to the Administrator of the Environmental Protection Agency, the Regional Administrator of the Environmental Protection Agency for the region in which the violation is alleged to have occurred, and the chief administrative officer of the solid waste management agency for the State in which the violation is alleged to have occurred. If the alleged violator is a corporation, a copy of the notice shall also be mailed to the registered agent, if any, of that corporation in the State in which such violation is alleged to have occurred.

(2) If the alleged violator is a State or local agency, service of notice shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the head of that agency. A copy of the notice shall be mailed to the chief administrator of the solid waste management agency for the State in which the violation is alleged to have occurred, the Administrator of the Environmental Protection Agency, and the Regional Administrator of the Environmental Protection Agency for the region in which the violation is alleged to have occurred.

(3) If the alleged violator is a Federal agency, service of notice shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the head of the agency. A copy of the notice shall be mailed to the Administrator of the Environmental Protection Agency, the Regional Administrator of the Environmental Protection Agency for the region in which the violation is alleged to have occurred, the Attorney General of the United States, and the chief administrative officer of the solid waste management agency for the State in which the violation is alleged to have occurred.

(b) Service of notice of intent to file suit under subsection 7002(a)(2) of the Act shall be accomplished by registered mail, return receipt requested, addressed to, or by personal service upon, the Administrator, Environmental Protection Agency, Washington, DC 20460. A copy of the notice shall be mailed to the Attorney General of the United States.

(c) Notice given in accordance with the provisions of this part shall be considered to have been served on the date of receipt. If service was acomplished by mail, the date of receipt will be considered to be the date noted on the return receipt card.

### § 254.3 Contents of notice.

(a) *Violation of permit, standard, regulation, condition, requirement, or order.* Notice regarding an alleged violation of a permit, standard, regulation, condition, requirement, or order which has become effective under this Act shall include sufficient information to permit the recipient to identify the specific permit, standard, regulation, condition, requirement, or order which has allegedly been violated, the activity alleged to constitute a violation, the person or persons responsible for the alleged violation, the date or dates of the violation, and the full name, address, and telephone number of the person giving notice.

(b) *Failure to act.* Notice regarding an alleged failure of the Administrator to perform an act or duty which is not discretionary under the Act shall identify the provisions of the Act which require such act or create such duty, shall describe with reasonable specificity the action taken or not taken by the Administrator which is claimed to constitute a failure to perform the act or duty, and shall state the full name, address, and telephone number of the person 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 person giving the notice.

# PART 255—IDENTIFICATION OF REGIONS AND AGENCIES FOR SOLID WASTE MANAGEMENT

### Subpart A—General Provisions

Sec.
255.1 Scope and purpose.
255.2 Definitions.

### Subpart B—Criteria for Identifying Regions and Agencies

255.10 Criteria for identifying regions.
255.11 Criteria for identifying agencies.

### Subpart C—Procedures for Identifying Regions and Agencies

255.20 Preliminary identification of regions.
255.21 Local consultation on boundaries.
255.22 Establishing regional boundaries.
255.23 Joint identification of agencies.
255.24 Procedure for identifying interstate regions.
255.25 Public participation.

### Subpart D—Responsibilities of Identified Agencies and Relationship to Other Programs

255.30 Responsibilities established.
255.31 Integration with other acts.
255.32 Coordination with other programs.
255.33 Inclusion of Federal facilities and Native American Reservations.

### Subpart E—Submission and Revision of Identifications

255.40 Notification of status.
255.41 Procedure for revision.

AUTHORITY: Sec. 2002(a)(1), Pub. L. 94–580, 90 Stat. 2795 (42 U.S.C. 6912(a)(1)). Also issued under sec. 4006(b), Pub. L. 94–580, 90 Stat. 2795 (42 U.S.C. 6946(b)).

SOURCE: 42 FR 24927, May 16, 1977, unless otherwise noted.

## Subpart A—General Provisions

### § 255.1 Scope and purpose.

(a) These guidelines are applicable to policies, procedures, and criteria for the identification of those areas which have common solid waste management problems and which are appropriate units for planning regional solid waste management services pursuant to section 4002(a) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (the Act). The guidelines also define and guide the identification of which functions will be carried out by which agencies pursuant to section 4006 of the Act.

(b) The purposes of these guidelines are to (1) provide useful criteria for selecting the regions and agencies to be identified pursuant to section 4006 of the Act and (2) provide guidance for conducting the process which will result in formal identification of those regions and agencies.

(c) Identifications made pursuant to these guidelines should be consistent with State solid waste management plans and strategies. A State strategy

establishes: Goals for prevention of adverse effects on the environment resulting from improper solid waste disposal including protection of surface and ground water quality, air quality and the land; priorities among waste types; priorities among disposal practices; and the roles of existing agencies with responsibilities in solid waste management. The identification process should cover all waste types (residential and commercial solid waste, hazardous wastes, industrial sludges and pretreatment residues, municipal sewage sludge, air pollution control residue, septage, mining and agricultural waste, other industrial waste, and solid waste from community activities), all disposal practices (impoundments, pits, ponds, lagoons, landfills, dumps, land-spreading, and industrial leaching fields) and all technological approaches (conservation, recovery, incineration, disposal).

(Also sec. 4002(a), Pub. L. 94–580, 90 Stat. 2795 (42 U.S.C. 6942))

### § 255.2 Definitions.

The Act contains an extensive list of definitions in section 1004 which are applicable here. There are further definitions of terms in 40 CFR part 29 of this chapter which apply unless the context herein requires otherwise.

[42 FR 24927, May 16, 1977, as amended at 48 FR 29302, June 24, 1983]

## Subpart B—Criteria for Identifying Regions and Agencies

### § 255.10 Criteria for identifying regions.

The following criteria are to assist in identifying regions pursuant to section 4006(a) of the Act.

(a) Geographic areas which have a history of cooperating to solve problems in environmental or other related matters should be considered.

(1) Regions encompassing existing regional, including countywide, systems or institutions, including those of the private sector, should be evaluated. Changes in their boundaries may be needed for economic viability or other reasons in keeping with the State plan.

(2) Boundary selection which would require the creation of new agencies should be considered only where necessary. The relationship among established agencies should be considered. Where institutional gaps or inadequacies are found, regions should be identified keeping in mind which agencies would be able to fill those needs.

(b) The size and location of regions should permit resource recovery and conservation in accordance with the objectives in section 4001 of the Act.

(1) A region's size and configuration should be considered, weighing transportation costs against economies of scale.

(2) Left-over regions having inadequate resources or volumes of waste should be avoided.

(3) Location should be considered relative to available transportation and to markets for recovered resources.

(c) The volume of wastes within a region will influence the technology choices for recovery and disposal, determine economies of scale, and affect marketability of resources recovered. A region should include sufficient volume of waste to support the goals and objectives of the State plan, including materials or energy recovery as appropriate.

(d) Waste type should be considered since it also affects management options. Industrial or hazardous waste streams may warrant special consideration or special boundaries.

(e) The effect of geologic and hydrologic conditions, such as soil suitability, land availability, natural barriers (rivers and mountains), the quantity and availability of water resources, and the susceptibility of ground water to contamination should be considered. Aquifer protection in accordance with State water quality management plans and policies could influence boundary selection.

(f) Coordination with ongoing planning for other purposes may be an influence in selecting boundaries.

(1) The local and regional planning process should be integrated into the State planning process.

(2) Use of a common data base should be encouraged among transportation, land use, and other planning areas.

(3) To the extent practicable, coterminous planning regions should be encouraged, and larger regions should be multiples of whole smaller regions.

(4) Coordination should be provided with those agencies designated for water quality management planning under section 208 of the Federal Water Pollution Control Act, with underground injection control agencies designated in accordance with the Safe Drinking Water Act, and with air quality planning agencies designated under the Clean Air Act.

(Sec. 4002(a), Pub. L. 94–580, 90 Stat. 2795 (42 U.S.C. 6942))

### § 255.11 Criteria for identifying agencies.

The following criteria are intended to assist in the process of agency selection pursuant to section 4006(b) of the Act. They may also be useful in pointing out needed improvements in the qualifications of the selected agencies.

(a) Existing agencies with demonstrated satisfactory ability to plan, manage, or operate solid waste management services should be considered for planning and implementation responsibilities. Agencies which have completed planning that resulted in successful implementation of solid waste management facilities or services should be given priority consideration for future planning responsibilities when they otherwise meet these criteria.

(b) An agency to be identified as responsible for conducting regional solid waste management planning should:

(1) Be a representative organization composed of, or whose membership is composed of, individuals at least a majority of whom are elected officials of local governments or their designees having jurisdiction in the planning region.

(2) Have planning jurisdiction in the entire planning region.

(3) Be capable of having the planning process fully underway within 1 year after identification.

(4) Have established procedures for adoption, review, and revision of plans and resolution of major issues, including procedures for public participation in the planning process.

(5) Have appropriate experience and skills to perform all of its assigned responsibilities, including expertise for the particular waste type, processing or disposal technology, and functional area. (Attention is directed to OMB Circular No. A–95, paragraph 1.e., part IV of Attachment A which encourages the designation of established substate district comprehensive planning agencies as the agencies to carry out areawide planning assisted or required under any Federal program).

(c) In identifying agencies for solid waste management planning and implementation under section 4006 of the Act, the State should review the solid waste activities being conducted by water quality management planning agencies designated under section 208 of the Federal Water Pollution Control Act. Where feasible, identification of such agencies should be considered in the joint identification processes of subpart C of this part. There should be a formal means of coordination established with the State water quality management agencies.

(d) Planning objectives will influence agency selection. Distinctions may be made between policy planning and facility planning and between planning a single solid waste management system and comprehensive planning which addresses trade-offs among various media.

(e) For coordinating planning and implementation under the State plan, as required in section 4003(1)(c), consideration should be given to identifying one agency for both functions. Where separate planning and implementation agencies are selected, there should be some means to ensure implementation, such as State legislation or an interagency agreement that all constituent jurisdictions will abide by the plan. Furthermore, strong coordination should be established between the planning agency and the implementing agency. During the planning period, the implementation agency should have continual access to plan development processes. There should be an administrative procedure to resolve conflicts between planners and implementers.

(f) The agency responsible for carrying out the regional plan should be

constituted with authority to implement the plan in its constituent jurisdictions.

(g) The need for a reliable volume of waste to supply disposal or recovery facilities should be addressed. The Agency providing such facilities whose member jurisdictions could choose whether or not to utilize the facility should analyze that need and consider methods such as franchising or public utility controls to assure an adequate supply.

## Subpart C—Procedures for Identifying Regions and Agencies

NOTE: The following procedures are provided to assist in establishing consultation and joint identification processes to be used for identifying regions and agencies pursuant to section 4006. Any process which meets the substantive intent of these guidelines may be submitted to the EPA Regional Administrator for purposes of determining grant eligibility under section 4007, especially if such process has been mandated or funded by State legislation.

### § 255.20 Preliminary identification of regions.

Preliminary identification of regions should be made by the Governor or his representative after consultation with regional and areawide planning agencies, water quality and solid waste management planning agencies, cities, and counties and other appropriate units of general purpose local government. The Governor should notify the concerned agencies of his recommendations concerning boundaries. Where the regional identification has already been established by State legislation or other method in keeping with these guidelines, this notification need only request comments on the existing arrangement.

[42 FR 24927, May 16, 1977, as amended at 48 FR 29303, June 24, 1983]

### § 255.21 Local consultation on boundaries.

Any chief executive of a general purpose government within the State may comment on the Governor's recommendation concerning the boundaries.

(a) The purposes of these comments are to assure that the experience of local agencies is used to fullest advantage in boundary decisions, that incompatible institutional arrangements are not forced, and that significant local considerations are not overlooked.

(b) When the objectives of the Act concerning local consultation can be met by an equivalent or existing process established under State administrative procedures acts or other State procedural guidance, the Governor may request that the EPA accept that process in fulfillment of the grant eligibility criteria under section 4007 of the Act.

### § 255.22 Establishing regional boundaries.

Under section 4006(a) of the Act the formal means for identifying regional boundaries are to be regulations promulgated by the Governor. Where the identification of areas has already been made by State legislation or other means which have legal stature equivalent to the required regulations, and where notification and consultation have occurred pursuant to §§ 255.20 and 255.21 of this part, such legislation may be used in lieu of those regulations. Where substantial disagreement persists between the Governor and local officials, normal State administrative and judicial appeals procedures are available to resolve such conflict.

### § 255.23 Joint identification of agencies.

(a) The Governor should designate a lead agency to manage the identification process. That agency should review established notification procedures to determine that at least all general purpose local governments within the State, all units of regional governance, all existing solid waste and water quality management planning agencies, and all areawide agencies and the state process under Executive Order 12372 will be notified. If necessary, a supplemental distribution list should be prepared. Consideration should be given to addressing individual offices within those agencies.

(b) The Governor should, by correspondence or State notification procedures, notify the agencies on the distribution list (paragraph (a) of this section) of the purpose and schedule of the joint identification process. This may be coincident with the notification in § 255.20.

(c) The Governor, an appropriate legislative committee, and appropriate local elected officials may submit nominations of agencies and functions to the lead agency appointed by the Governor. This lead agency should make such nominations public.

(d) Chief executives of agencies on the distribution list may comment by letter on the nominations.

(e) If a disagreement exists which cannot be settled by correspondence or a meeting with the Governor's representative, a public hearing should be held and all elected officials of local general purpose governments within the region should be invited. The purpose of this meeting will be for the local officials to reach a consensus regarding the agency(ies) to be formally identified.

(f) When a consensus is reached among local elected officials a formal agreement should be made in conformance with State administrative procedures. It should be binding until revised in accordance with this subpart.

(g) When the local consensus is in agreement with the State opinion, the State should confirm that agreed arrangement, formally establishing the duties and responsibilities of the identified agencies by legislative resolution or executive order.

(h) In the event that a consensus cannot be reached before 270 days after promulgation of regulations pursuant to § 255.22 the Governor should designate a State agency to develop and implement the plan for the concerned region.

[42 FR 24927, May 16, 1977, as amended at 48 FR 29303, June 24, 1983]

### § 255.24 Procedure for identifying interstate regions.

If the Governor's recommendation, the local consensus, or a neighboring Governor's recommendation is that an interstate region be identified, the procedures described in this subpart should be extended to include notification and comment of all concerned officials in the entire recommended region.

(a) Section 4006(c) of the Act establishes specific procedures for the conduct of interstate identification processes.

(b) Recommendations, nominations, and comments resulting from processes described in §§ 255.20 and 255.21 that concern interstate regions should be brought to the attention of the appropriate EPA Regional Administrator.

(c) The Governor should evaluate the use of interstate metropolitan area (Standard Metropolitan Statistical Area) boundaries for planning and management purposes, and consider nominating such areas where appropriate.

(Also sec. 4006(c), Pub. L. 94–580, 90 Stat. 2795 (42 U.S.C. 6946(c)))

### § 255.25 Public participation.

Public participation in the process of identifying regions and agencies should be provided for, encouraged, and assisted by the State and local officials.

## Subpart D—Responsibilities of Identified Agencies and Relationship to Other Programs

### § 255.30 Responsibilities established.

The following duties and responsibilities should be assigned for all appropriate areas pursuant to section 4006.

(a) Disposal of municipal solid waste should be an identified responsibility throughout the State. In the event that no local or regional agency is held responsible for disposal for a region, a State agency should be identified and held accountable.

(b) Where the State plan identifies municipal sewage sludge disposal, hazardous waste disposal or other functions needing attention in a region, an agency should be identified as being responsible for that function in that region.

(c) These responsibilities may be assigned with the intent that private industry be the actual purveyor of service.

### § 255.31 Integration with other acts.

The Governor shall integrate the provisions of these guidelines for purposes of administration and enforcement, and should avoid duplication to the maximum extent practicable, with the appropriate regional identification provisions of the Clean Air Act (42 U.S.C. 1857 et seq.), the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), the Safe Drinking Water Act (42 U.S.C. 300f et seq.), the Toxic Substances Control Act (15 U.S.C. 2601 et seq.), the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.) and other appropriate Acts of Congress.

(Sec. 1006(b), Pub. L. 94–580, 90 Stat. 2795 (42 U.S.C. 6905(b)))

### § 255.32 Coordination with other programs.

The region and agency identification criteria (§ 255.11) specify review of solid waste activities being conducted by water quality management planning agencies, underground injection control agencies, and air quality management agencies. There should be a formal means of coordination established between any agencies established under section 4006 which are not identical with these agencies. Coordination should be established so that permittees under the National Pollutant Discharge Elimination System of the Federal Water Pollution Control Act will be consulted concerning disposal of residual sludges.

### § 255.33 Inclusion of Federal facilities and Native American Reservations.

Major Federal facilities and Native American Reservations should be treated for the purposes of these guidelines as though they are incorporated municipalities, and the facility director or administrator should be considered the same as a locally elected official.

(Sec. 6001, Pub. L. 94–580, 90 Stat. 2795 (42 U.S.C. 6961))

## Subpart E—Submission and Revision of Identifications

### § 255.40 Notification of status.

This subpart describes procedures which may ultimately be required by EPA when it publishes regulations governing application and eligibility for grants under section 4007. Under these regulations the appropriate EPA Regional Administrator will consider the identifications made under section 4006 as one of the conditions of grant eligibility.

The Regional Administrator may accept, in State grant applications, notification of the status of these identifications to ensure that premature decisions on State plan development will not be forced by the timing of the identifications specified in the Act. Procedures are outlined here to advise the States of what EPA expects to require in such notification.

(a) The notification should specify those regional boundaries and agencies which are uncontested at the time of submission, and specify a schedule of hearings and determinations of subsequent identification of regions and agencies as consensus is reached.

(b) The appropriate level of detail and the timing of the identifications to be made should be established for each planning region after agreement between the State and the appropriate EPA Regional Administrator. The timing should depend upon how well the State plan is developed, the environmental and economic decisions to be made, and the existing management approaches to their resolution.

(c) The notification should list the major known interested agencies and private operators within each planning region and describe how they will be included in the process. Where appropriate, it should include an expression of their interest and a definition of the extent and limits of their role in solid waste management planning.

(d) The notification should provide a schedule for phasing of plan development with the identification of agencies to carry out those plans, showing

the projected maturation of management agencies and the milestones for those agencies in taking over the plan implementation process.

(e) This notification should include establishment of State agencies where regional planning and implementation agencies have not been identified within 270 days of the Governor's promulgation of regulations identifying regional boundaries.

(See sec. 4006(b)(2))

### § 255.41 Procedure for revision.

The procedure for revising regional identifications or agency responsibilities should be specified by the notification.

(a) The State should review and, if appropriate, revise or modify the identification of regions and the responsibilities of local and regional agencies at intervals of less than 3 years. Review and modification should include, but not be limited to, the following areas:

(1) Whether new regions should be identified, or whether present boundaries should be modified.

(2) Whether responsibilities of an agency should be expanded or reduced due to changes in the needs for solid waste functions in the region.

(b) Revisions or adjustments to the State plan may require minor boundary or agency changes from time to time. The appropriate EPA Regional Administrator should be notified of such revisions by the State solid waste agency.

(c) Major revisions or adjustments in agencies or boundaries should be made in consultation with local officials and be subject to the same procedures used in the original identification process. Notification of such revisions should be submitted with State plan updates.

## PART 256—GUIDELINES FOR DEVELOPMENT AND IMPLEMENTATION OF STATE SOLID WASTE MANAGEMENT PLANS

### Subpart A—Purpose, General Requirements, Definitions

Sec.
256.01 Purpose and scope of the guidelines.
256.02 Scope of the State solid waste management plan.
256.03 State plan submission, adoption, and revision.
256.04 State plan approval, financial assistance.
256.05 Annual work program.
256.06 Definitions.

### Subpart B—Identification of Responsibilities; Distribution of Funding

256.10 Requirements.
256.11 Recommendations.

### Subpart C—Solid Waste Disposal Programs

256.20 Requirements for State legal authority.
256.21 Requirements for State regulatory powers.
256.22 Recommendations for State regulatory powers.
256.23 Requirements for closing or upgrading open dumps.
256.24 Recommendations for closing or upgrading open dumps.
256.25 Recommendation for inactive facilities.
256.26 Requirement for schedules leading to compliance with the prohibition of open dumping.
256.27 Recommendation for schedules leading to compliance with the prohibition of open dumping.

### Subpart D—Resource Conservation and Resource Recovery Programs

256.30 Requirements.
256.31 Recommendations for developing and implementing resource conservation and recovery programs.

### Subpart E—Facility Planning and Implementation

256.40 Requirements.
256.41 Recommendations for assessing the need for facilities.
256.42 Recommendations for assuring facility development.

### Subpart F—Coordination With Other Programs

256.50 Requirements.

### Subpart G—Public Participation

256.60 Requirements for public participation in State and substate plans.
256.61 Requirements for public participation in the annual State work program.
256.62 Requirements for public participation in State regulatory development.
256.63 Requirements for public participation in the permitting of facilities.

256.64 Requirements for public participation in the open dump inventory.
256.65 Recommendations for public participation.

AUTHORITY: Sec. 4002(b), Pub. L. 94–580, 90 Stat. 2813(b) (42 U.S.C. 6942(b)).

SOURCE: 44 FR 45079, July 31, 1979, unless otherwise noted.

EDITORIAL NOTE: For approval of State solid waste management plans see the List of CFR Sections Affected in the Finding Aids section of this volume.

## Subpart A—Purpose, General Requirements, Definitions

### § 256.01 Purpose and scope of the guidelines.

(a) The purpose of these guidelines is to assist in the development and implementation of State solid waste management plans, in accordance with section 4002(b) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6942(b)) (the ''Act''). These guidelines contain methods for achieving the objectives of environmentally sound management and disposal of solid and hazardous waste, resource conservation, and maximum utilization of valuable resources.

(b) These guidelines address the minimum requirements for approval of State plans as set forth in section 4003 of the Act. These are:

(1) The plan shall identify, in accordance with section 4006(b), (i) the responsibilities of State, local, and regional authorities in the implementation of the State plan, (ii) the distribution of Federal funds to the authorities responsible for development and implementation of the State plan, and (iii) the means for coordinating regional planning and implementation under the State plan.

(2) The plan shall, in accordance with section 4005(c), prohibit the establishment of new open dumps within the State, and contain requirements that all solid waste (including solid waste originating in other States, but not including hazardous waste) shall be (i) utilized for resource recovery or (ii) disposed of in sanitary landfills (within the meaning of section 4004(a)) or otherwise disposed of in an environmentally sound manner.

(3) The plan shall provide for the closing or upgrading of all existing open dumps within the State pursuant to the requirements of section 4005.

(4) The plan shall provide for the establishment of such State regulatory powers as may be necessary to implement the plan.

(5) The plan shall provide that no local government within the State shall be prohibited under State or local law from entering into long-term contracts for the supply of solid waste to resource recovery facilities.

(6) The plan shall provide for resource conservation or recovery and for the disposal of solid waste in sanitary landfills or for any combination of practices so as may be necessary to use or dispose of such waste in a manner that is environmentally sound.

(c) These guidelines address the requirement of section 4005(c) that a State plan:

> Shall establish, for any entity which demonstrates that it has considered other public or private alternatives for solid waste management to comply with the prohibition on open dumping and is unable to utilize such alternatives to so comply, a timetable or schedule of compliance for such practice or disposal of solid waste which specifies a schedule of remedial measures, including an enforceable sequence of actions or operations leading to compliance with the prohibition on open dumping of solid waste within a reasonable time (not to exceed five years from the date of publication of the inventory).

### § 256.02 Scope of the State solid waste management plan.

(a)(1) The State plan shall address all solid waste in the State that poses potential adverse effects on health or the environment or provides opportunity for resource conservation or resource recovery. The plan shall consider:

(i) Hazardous wastes;

(ii) Residential, commercial and institutional solid waste;

(iii) Wastewater treatment sludge;

(iv) Pollution control residuals;

(v) Industrial wastes;

(vi) Mining wastes;

(vii) Agricultural wastes;

(viii) Water treatment sludge; and

(ix) Septic tank pumpings.

(2) The State plan shall consider the following aspects of solid waste management:

(i) Resource conservation;
(ii) Source separation;
(iii) Collection;
(iv) Transportation;
(v) Storage;
(vi) Transfer;
(vii) Processing (including resource recovery);
(viii) Treatment; and
(ix) Disposal.

(b) The State Plan shall establish and justify priorities and timing for actions. These priorities shall be based on the current level of solid waste management planning and implementation within the State, the extent of the solid waste management problem, the health, environmental and economic impacts of the problem, and the resources and management approaches available.

(c) The State plan shall set forth an orderly and manageable process for achieving the objectives of the Act and meeting the requirements of these quidelines. This process shall describe as specifically as possible the activities to be undertaken, including detailed schedules and milestones.

(d) The State plan shall cover a minimum of a five year time period from the date submitted to EPA for approval.

(e) The State plan shall identify existing State legal authority for solid waste management and shall identify modifications to regulations necessary to meet the requirements of these guidelines.

### § 256.03 State plan submission, adoption, and revision.

(a) To be considered for approval, the State plan shall be submitted to EPA within a reasonable time after final promulgation of these guidelines.

(b) Prior to submission to EPA, the plan shall be adopted by the State pursuant to State administrative procedures.

(c) The plan shall be developed in accord with public participation procedures required by Subpart G of this part.

(d) The plan shall contain procedures for revision. The State plan shall be revised by the State, after notice and public hearings, when the Administrator, by regulation, or the State determines, that:

(1) The State plan is not in compliance with the requirements of these guidelines;

(2) Information has become available which demonstrates the inadequacy of the plan; or

(3) Such revision is otherwise necessary.

(e) The State plan shall be reviewed by the State and, where necessary, revised and readopted not less frequently than every three years.

(f) States which are developing a complete State plan may submit the portion of the plan designed to satisfy the requirements of § 256.26 prior to submission of the complete plan.

[44 FR 45079, July 31, 1979, as amended at 46 FR 47051, Sept. 23, 1981]

### § 256.04 State plan approval, financial assistance.

(a) The Administrator shall, within six months after a State plan has been submitted for approval, approve or disapprove the plan. The Administrator shall approve a plan if he determines that:

(1) It meets the requirements of these guidelines which address sections 4003(1), (2), (3), and (5), and

(2) It contains provisions for revision pursuant to § 256.03.

(b) The Administrator shall review approved plans from time to time, and if he determines that revisions or corrections are necessary to bring such plan into compliance with all of the requirements of these guidelines, including the requirements which address sections 4003(4) and (6) and any new or revised requirement established by amendment to this part, he shall notify the State and provide an opportunity for such revisions and corrections and for an appeal and public hearing. If the plan continues to remain out of compliance, he shall withdraw his approval of such plan.

(c) Such withdrawal of approval shall cease to be effective upon the Administrator's determination that the State plan complies with the requirements of these guidelines.

(d) The Administrator shall approve a State application for financial assistance under subtitle D of the Act, and

make grants to such State, if the Administrator determines that the State plan continues to be eligible for approval and is being implemented by the State.

(e) Upon withdrawal of approval of a State plan, the Administrator shall withhold Federal financial and technical assistance under subtitle D (other than such technical assistance as may be necessary to assist in obtaining reinstatement of approval) until such time as approval is reinstated. (Procedures for termination of financial assistance and for settlement of disputes are contained in 40 CFR part 30, appendix A, articles 7 and 8.)

(f) If a State submits to EPA the portion of the plan by which entities may, pursuant to § 256.26, obtain timetables or schedules of compliance for complying with the open dumping prohibition, the Administrator shall approve such portion of the plan if he determines that:

(1) The portion submitted satisfies the requirements of § 256.26;

(2) The State has the general legal authority to issue and enforce compliance schedules; and

(3) The remainder of the plan is being developed in conformity with these guidelines and will be completed within a reasonable period of time.

In giving partial plan approval, the Administrator shall specify in writing the timetable for completion of the final plan as required in paragraph (f)(3) of this section.

[44 FR 45079, July 31, 1979, as amended at 46 FR 47051, Sept. 23, 1981]

### § 256.05 Annual work program.

(a) The annual work program submitted for financial assistance under section 4008(a)(1) and described in the grant regulations (40 CFR part 35) shall be reviewed by the Administrator in order to determine whether the State plan is being implemented by the State.

(b) The Administrator and the State shall agree on the contents of the annual work program. The Administrator will consider State initiatives and priorities, in light of the goals of the Act, in determining annual work programs for each State. The annual work program represents a State's obligation incurred by acceptance of financial assistance.

(c) Annual guidance for the development of State work programs will be issued by EPA. While this guidance will establish annual national priorities, flexibility will be provided in order to accommodate differing State priorities.

(d) The following documents developed under the State plan shall be included by reference in the annual work program:

(1) Substate solid waste management plans,

(2) Plans for the development of facilities and services, including hazardous waste management facilities and services, and

(3) Evidence of actions or steps taken to close or upgrade open dumps.

(e) The annual work program shall allocate the distribution of Federal funds to agencies responsible for the development and implementation of the State plan.

### § 256.06 Definitions.

Terms not defined below have the meanings assigned them by section 1004 of the Act.

*The Act* means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901 *et seq.*).

*Criteria* means the ''Criteria for Classification of Solid Waste Disposal Facilities'', 40 CFR Part 257, promulgated under section 4004(a) of the Act.

*Facility* refers to any resource recovery system or component thereof, any system, program or facility for resource conservation, and any facility for collection, source separation, storage, transportation, transfer, processing, treatment or disposal of solid waste, including hazardous waste, whether such facility is associated with facilities generating such wastes or not.

*Implementation* means putting the plan into practice by carrying out planned activities, including compliance and enforcement activities, or ensuring such activities are carried out.

*Inactive facility* means a facility which no longer receives solid waste.

*Inventory of open dumps* means the inventory required under section 4005(b) and is defined as the list published by EPA of those disposal facilities which do not meet the criteria.

*Operator* includes facility owners and operators.

A *permit* is an entitlement to commence and continue operation of a facility as long as both procedural and performance standards are met. The term ''permit'' includes any functional equivalent such as a registration or license.

*Planning* includes identifying problems, defining objectives, collecting information, analyzing alternatives and determining necessary activities and courses of action.

*Provide for* in the phrase ''the plan shall (should) provide for'' means explain, establish or set forth steps or courses of action.

The term *shall* denotes requirements for the development and implementation of the State plan.

The term *should* denotes recommendations for the development and implementation of the State plan.

*Substate* refers to any public regional, local, county, municipal, or intermunicipal agency, or regional or local public (including interstate) solid or hazardous waste management authority, or other public agency below the State level.

## Subpart B—Identification of Responsibilities; Distribution of Funding

### § 256.10 Requirements.

(a) In accordance with sections 4003(1) and 4006 and the interim guidelines for identification of regions and agencies for solid waste management (40 CFR part 255), the State plan shall provide for:

(1) The identification of the responsibilities of State and substate (regional, local and interstate) authorities in the development and implementation of the State plan;

(2) The means of distribution of Federal funds to the authorities responsible for development and implementation of the State plan; and

(3) The means for coordinating substate planning and implementation.

(b) Responsibilities shall be identified for the classification of disposal facilities for the inventory of open dumps.

(c) Responsibilities shall be identified for development and implementation of the State regulatory program described in subpart C of this part.

(d) Responsibilities shall be identified for the development and implementation of the State resource conservation and resource recovery program described in subpart D of this part.

(e) State, substate and private sector responsibilities shall be identified for the planning and implementation of solid and hazardous waste management facilities and services.

(f) Financial assistance under sections 4008(a) (1) and (2) shall be allocated by the State to State and substate authorities carrying out development and implementation of the State plan. Such allocation shall be based on the responsibilities of the respective parties as determined under section 4006(b).

### § 256.11 Recommendations.

(a) Responsibilities should be identified for each of the solid waste types listed in § 256.02(a)(1).

(b) Responsibilities should be identified for each of the aspects of solid waste management listed in § 256.02(a)(2).

(c) Responsibilities should be identified for planning and designating ground water use with respect to design and operation of solid waste disposal facilities.

(d) Responsibilities should be identified for the development and implementation of the authorized State hazardous waste management program under subtitle C of the Act.

(e) The State plan should include a schedule and procedure for the continuing review, reassessment and reassignment of responsibilities.

## Subpart C—Solid Waste Disposal Programs

### § 256.20 Requirements for State legal authority.

In order to comply with sections 4003 (2) and (3), the State plan shall assure

that the State has adequate legal authority to prohibit the establishment of new open dumps and to close or upgrade existing open dumps. The prohibition of the establishment of new open dumps shall take effect no later than six months after the date of promulgation of the criteria or on the date of approval of the State plan, whichever is later.

### § 256.21 Requirements for State regulatory powers.

In order to comply with section 4003(4), the State plan shall provide for the establishment of State regulatory powers. These powers:

(a) Shall be adequate to enforce solid waste disposal standards which are equivalent to or more stringent than the criteria for classification of solid waste disposal facilities (40 CFR part 257). Such authority shall be as definitive as possible and clearly establish the means for compliance.

(b) Shall include surveillance capabilities necessary to detect adverse environmental effects from solid waste disposal facilities. Such capabilities shall include access for inspection and monitoring by regulatory officials and the authority to establish operator monitoring and reporting requirements.

(c) Shall make use of a permit program which ensures that the establishment of new open dumps is prohibited.

(d) Shall have administrative and judicial enforcement capabilities, including enforceable orders, fines or other administrative procedures, as necessary to ensure compliance.

### § 256.22 Recommendations for State regulatory powers.

In order to assist compliance with section 4003(4), the following are recommendations for State regulatory powers as may be necessary to prohibit new open dumps and close or upgrade all existing open dumps.

(a) Solid waste disposal standards:

(1) Should be based on the health and environmental impacts of disposal facilities.

(2) Should specify design and operational standards.

(3) Should take into account the climatic, geologic, and other relevant characteristics of the State.

(b) Surveillance systems should establish monitoring requirements for facilities.

(1) Every facility should be evaluated for potential adverse health and environmental effects. Based on this evaluation, instrumentation, sampling, monitoring, and inspection requirements should be established.

(2) Every facility which produces leachate in quantities and concentrations that could contaminate ground water in an aquifer should be required to monitor to detect and predict contamination.

(3) Inspectors should be trained and provided detailed instructions for checking on the procedures and conditions that are specified in the engineering plan and site permit. Provisions should be made to ensure chain of custody for evidence.

(c) Facility assessment and prescription of remedial measures should be carried out by adequately trained or experienced professional staff, including engineers and geologists.

(d) The State permit system should provide the administrative control to prohibit the establishment of new open dumps and to assist in meeting the requirement that all wastes be used or disposed in an environmentally sound manner.

(1) Permitting procedures for new facilities should require applicants to demonstrate that the facility will comply with the criteria.

(2) The permit system should specify, for the facility operator, the location, design, construction, operational, monitoring, reporting, completion and maintenance requirements.

(3) Permit procedures should include provisions to ensure that future use of the property on which the facility is located is compatible with that property's use as a solid waste disposal facility. These procedures should include identification of future land use or the inclusion of a stipulation in the property deed which notifies future purchasers of precautions necessitated by the use of the property as a solid waste disposal facility.

(4) Permits should only be issued to facilities that are consistent with the State plan, or with substate plans developed under the State plan.

(e) The enforcement system should be designed to include both administrative procedures and judicial remedies to enforce the compliance schedules and closure procedures for open dumps.

(1) Permits, surveillance, and enforcement system capabilities should be designed for supporting court action.

(2) Detection capabilities and penalties for false reporting should be provided for.

### § 256.23 Requirements for closing or upgrading open dumps.

In meeting the requirement of section 4003(3) for closing or upgrading open dumps:

(a) The State plan shall provide for the classification of existing solid waste disposal facilities according to the criteria. This classification shall be submitted to EPA, and facilities classified as open dumps shall be published in the inventory of open dumps.

(b) The State plan shall provide for an orderly time-phasing of the disposal facility classifications described in paragraph (a) of this section. The determination of priorities for the classification of disposal facilities shall be based upon:

(1) The potential health and environmental impact of the solid waste disposal facility;

(2) The availability of State regulatory and enforcement powers; and

(3) The availability of Federal and State resources for this purpose.

(c) For each facility classified as an open dump the State shall take steps to close or upgrade the facility. Evidence of that action shall be incorporated by reference into the annual work program and be made publicly available. When the State's actions concerning open dumps are modified, the changes shall be referenced in subsequent annual work programs.

(d) In providing for the closure of open dumps the State shall take steps necessary to eliminate health hazards and minimize potential health hazards. These steps shall include requirements for long-term monitoring or contingency plans where necessary.

### § 256.24 Recommendations for closing or upgrading open dumps.

(a) All sources of information available to the State should be used to aid in the classification of facilities. Records of previous inspections and monitoring, as well as new inspections and new monitoring, should be considered.

(b) The steps to close or upgrade open dumps established under § 256.23(c) should be coordinated with the facility needs assessment described in § 256.41.

(c) A determination should be made of the feasibility of resource recovery or resource conservation to reduce the solid waste volume entering a facility classified as an open dump; and feasible measures to achieve that reduction should be implemented.

(d) At the time of classification of existing solid waste disposal facilities pursuant to § 256.23, the State should consider developing appropriate timetables or schedules by which any responsible party can be brought into compliance with the open dumping prohibition pursuant to §§ 256.26 and 256.27.

[44 FR 45079, July 31, 1979, as amended at 46 FR 47051, Sept. 23, 1981]

### § 256.25 Recommendation for inactive facilities.

Inactive facilities that continue to produce adverse health or environmental effects should be evaluated according to the criteria. The State plan should provide for measures to ensure that adverse health or environmental effects from inactive facilities are minimized or eliminated. Such measures may include actions by disposal facility owners and operators, notification of the general public, adjacent residents and other affected parties and notification of agencies responsible for public health and safety.

### § 256.26 Requirement for schedules leading to compliance with the prohibition of open dumping.

In implementing the section 4005(c) prohibition on open dumping, the State plan shall provide that any entity

which demonstrates that it has considered other public or private alternatives to comply with the prohibition on open dumping and is unable to utilize such alternatives to so comply, may obtain a timetable or schedule for compliance which specifies a schedule of remedial measures, and an enforceable sequence of actions, leading to compliance within a reasonable time (not to exceed 5 years from the date of publication of the inventory).

### § 256.27 Recommendation for schedules leading to compliance with the prohibition of open dumping.

In reviewing applications for compliance schedules under § 256.26, the State should consider the availability of processing and disposal facilities, the likelihood of environmental damage from disposal at available facilities, the existence of State or substate requirements (including other compliance schedules) applicable to available facilities, cost constraints, existing contractual agreements and other pertinent factors.

## Subpart D—Resource Conservation and Resource Recovery Programs

### § 256.30 Requirements.

(a) In order to comply with sections 4003(2) and (6) as they pertain to resource conservation and recovery, the State plan shall provide for a policy and strategy for encouragement of resource recovery and conservation activities.

(b) In order to comply with section 4003(5), the State plan shall provide that no local government within the State is prohibited under State or local law from entering into long-term contracts for the supply of solid waste to resource recovery facilities.

### § 256.31 Recommendations for developing and implementing resource conservation and recovery programs.

(a) In order to encourage resource recovery and conservation, the State plan should provide for technical assistance, training, information development and dissemination, financial support programs, market studies and market development programs.

(b) In order to comply with the requirement of § 256.30(b) regarding long-term contract prohibitions, the State plan should provide for:

(1) Review of existing State and local laws and regulations pertinent to contracting for resource recovery services or facilities.

(2) Reporting of all laws and regulations found to be in violation of this requirement to the executive officer of the administrative agency responsible for the statute.

(3) Development of an administrative order or a revised law or regulation or any other preliminary step for the removal or amending of a law or regulation in violation of this requirement.

(4) Development of a strategy for the consideration of the legislature to prohibit and/or remove from State or local law provisions in violation of this requirement.

(c) The State plan should aid and encourage State procurement of products containing recovered materials in accord with section 6002 of the Act. To assist this effort, the State plan should provide for:

(1) The development of a policy statement encouraging the procurement of recovered materials, wherever feasible;

(2) The identification of the key purchasing agencies of the State, along with potential uses of recovered materials by these agencies; and,

(3) The development of a plan of action to promote the use of recovered materials through executive order, legislative initiative, or other action that the State deems necessary.

(d) In order to encourage resource recovery and conservation, the State plan should provide for the elimination, to the extent possible, of restrictions on the purchase of goods or services, especially negotiated procurements, for resource recovery facilities. This should include:

(1) Review of existing State and local laws pertinent to the procurement of equipment and services for the design, construction and operation of resource recovery facilities;

(2) Listing of all laws that limit the ability of localities to negotiate for the procurement of the design, construction, or operation of resource recovery facilities;

(3) Development of administrative orders or legislation or other action that would eliminate these restrictions; and

(4) Development of a strategy and plan of action for the consideration of the legislature for execution of administrative orders or other action that would eliminate these restrictions.

(e) The State plan should encourage the development of resource recovery and resource conservation facilities and practices as the preferred means of solid waste management whenever technically and economically feasible. The State plan should provide for the following activities:

(1) The composition of wastes should be analyzed with particular emphasis on recovery potential for material and energy, including fuel value, percentages of recoverable industrial wastes, grades of wastepaper, glass, and nonferrous and ferrous metals.

(2) Available and potential markets for recovered materials and energy should be identified, including markets for recoverable industrial wastes; wastepapers; ferrous and non-ferrous metals; glass; solid, liquid, or gaseous fuels; sludges; and tires. The following should be evaluated: location and transportation requirements, materials and energy specifications of user industries, minimum quantity requirements, pricing mechanisms and long-term contract availability.

(3) Resource recovery feasibility studies should be conducted in regions of the State in which uses or markets for recovered materials or energy are identified. These studies should review various technological approaches, environmental considerations, institutional and financial constraints, and economic feasibility.

(4) Source separation, recycling and resource conservation should be utilized whenever technically and economically feasible.

(5) Mixed waste processing facilities for the recovery of energy and materials should be utilized whenever technically and economically feasible.

(6) Source separation, resource conservation and mixed waste processing capacity should be combined to achieve the most effective resource conservation and economic balance.

## Subpart E—Facility Planning and Implementation

### §256.40 Requirements.

In order to comply with section 4003(6), the State plan shall provide for adequate resource conservation, recovery, storage, treatment and disposal facilities and practices necessary to use or dispose of solid and hazardous waste in an environmentally sound manner.

### §256.41 Recommendations for assessing the need for facilities.

(a) In meeting the requirement for adequate resource conservation, recovery, storage, treatment and disposal facilities and practices, the State plan should provide for an assessment of the adequacy of existing facilities and practices and the need for new or expanded facilities and practices.

(1) The needs assessment should be based on current and projected waste generation rates and on the capacities of presently operating and planned facilities.

(2) Existing and planned resource conservation and recovery practices and their impact on facility needs should be assessed.

(3) Current and projected movement of solid and hazardous waste across State and local boundaries should be assessed.

(4) Special handling needs should be determined for all solid waste categories.

(5) Impact on facility capacities due to predictable changes in waste quantities and characteristics should be estimated.

(6) Environmental, economic, and other constraints on continued operation of facilities should be assessed.

(7) Diversion of wastes due to closure of open dumps should be anticipated.

(8) Facilities and practices planned or provided for by the private sector should be assessed.

(b) The State plan should provide for the identification of areas which require new capacity development, based on the needs assessment.

### §256.42 Recommendations for assuring facility development.

(a) The State plan should address facility planning and acquisition for all

areas which are determined to have insufficient recovery, storage, treatment and disposal capacity in the assessment of facility needs.

(b) Where facilities and practices are found to be inadequate, the State plan should provide for the necessary facilities and practices to be developed by responsible State and substate agencies or by the private sector.

(c) For all areas found to have five or fewer years of capacity remaining, the State plan should provide for:

(1) The development of estimates of waste generation by type and characteristic,

(2) The evaluation and selection of resource recovery, conservation or disposal methods,

(3) Selection of sites for facilities, and

(4) Development of schedules of implementation.

(d) The State plan should encourage private sector initiatives in order to meet the identified facility needs.

(e) In any area having fewer than 2 years of projected capacity, the State plan should provide for the State to take action such as acquiring facilities or causing facilities to be acquired.

(f) The State plan should provide for the initiation and development of environmentally sound facilities as soon as practicable to replace all open dumps.

(g) The State plan should provide for the State, in cooperation with substate agencies, to establish procedures for choosing which facilities will get priority for technical or financial assistance or other emphasis. Highest priority should be given to facilities developed to replace or upgrade open dumps.

(h) The State plan should provide for substate cooperation and policies for free and unrestricted movement of solid and hazardous waste across State and local boundaries.

## Subpart F—Coordination With Other Programs

### § 256.50 Requirements.

Section 4003(1) requires the State solid waste managment plan to idenifty means for coordinating regional planning and implementation under the State plan. Section 1006 requires the Administrator to integrate all provisions of this Act (including approval of State plans) with other Acts that grant regulatory authority to the Administrator in order to prevent duplication of administrative and enforcement efforts. In order to meet these requirements:

(a) The State solid waste management plan shall be developed in coordination with Federal, State, and substate programs for air quality, water quality, water supply, waste water treatment, pesticides, ocean protection, toxic substances control, noise control, and radiation control.

(b) The State plan shall provide for coordination with programs under section 208 of the Clean Water Act, as amended (33 U.S.C. 1288). In identifying agencies for solid waste management planning and implementation, the State shall review the solid waste management activities being conducted by water quality planning and management agencies designated under section 208 of the Clean Water Act. Where feasible, identification of such agencies should be considered during the identification of responsibilities under subpart B of this part. Where solid waste management and water quality agencies are separate entities, necessary coordination procedures shall be established.

(c) The State plan shall provide for coordination with the National Pollutant Discharge Elimination System (NPDES) established under section 402 of the Clean Water Act, as amended (33 U.S.C. 1342). The issuance of State facility permits and actions taken to close or upgrade open dumps shall be timed, where practicable, to coordinate closely with the issuance of a new or revised NPDES permit for such facility.

(d) The State plan shall provide for coordination with activities for municipal sewage sludge disposal and utilization conducted under the authority of section 405 of the Clean Water Act, as amended (33 U.S.C. 1345), and with the program for construction grants for publicly owned treatment works under section 201 of the Clean Water Act, as amended (33 U.S.C. 1281).

(e) The State plan shall provide for coordination with State pretreatment activities under section 307 of the

Clean Water Act, as amended (33 U.S.C. 1317).

(f) The State plan shall provide for coordination with agencies conducting assessments of the impact of surface impoundments on underground sources of drinking water under the authority of section 1442(a)(8)(C) of the Safe Drinking Water Act (42 U.S.C. 300j–1).

(g) The State plan shall provide for coordination with State underground injection control programs (40 CFR Parts 122, 123, 124, and 146) carried out under the authority of the Safe Drinking Water Act (42 U.S.C. 300f *et seq.*) and with the designation of sole source aquifers under section 1424 of that Act.

(h) The State plan shall provide for coordination with State implementation plans developed under the Clean Air Act (42 U.S.C. 7401 *et seq.*; incineration and open burning limitations; and, State implementation plan requirements impacting resource recovery systems).

(i) The State plan shall provide for coordination with the Army Corps of Engineers permit program (or authorized State program) under section 404 of the Clean Water Act, as amended (33 U.S.C. 1344) for dredge and fill activities in waters of the United States.

(j) The State plan shall provide for coordination with the Office of Endangered Species, Department of the Interior, to ensure that solid waste management activities, especially the siting of disposal facilities, do not jeopardize the continued existence of an endangered or threated species nor result in the destruction or adverse modification of a critical habitat.

(k) The State plan shall provide for coordination, where practicable, with programs under:

(1) The Toxic Substances Control Act (15 U.S.C. 2601 *et seq.*; disposal of chemical substances and mixtures).

(2) The Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 1362 et seq.; disposal and storage of pesticides and pesticide containers).

(3) The Marine Protection, Research and Sanctuaries Act (33 U.S.C. 1420 *et seq.*; disposal in ocean waters).

(l) The State plan shall provide for coordination, where practicable, with programs of other Federal agencies, including:

(1) Department of the Interior.

(i) Fish and Wildlife Service (wetlands),

(ii) Bureau of Mines and Office of Surface Mining (mining waste disposal and use of sludge in reclamation),

(iii) U.S. Geological Survey (wetlands, floodplains, ground water);

(2) Department of Commerce, National Oceanic and Atmospheric Administration (coastal zone management plans);

(3) Water Resources Council (floodplains, surface and ground waters);

(4) Department of Agriculture, including Soil Conservation Service (land spreading solid waste on food chain croplands);

(5) Federal Aviation Administration (locating disposal facilities on or near airport property);

(6) Department of Housing and Urban Development (701 comprehensive planning program, flood plains mapping);

(7) Department of Defense (development and implementation of State and substate plans with regard to resource recovery and solid waste disposal programs at various installations);

(8) Department of Energy (State energy conservation plans under the Energy Policy and Conservation Act (42 U.S.C. 6321)); and

(9) Other programs.

(m) The State plan shall provide for coordination, where practicable, with solid waste management plans in neighboring States and with plans for Indian reservations in the State.

## Subpart G—Public Participation

### § 256.60 Requirements for public participation in State and substate plans.

(a) State and substate planning agencies shall:

(1) Maintain a current list of agencies, organizations, and individuals affected by or interested in the plan, which shall include any parties that request to be on the list, the owner or operator of each facility classified as an open dump and any other parties which the State determines to be affected by or interested in the plan;

(2) Provide depositories of relevant information in one or more convenient locations; and

(3) Prepare a responsiveness summary, in accord with 40 CFR 25.8, where required by this subpart or by an approved public participation work plan, which describes matters on which the public was consulted, summarizes the public's views, and sets forth the agency's response to the public input.

(b) State and substate planning agencies shall provide information and consult with the public on plan development and implementation. Provision of information and consultation shall occur both early in the planning process (including the preparation and distribution of a summary of the proposed plan) and on major policy decisions made during the course of plan development, revision and implementation. To meet this requirement, planning agencies shall:

(1) Publicize information in news media having broad audiences in the geographic area;

(2) Place information in depositories maintained under paragraph (a)(2) of this section;

(3) Send information directly to agencies, organizations and individuals on the list maintained under paragraph (a)(1) of this section; and

(4) Prepare and make available to the public a responsiveness summary in accord with 40 CFR 25.8.

(c) State and substate planning agencies shall conduct public hearings (and public meetings, where the agency determines there is sufficient interest) in accord with 40 CFR 25.5 and 25.6. The purpose of the hearings and meetings is to solicit reactions and recommendations from interested or affected parties and to explain major issues within the proposed plan. Following the public hearings, a responsiveness summary shall be prepared and made available to the public in accord with 40 CFR 25.8.

[44 FR 45079, July 31, 1979, as amended at 46 FR 47051, Sept. 23, 1981]

### § 256.61 Requirements for public participation in the annual State work program.

(a) A public participation work plan in accord with 40 CFR 25.11 shall be included in the annual State work program.

(b) The State shall consult with the public in the development of the annual work program. One month prior to submission of the draft work program to the Regional Administrator, as required by 40 CFR part 35, the draft work program shall be made available to the public at the State information depositories maintained under § 256.60(a)(2). The public shall be notified of the availability of the draft work program, and a public meeting shall be held if the planning agency determines there is sufficient interest.

(c) The State shall comply with the requirements of Office of Management and Budget Circular No. A–95.

(d) Copies of the final work program shall be placed in the State information depositories maintained under § 256.60(a)(2).

### § 256.62 Requirements for public participation in State regulatory development.

(a) The State shall conduct public hearings (and public meetings where the State determines there is sufficient interest) on State legislation and regulations, in accord with the State administrative procedures act, to solicit reactions and recommendations. Following the public hearings, a responsiveness summary shall be prepared and made available to the public in accord with 40 CFR 25.8.

(b) In advance of the hearings and meetings required by paragraph (a) of this section, the State shall prepare a fact sheet on proposed regulations or legislation, mail the fact sheet to agencies, organizations and individuals on the list maintained under § 256.60(a)(1) and place the fact sheet in the State information depositories maintained under § 256.60(a)(2).

### § 256.63 Requirements for public participation in the permitting of facilities.

(a) Before approving a permit application (or renewal of a permit) for a resource recovery or solid waste disposal facility the State shall hold a public hearing to solicit public reaction and recommendations on the proposed permit application if the State determines there is a significant degree of public interest in the proposed permit.

(b) This hearing shall be held in accord with 40 CFR 25.5.

### § 256.64 Requirements for public participation in the open dump inventory.

(a) The State shall provide an opportunity for public participation prior to submission of any classification of a facility as an open dump to the Federal Government. The State shall accomplish this by providing notice as specified in § 256.64(b) or by using other State administrative procedures which provide equivalent public participation.

(b) The State may satisfy the requirement of § 256.64(a) by providing written notice of the availability of the results of its classifications to all parties on the list required under § 256.60(a)(1) at least 30 days before initial submission of these classifications to the Federal Government. For those parties on the list required under § 256.60(a)(1) who are owners or operators of facilities classified as open dumps, such notice shall indicate that the facility has been so classified.

[46 FR 47052, Sept. 23, 1981]

### § 256.65 Recommendations for public participation.

(a) State and substate planning agencies should establish an advisory group, or utilize an existing group, to provide recommendations on major policy and program decisions. The advisory group's membership should reflect a balanced viewpoint in accord with 40 CFR 25.7(c).

(b) State and substate planning agencies should develop public education programs designed to encourage informed public participation in the development and implementation of solid waste management plans.

[44 FR 45079, July 31, 1979. Redesignated and amended at 46 FR 47052, Sept. 23, 1981]

# PART 257—CRITERIA FOR CLASSIFICATION OF SOLID WASTE DISPOSAL FACILITIES AND PRACTICES

## Subpart A—Classification of Solid Waste Disposal Facilities and Practices

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AUTHORITY: 42 U.S.C. 6907(a)(3), 6912(a)(1), 6944(a) and 6949(c), 33 U.S.C. 1345 (d) and (e).

SOURCE: 44 FR 53460, Sept. 13, 1979, unless otherwise noted.

## Subpart A—Classification of Solid Waste Disposal Facilities and Practices

### § 257.1 Scope and purpose.

(a) Unless otherwise provided, the criteria in §§257.1 through 257.4 are adopted for determining which solid waste disposal facilities and practices pose a reasonable probability of adverse effects on health or the environment under sections 1008(a)(3) and 4004(a) of the Resource Conservation and Recovery Act (The Act). Unless otherwise provided, the criteria in §§257.5 through 257.30 are adopted for purposes of ensuring that non-municipal non-hazardous waste disposal units that receive conditionally exempt small quantity geterator (CESQG) waste do not present risks to human health and the environment taking into account the practicable capability of such units in accordance with section 4010(c) of the Act.

(1) Facilities failing to satisfy either the criteria in §§257.1 through 257.4 or §§257.5 through 257.30 are considered open dumps, which are prohibited under section 4005 of the Act.

(2) Practices failing to satisfy either the criteria in §§257.1 through 257.4 or §§257.5 through 257.30 constitute open dumping, which is prohibited under sction 4005 of the Act.

(b) These criteria also provide guidelines for the disposal of sewage sludge on the land when the sewage sludge is not used or disposed through a practice regulated in 40 CFR part 503.

(c) These criteria apply to all solid waste disposal facilities and practices with the following exceptions:

(1) The criteria do not apply to agricultural wastes, including manures and crop residues, returned to the soil as fertilizers or soil conditioners.

(2) The criteria do not apply to overburden resulting from mining operations intended for return to the mine site.

(3) The criteria do not apply to the land application of domestic sewage or treated domestic sewage.

(4) The criteria do not apply to the location and operation of septic tanks. The criteria do, however, apply to the disposal of septic tank pumpings.

(5) The criteria do not apply to solid or dissolved materials in irrigation return flows.

(6) The criteria do not apply to industrial discharges which are point sources subject to permits under section 402 of the Clean Water Act, as amended.

(7) The criteria do not apply to source, special nuclear or byproduct material as defined by the Atomic Energy Act, as amended (68 Stat. 923).

(8) The criteria do not apply to hazardous waste disposal facilities which are subject to regulation under subtitle C of the Act.

(9) The criteria do not apply to disposal of solid waste by underground well injection subject to the regulations (40 CFR part 146) for the Underground Injection Control Program (UICP) under the Safe Drinking Water Act, as amended, 42 U.S.C. 3007 *et seq*.

(10) The criteria of this part do not apply to municipal solid waste landfill units, which are subject to the revised criteria contained in part 258 of this chapter.

(11) The criteria do not apply to the use or disposal sewage sludge on the land when the sewage sludge is used or disposed in accordance with 40 CFR part 503.

[44 FR 53460, Sept. 13, 1979, as amended at 46 FR 47052, Sept. 23, 1981; 56 FR 51016, Oct. 9, 1991; 58 FR 9385, Feb. 19, 1993; 61 FR 34269, July 1, 1996]

### § 257.2 Definitions.

The definitions set forth in section 1004 of the Act apply to this part. Special definitions of general concern to this part are provided below, and definitions especially pertinent to particular sections of this part are provided in those sections.

*Disposal* means the discharge, deposit, injection, dumping, spilling,

leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

*Domestic septage* is either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

*Facility* means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

*Land application unit* means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for agricultural purposes or for treatment and disposal.

*Landfill* means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile.

*Leachate* means liquid that has passed through or emerged from solid waste and contains soluble, suspended or miscible materials removed from such wastes.

*Municipal solid waste landfill (MSWLF) unit* means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined in this section. A MSWLF unit also may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, and industrial solid waste. Such a landfill may be publicly or privately owned. An MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion.

*Open dump* means a facility for the disposal of solid waste which does not comply with this part.

*Practice* means the act of disposal of solid waste.

*Sanitary landfill* means a facility for the disposal of solid waste which complies with this part.

*Sewage sludge* means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

*Sludge* means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect.

*Solid waste* means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

*State* means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

*Surface impoundment* or *impoundment* means a facility or part of a facility

that is a natural topographic depression, human-made excavation, or diked area formed primarily of earthen materials (although it may be lined with human-made materials), that is designed to hold an accumulation of liquid wastes or wastes containing free liquids and that is not an injection well. Examples of surface impoundments are holding storage, settling, and aeration pits, ponds, and lagoons.

*Waste pile* or *pile* means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.

[44 FR 53460, Sept. 13, 1979; 44 FR 58910, Oct. 12, 1979; 56 FR 51016, Oct. 9, 1991; 58 FR 9385, Feb. 19, 1993]

### § 257.3 Criteria for classification of solid waste disposal facilities and practices.

Solid waste disposal facilities or practices which violate any of the following criteria pose a reasonable probability of adverse effects on health or the environment:

#### § 257.3–1 Floodplains.

(a) Facilities or practices in floodplains shall not restrict the flow of the base flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste, so as to pose a hazard to human life, wildlife, or land or water resources.

(b) As used in this section:

(1) *Based flood* means a flood that has a 1 percent or greater chance of recurring in any year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

(2) *Floodplain* means the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, which are inundated by the base flood.

(3) *Washout* means the carrying away of solid waste by waters of the base flood.

[44 FR 53460, Sept. 13, 1979; 44 FR 54708, Sept. 21, 1979]

#### § 257.3–2 Endangered species.

(a) Facilities or practices shall not cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife.

(b) The facility or practice shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in 50 CFR part 17.

(c) As used in this section:

(1) *Endangered or threatened species* means any species listed as such pursuant to section 4 of the Endangered Species Act.

(2) *Destruction or adverse modification* means a direct or indirect alteration of critical habitat which appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat.

(3) *Taking* means harassing, harming, pursuing, hunting, wounding, killing, trapping, capturing, or collecting or attempting to engage in such conduct.

#### § 257.3–3 Surface water.

(a) For purposes of section 4004(a) of the Act, a facility shall not cause a discharge of pollutants into waters of the United States that is in violation of the requirements of the National Pollutant Discharge Elimination System (NPDES) under section 402 of the Clean Water Act, as amended.

(b) For purposes of section 4004(a) of the Act, a facility shall not cause a discharge of dredged material or fill material to waters of the United States that is in violation of the requirements under section 404 of the Clean Water Act, as amended.

(c) A facility or practice shall not cause non-point source pollution of waters of the United States that violates applicable legal requirements implementing an areawide or Statewide water quality management plan that has been approved by the Administrator under section 208 of the Clean Water Act, as amended.

(d) Definitions of the terms *Discharge of dredged material, Point source, Pollutant, Waters of the United States,* and *Wetlands* can be found in the Clean Water Act, as amended, 33 U.S.C. 1251 *et seq.*, and implementing regulations, specifically 33 CFR part 323 (42 FR 37122, July 19, 1977).

[44 FR 53460, Sept. 13, 1979, as amended at 46 FR 47052, Sept. 23, 1981]

### § 257.3–4 Ground water.

(a) A facility or practice shall not contaminate an underground drinking water source beyond the solid waste boundary or beyond an alternative boundary specified in accordance with paragraph (b) of this section.

(b)(1) For purposes of section 1008(a)(3) of the Act or section 405(d) of the CWA, a party charged with open dumping or a violation of section 405(e) with respect to sewage sludge that is not used or disposed through a practice regulated in 40 CFR part 503 may demonstrate that compliance should be determined at an alternative boundary in lieu of the solid waste boundary. The court shall establish an alternative boundary only if it finds that such a change would not result in contamination of ground water which may be needed or used for human consumption. This finding shall be based on analysis and consideration of all of the following factors that are relevant:

(i) The hydrogeological characteristics of the facility and surrounding land, including any natural attenuation and dilution characteristics of the aquifer;

(ii) The volume and physical and chemical characteristics of the leachate;

(iii) The quantity, quality, and direction of flow of ground water underlying the facility;

(iv) The proximity and withdrawal rates of ground-water users;

(v) The availability of alternative drinking water supplies;

(vi) The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water;

(vii) Public health, safety, and welfare effects.

(2) For purposes of sections 4004(a) and 1008(a)(3), the State may establish an alternative boundary for a facility to be used in lieu of the solid waste boundary only if it finds that such a change would not result in the contamination of ground water which may be needed or used for human consumption. Such a finding shall be based on an analysis and consideration of all of the factors identified in paragraph (b)(1) of this section that are relevant.

(c) As used in this section:

(1) *Aquifer* means a geologic formation, group of formations, or portion of a formation capable of yielding usable quantities of ground water to wells or springs.

(2) *Contaminate* means introduce a substance that would cause:

(i) The concentration of that substance in the ground water to exceed the maximum contaminant level specified in appendix I, or

(ii) An increase in the concentration of that substance in the ground water where the existing concentration of that substance exceeds the maximum contaminant level specified in appendix I.

(3) *Ground water* means water below the land surface in the zone of saturation.

(4) *Underground drinking water source* means:

(i) An aquifer supplying drinking water for human consumption, or

(ii) An aquifer in which the ground water contains less than 10,000 mg/1 total dissolved solids.

(5) *Solid waste boundary* means the outermost perimeter of the solid waste (projected in the horizontal plane) as it would exist at completion of the disposal activity.

[44 FR 53460, Sept. 13, 1979, as amended at 46 FR 47052, Sept. 23, 1981; 58 FR 9386, Feb. 19, 1993]

### § 257.3–5 Application to land used for the production of food-chain crops (interim final).

(a) *Cadmium.* A facility or practice concerning application of solid waste to within one meter (three feet) of the surface of land used for the production of food-chain crops shall not exist or occur, unless in compliance with all requirements of paragraphs (a)(1) (i) through (iii) of this section or all requirements of paragraphs (a)(2) (i) through (iv) of this section.

(1)(i) The pH of the solid waste and soil mixture is 6.5 or greater at the time of each solid waste application, except for solid waste containing cadmium at concentrations of 2 mg/kg (dry weight) or less.

(ii) The annual application of cadmium from solid waste does not exceed 0.5 kilograms per hectare (kg/ha) on land used for production of tobacco,

leafy vegetables or root crops grown for human consumption. For other food-chain crops, the annual cadmium application rate does not exceed:

| Time period | Annual Cd application rate (kg/ha) |
|---|---|
| Present to June 30, 1984 | 2.0 |
| July 1, 1984 to December 31, 1986 | 1.25 |
| Beginning January 1, 1987 | 0.5 |

(iii) The cumulative application of cadmium from solid waste does not exceed the levels in either paragraph (a)(1)(iii)(A) or (B) of this section.

(A)

| Soil cation exchange capacity (meq/100g) | Maximum cumulative application (kg/ha) | |
|---|---|---|
| | Background soil pH less than 6.5 | Background soil pH more than 6.5 |
| Less than 5 | 5 | 5 |
| 5 to 15 | 5 | 10 |
| More than 15 | 5 | 20 |

(B) For soils with a background pH of less than 6.5, the cumulative cadmium application rate does not exceed the levels below: *Provided,* That the pH of the solid waste and soil mixture is adjusted to and maintained at 6.5 or greater whenever food-chain crops are grown.

| Soil cation exchange capacity (meq/100g) | Maximum cumulative application (kg/ha) |
|---|---|
| Less than 5 | 5 |
| 5 to 15 | 10 |
| More than 15 | 20 |

(2)(i) The only food-chain crop produced is animal feed.

(ii) The pH of the solid waste and soil mixture is 6.5 or greater at the time of solid waste application or at the time the crop is planted, whichever occurs later, and this pH level is maintained whenever food-chain crops are grown.

(iii) There is a facility operating plan which demonstrates how the animal feed will be distributed to preclude ingestion by humans. The facility operating plan describes the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses.

(iv) Future property owners are notified by a stipulation in the land record or property deed which states that the property has received solid waste at high cadmium application rates and that food-chain crops should not be grown, due to a possible health hazard.

(b) *Polychlorinated Biphenyls (PCBs).* Solid waste containing concentrations of PCBs equal to or greater than 10 mg/kg (dry weight) is incorporated into the soil when applied to land used for producing animal feed, including pasture crops for animals raised for milk. Incorporation of the solid waste into the soil is not required if it is assured that the PCB content is less than 0.2 mg/kg (actual weight) in animal feed or less than 1.5 mg/kg (fat basis) in milk.

(c) As used in this section:

(1) *Animal feed* means any crop grown for consumption by animals, such as pasture crops, forage, and grain.

(2) *Background soil pH* means the pH of the soil prior to the addition of substances that alter the hydrogen ion concentration.

(3) *Cation exchange capacity* means the sum of exchangeable cations a soil can absorb expressed in milli-equivalents per 100 grams of soil as determined by sampling the soil to the depth of cultivation or solid waste placement, whichever is greater, and analyzing by the summation method for distinctly acid soils or the sodium acetate method for neutral, calcareous or saline soils (''Methods of Soil Analysis, Agronomy Monograph No. 9.'' C. A. Black, ed., American Society of Agronomy, Madison, Wisconsin. pp 891–901, 1965).

(4) *Food-chain crops* means tobacco, crops grown for human consumption, and animal feed for animals whose products are consumed by humans.

(5) *Incorporated into the soil* means the injection of solid waste beneath the surface of the soil or the mixing of solid waste with the surface soil.

(6) *Pasture crops* means crops such as legumes, grasses, grain stubble and stover which are consumed by animals while grazing.

(7) *pH* means the logarithm of the reciprocal of hydrogen ion concentration.

(8) *Root crops* means plants whose edible parts are grown below the surface of the soil.

(9) *Soil pH* is the value obtained by sampling the soil to the depth of cultivation or solid waste placement, whichever is greater, and analyzing by the electrometric method. (''Methods of Soil Analysis, Agronomy Monograph No. 9,'' C.A. Black, ed., American Society of Agronomy, Madison, Wisconsin, pp. 914–926, 1965.)

[44 FR 53460, Sept. 13, 1979; 44 FR 54708, Sept. 21, 1979]

### § 257.3–6 Disease.

(a) *Disease Vectors.* The facility or practice shall not exist or occur unless the on-site population of disease vectors is minimized through the periodic application of cover material or other techniques as appropriate so as to protect public health.

(b) *Sewage sludge and septic tank pumpings (Interim Final).* A facility or practice involving disposal of sewage sludge or septic tank pumpings shall not exist or occur unless in compliance with paragraphs (b) (1), (2) or (3) of this section.

(1) Sewage sludge that is applied to the land surface or is incorporated into the soil is treated by a Process to Significantly Reduce Pathogens prior to application or incorporation. Public access to the facility is controlled for at least 12 months, and grazing by animals whose products are consumed by humans is prevented for at least one month. Processes to Significantly Reduce Pathogens are listed in appendix II, section A. (These provisions do not apply to sewage sludge disposed of by a trenching or burial operation.)

(2) Septic tank pumpings that are applied to the land surface or incorporated into the soil are treated by a Process to Significantly Reduce Pathogens (as listed in appendix II, section A), prior to application or incorporation, unless public access to the facility is controlled for at least 12 months and unless grazing by animals whose products are consumed by humans is prevented for at least one month. (These provisions do not apply to septic tank pumpings disposed of by a trenching or burial operation.)

(3) Sewage sludge or septic tank pumpings that are applied to the land surface or are incorporated into the soil are treated by a Process to Further Reduce Pathogens, prior to application or incorporation, if crops for direct human consumption are grown within 18 months subsequent to application or incorporation. Such treatment is not required if there is no contact between the solid waste and the edible portion of the crop; however, in this case the solid waste is treated by a Process to Significantly Reduce Pathogens, prior to application; public access to the facility is controlled for at least 12 months; and grazing by animals whose products are consumed by humans is prevented for at least one month. If crops for direct human consumption are not grown within 18 months of application or incorporation, the requirements of paragraphs (b) (1) and (2) of this section apply. Processes to Further Reduce Pathogens are listed in appendix II, section B.

(c) As used in this section:

(1) *Crops for direct human consumption* means crops that are consumed by humans without processing to minimize pathogens prior to distribution to the consumer.

(2) *Disease vector* means rodents, flies, and mosquitoes capable of transmitting disease to humans.

(3) *Incorporated into the soil* means the injection of solid waste beneath the surface of the soil or the mixing of solid waste with the surface soil.

(4) *Periodic application of cover material* means the application and compaction of soil or other suitable material over disposed solid waste at the end of each operating day or at such frequencies and in such a manner as to reduce the risk of fire and to impede vectors access to the waste.

(5) *Trenching or burial operation* means the placement of sewage sludge or septic tank pumpings in a trench or other natural or man-made depression and the covering with soil or other suitable material at the end of each operating day such that the wastes do not migrate to the surface.

[44 FR 53460, Sept. 13, 1979; 44 FR 54708, Sept. 21, 1979]

### § 257.3–7 Air.

(a) The facility or practice shall not engage in open burning of residential,

commercial, institutional or industrial solid waste. This requirement does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, diseased trees, debris from emergency clean-up operations, and ordnance.

(b) For purposes of section 4004(a) of the Act, the facility shall not violate applicable requirements developed under a State Implementation Plan (SIP) approved or promulgated by the Administrator pursuant to section 110 of the Clean Air Act, as amended.

(c) As used in this section ''open burning'' means the combustion of solid waste without (1) control of combustion air to maintain adequate temperature for efficient combustion, (2) containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and (3) control of the emission of the combustion products.

[44 FR 53460, Sept. 13, 1979; 44 FR 54708, Sept. 21, 1979, as amended at 46 FR 47052, Sept. 23, 1981]

### § 257.3–8 Safety.

(a) *Explosive gases.* The concentration of explosive gases generated by the facility or practice shall not exceed:

(1) Twenty-five percent (25%) of the lower explosive limit for the gases in facility structures (excluding gas control or recovery system components); and

(2) The lower explosive limit for the gases at the property boundary.

(b) *Fires.* A facility or practice shall not pose a hazard to the safety of persons or property from fires. This may be accomplished through compliance with § 257.3–7 and through the periodic application of cover material or other techniques as appropriate.

(c) *Bird hazards to aircraft.* A facility or practice disposing of putrescible wastes that may attract birds and which occurs within 10,000 feet (3,048 meters) of any airport runway used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway used by only piston-type aircraft shall not pose a bird hazard to aircraft.

(d) *Access.* A facility or practice shall not allow uncontrolled public access so as to expose the public to potential health and safety hazards at the disposal site.

(e) As used in this section:

(1) *Airport* means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(2) *Bird hazard* means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

(3) *Explosive gas* means methane ($CH_4$).

(4) *Facility structures* means any buildings and sheds or utility or drainage lines on the facility.

(5) *Lower explosive limit* means the lowest percent by volume of a mixture of explosive gases which will propagate a flame in air at 25 °C and atmospheric pressure.

(6) *Periodic application of cover material* means the application and compaction of soil or other suitable material over disposed solid waste at the end of each operating day or at such frequencies and in such a manner as to reduce the risk of fire and to impede disease vectors' access to the waste.

(7) *Putrescible wastes* means solid waste which contains organic matter capable of being decomposed by microorganisms and of such a character and proportion as to be capable of attracting or providing food for birds.

### § 257.4 Effective date.

These criteria become effective October 15, 1979.

## Subpart B—Disposal Standards for the Receipt of Conditionally Exempt Small Quantity Generator (CESQG) Wastes at Non-Municipal Non-Hazardous Waste Disposal Units

SOURCE: 61 FR 34269, July 1, 1996, unless otherwise noted.

**§257.5 Disposal standards for owners/operators of non-municipal non-hazardous waste disposal units that receive Conditionally Exempt Small Quantity Generator (CESQG) waste.**

(a) *Applicability*. (1) The requirements in this section apply to owners/operators of any non-municipal non-hazardous waste disposal unit that receives CESQG hazardous waste, as defined in 40 CFR 261.5. Non-municipal non-hazardous waste disposal units that meet the requirements of this section may receive CESQG wastes. Any owner/operator of a non-municipal non-hazardous waste disposal unit that receives CESQG hazardous waste continues to be subject to the requirements in §§257.3–2, 257.3–3, 257.3–5, 257.3–6, 257.3–7, and 257.3–8 (a), (b), and (d).

(2) Any non-municipal non-hazardous waste disposal unit that is receiving CESQG hazardous waste as of January 1, 1998, must be in compliance with the requirements in §§257.7 through 257.13 and §257.30 by January 1, 1998, and the requirements in §§257.21 through 257.28 by July 1, 1998.

(3) Any non-municipal non-hazardous waste disposal unit that does not meet the requirements in this section may not receive CESQG wastes.

(4) Any non-municipal non-hazardous waste disposal unit that is not receiving CESQG Hazardous waste as of January 1, 1998, continues to be subject to the requirements in §§257.1 through 257.4.

(5) Any non-municipal non-hazardous waste disposal unit that first receives CESQG hazardous waste after January 1, 1998, must be in compliance with §§257.7 through 257.30 prior to the receipt of CESQG hazardous waste.

(b) *Definitions.*

*Active life* means the period of operation beginning with the initial receipt of solid waste and ending at the final receipt of solid waste.

*Existing unit* means any non-municipal non-hazardous waste disposal unit that is receiving CESQG hazardous waste as of January 1, 1998.

*Facility* means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of non-municipal non-hazardous waste.

*Lateral expansion* means a horizontal expansion of the waste boundaries of an existing non-municipal non-hazardous waste disposal unit.

*New unit* means any non-municipal non-hazardous waste disposal unit that has not received CESQG hazardous waste prior to January 1, 1998.

*State* means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, and Indian Tribes.

*State Director* means the chief administrative officer of the lead State/Tribal agency responsible for implementing the State/Tribal permit program for Subtitle D regulated facilities.

*Uppermost aquifer* means the geologic formation nearest the natural ground surface that is an aquifer, as well as, lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

*Waste management unit boundary* means a vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer.

LOCATION RESTRICTIONS

**§257.7 [Reserved]**

**§257.8 Floodplains.**

(a) Owners or operators of new units, existing units, and lateral expansions located in 100-year floodplains must demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record.

(b) For purposes of this section:

(1) *Floodplain* means the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.

(2) *100-year flood* means a flood that has a 1-percent or greater chance of recurring in any given year or a flood of

a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

(3) *Washout* means the carrying away of solid waste by waters of the base flood.

### § 257.9 Wetlands.

(a) Owners or operators of new units and lateral expansions shall not locate such units in wetlands, unless the owner or operator can make the following demonstrations to the Director of an approved State:

(1) Where applicable under section 404 of the Clean Water Act or applicable State wetlands laws, the presumption that a practicable alternative to the proposed landfill is available which does not involved wetlands is clearly rebutted:

(2) The construction and operation of the unit will not:

(i) Cause or contribute to violations of any applicable State water quality standard;

(ii) Violate any applicable toxic effluent standard or prohibition under Section 307 of the Clean Water Act;

(iii) Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973; and

(iv) Violate any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary;

(3) The unit will not cause or contribute to significant degradation of wetlands. The owner/operator must demonstrate the integrity of the unit and its ability to protect ecological resources by addressing the following factors:

(i) Erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the unit;

(ii) Erosion, stability, and migration potential of dredged and fill materials used to support the unit;

(iii) The volume and chemical nature of the waste managed in the unit;

(iv) Impacts on fish, wildlife, and other aquatic resources and their habitat from release of the waste;

(v) The potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

(vi) Any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected.

(4) To the extent required under section 404 of the Clean Water Act or applicable State wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent practicable as required by paragraph (a)(1) of this section, then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands); and

(5) Sufficient information is available to make a reasonable determination with respect to these demonstrations.

(b) For purposes of this section, wetlands means those areas that are defined in 40 CFR 232.2(r).

### §§ 257.10–257.12 [Reserved]

### § 257.13 Deadline for making demonstrations.

Existing units that cannot make the demonstration specified in § 257.8(a) pertaining to floodplains by January 1, 1998, must not accept CESQG hazardous waste for disposal.

## GROUND-WATER MONITORING AND CORRECTIVE ACTION

### § 257.21 Applicability.

(a) The requirements in this section apply to units identified in § 257.5(a), except as provided in paragraph (b) of this section.

(b) Ground-water monitoring requirements under §§ 257.22 through 257.25 may be suspended by the Director of an approved State for a unit identified in § 257.5(a) if the owner or operator can demonstrate that there is no potential for migration of hazardous constituents from that unit to the uppermost aquifer during the active life of the unit plus 30 years. This demonstration must be certified by a qualified ground-

water scientist and approved by the Director of an approved State, and must be based upon:

(1) Site-specific field collected measurements, sampling, and analysis of physical, chemical, and biological processes affecting contaminant fate and transport; and

(2) Contaminant fate and transport predictions that maximize contaminant migration and consider impacts on human health and environment.

(c) Owners and operators of facilities identified in §257.5(a) must comply with the ground-water monitoring requirements of this section according to the following schedule unless an alternative schedule is specified under paragraph (d) of this section:

(1) Existing units and lateral expansions must be in compliance with the ground-water monitoring requirements specified in §§257.22 through 257.25 by July 1, 1998.

(2) New units identified in §257.5(a) must be in compliance with the ground-water monitoring requirements specified in §§257.22 through 257.25 before waste can be placed in the unit.

(d) The Director of an approved State may specify an alternative schedule for the owners or operators of existing units and lateral expansions to comply with the ground-water monitoring requirements specified in §§257.22 through 257.25. This schedule must ensure that 50 percent of all existing units are in compliance by July 1, 1998, and all existing units are in compliance by July 1, 1999. In setting the compliance schedule, the Director of an approved State must consider potential risks posed by the unit to human health and the environment. The following factors should be considered in determining potential risk:

(1) Proximity of human and environmental receptors;

(2) Design of the unit;

(3) Age of the unit;

(4) The size of the unit; and

(5) Resource value of the underlying aquifer, including:

(i) Current and future uses;

(ii) Proximity and withdrawal rate of users; and

(iii) Ground-water quality and quantity.

(e) Once established at a unit, ground-water monitoring shall be conducted throughout the active life plus 30 years. The Director of an approved State may decrease the 30 year period if the owner/operator demonstrates that a shorter period of time is adequate to protect human health and the environment and the Director approves the demonstration.

(f) For the purposes of this section, a qualified ground-water scientist is a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in ground-water hydrology and related fields as may be demonstrated by State registration, professional Certifications, or completion of accredited university programs that enable that individual to make sound professional judgments regarding ground-water monitoring, contaminant fate and transport, and corrective-action.

(g) The Director of an approved State may establish alternative schedules for demonstrating compliance with §257.22(d)(2), pertaining to notification of placement of certification in operating record; §257.24(c)(1), pertaining to notification that statistically significant increase (SSI) notice is in operating record; §257.24(c) (2) and (3), pertaining to an assessment monitoring program; §257.25(b), pertaining to sampling and analyzing appendix II of part 258 constituents; §257.25(d)(1), pertaining to placement of notice (appendix II of 40 CFR part 258 constituents detected) in record and notification of notice in record; §257.25(d)(2), pertaining to sampling for appendix I and II of 40 CFR part 258; §257.25(g), pertaining to notification (and placement of notice in record) of SSI above ground-water protection standard; §§257.25(g)(1)(iv) and 257.26(a), pertaining to assessment of corrective measures; §257.27(a), pertaining to selection of remedy and notification of placement in record; §257.28(c)(4), pertaining to notification of placement in record (alternative corrective action measures); and §257.28(f), pertaining to notification of placement in record (certification of remedy completed).

(h) Directors of approved States can use the flexibility in paragraph (i) of this section for any non-municipal non-hazardous waste disposal unit that receives CESQG waste, if the non-municipal non-hazardous waste disposal unit:

(1) Disposes of less than 20 tons of non-municipal waste daily, based on an annual average; and

(2) Has no evidence of ground-water contamination; and either

(3) Serves a community that experiences an annual interruption of at least three consecutive months of surface transportation that prevents access to a regional waste management facility; or

(4) Serves a community that has no practicable waste management alternative and the non-municipal solid waste disposal facility is located in an area that annually receives less than or equal to 25 inches of precipitation.

(5) Owners/operators of any non-municipal non-hazardous waste disposal unit that meets the criteria in paragraph (h) of this section must place in the operating record information demonstrating this.

(i) Directors of approved States may allow any non-municipal non-hazardous waste disposal unit meeting the criteria in paragraph (h) of this section to:

(1) Use alternatives to the ground-water monitoring system prescribed in §§ 257.22 through 257.25 so long as the alternatives will detect and, if necessary, assess the nature or extent of contamination from the non-municipal non-hazardous waste disposal unit on a site-specific basis; or establish and use, on a site-specific basis, an alternative list of indicator parameters for some or all of the constituents listed in appendix I (Appendix I of 40 CFR part 258. Alternative indicator parameters approved by the Director of an approved State under this section must ensure detection of contamination from the non-municipal non-hazardous waste disposal unit.

(2) If contamination is detected through the use of any alternative to the ground-water monitoring system prescribed in §§ 257.22 through 257.25, the non-municipal non-hazardous waste disposal unit owner or operator must perform expanded monitoring to determine whether the detected contamination is an actual release from the non-municipal solid waste disposal unit and, if so, to determine the nature and extent of the contamination. The Director of the approved State shall establish a schedule for the non-municipal non-hazardous waste disposal unit owner or operator to submit results from expanded monitoring in a manner that ensures protection of human health and the environment.

(i) If expanded monitoring indicates that contamination from the non-municipal non-hazardous waste disposal unit has reached the saturated zone, the owner or operator must install ground-water monitoring wells and sample these wells in accordance with §§ 257.22 through 257.25.

(ii) If expanded monitoring indicates that contamination from the non-municipal non-hazardous waste disposal unit is present in the unsaturated zone or on the surface, the Director of an approved State shall establish a schedule for the owner or operator to submit a description of any necessary corrective measures. The schedule shall ensure corrective measures, where necessary, are undertaken in a timely manner that protects human health and the environment. The proposed corrective measures are subject to revision and approval by the Director of the approved State. The owner or operator must implement the corrective measures according to a schedule established by the Director of the approved State.

(3) When considering whether to allow alternatives to a ground-water monitoring system prescribed in §§ 257.22 through 257.25, including alternative indicator parameters, the Director of an approved State shall consider at least the following factors:

(i) The geological and hydrogeological characteristics of the site;

(ii) The impact of manmade and natural features on the effectiveness of an alternative technology;

(iii) Climatic factors that may influence the selection, use, and reliability of alternative ground-water monitoring procedures; and

(iv) The effectiveness of indicator parameters in detecting a release.

(4) The Director of an approved State can require an owner or operator to comply with the requirements of §§257.22 through 257.25, where it is determined by the Director that using alternatives to ground-water monitoring approved under this paragraph are inadequate to detect contamination and, if necessary, to assess the nature and extent of contamination.

**§257.22 Ground-water monitoring systems.**

(a) A ground-water monitoring system must be installed that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield ground-water samples from the uppermost aquifer (as defined in §257.5(b)) that:

(1) Represent the quality of background ground water that has not been affected by leakage from a unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

(i) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; or

(ii) Sampling at other wells will provide an indication of background ground-water quality that is as representative or more representative than that provided by the upgradient wells; and

(2) Represent the quality of ground water passing the relevant point of compliance specified by the Director of an approved State or at the waste management unit boundary in an unapproved State. The downgradient monitoring system must be installed at the relevant point of compliance specified by the Director of an approved State or at the waste management unit boundary in an unapproved State that ensures detection of ground-water contamination in the uppermost aquifer. The relevant point of compliance specified by the Director of an approved State shall be no more than 150 meters from the waste management unit boundary and shall be located on land owned by the owner of the facility. In determining the relevant point of compliance the State Director shall consider at least the following factors: the hydrogeologic characteristics of the unit and surrounding land, the volume and physical and chemical characteristics of the leachate, the quantity, quality and direction of flow of ground water, the proximity and withdrawal rate of the ground-water users, the availability of alternative drinking water supplies, the existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water, and whether the ground water is currently used or reasonably expected to be used for drinking water, public health, safety, and welfare effects, and practicable capability of the owner or operator. When physical obstacles preclude installation of ground-water monitoring wells at the relevant point of compliance at existing units, the down-gradient monitoring system may be installed at the closest practicable distance hydraulically down-gradient from the relevant point of compliance specified by the Director of an approved State that ensures detection of groundwater contamination in the uppermost aquifer.

(b) The Director of an approved State may approve a multi-unit ground-water monitoring system instead of separate ground-water monitoring systems for each unit when the facility has several units, provided the multi-unit ground-water monitoring system meets the requirement of §257.22(a) and will be as protective of human health and the environment as individual monitoring systems for each unit, based on the following factors:

(1) Number, spacing, and orientation of the units;

(2) Hydrogeologic setting;

(3) Site history;

(4) Engineering design of the units; and

(5) Type of waste accepted at the units.

(c) Monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of ground-water samples. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed to prevent

contamination of samples and the ground water.

(1) The owner or operator must notify the State Director that the design, installation, development, and decommission of any monitoring wells, piezometers and other measurement, sampling, and analytical devices documentation has been placed in the operating record; and

(2) The monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

(d) The number, spacing, and depths of monitoring systems shall be:

(1) Determined based upon site-specific technical information that must include thorough characterization of:

(i) Aquifer thickness, ground-water flow rate, ground-water flow direction including seasonal and temporal fluctuations in ground-water flow; and

(ii) Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer; including, but not limited to: thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities and effective porosities.

(2) Certified by a qualified ground-water scientist or approved by the Director of an approved State. Within 14 days of this certification, the owner or operator must notify the State Director that the certification has been placed in the operating record.

### § 257.23 Ground-water sampling and analysis requirements.

(a) The ground-water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground-water quality at the background and downgradient wells installed in compliance with § 257.22(a). The owner or operator must notify the State Director that the sampling and analysis program documentation has been placed in the operating record and the program must include procedures and techniques for:

(1) Sample collection;

(2) Sample preservation and shipment;

(3) Analytical procedures;

(4) Chain of custody control; and

(5) Quality assurance and quality control.

(b) The ground-water monitoring program must include sampling and analytical methods that are appropriate for ground-water sampling and that accurately measure hazardous constituents and other monitoring parameters in ground-water samples. Ground-water samples shall not be field-filtered prior to laboratory analysis.

(c) The sampling procedures and frequency must be protective of human health and the environment.

(d) Ground-water elevations must be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator must determine the rate and direction of ground-water flow each time ground water is sampled. Ground-water elevations in wells which monitor the same waste management area must be measured within a period of time short enough to avoid temporal variations in ground-water flow which could preclude accurate determination of ground-water flow rate and direction.

(e) The owner or operator must establish background ground-water quality in a hydraulically upgradient or background well(s) for each of the monitoring parameters or constituents required in the particular ground-water monitoring program that applies to the unit, as determined under § 257.24(a), or § 257.25(a). Background ground-water quality may be established at wells that are not located hydraulically upgradient from the unit if it meets the requirements of § 257.22(a)(1).

(f) The number of samples collected to establish ground-water quality data must be consistent with the appropriate statistical procedures determined pursuant to paragraph (g) of this section. The sampling procedures shall be those specified under § 257.24(b) for detection monitoring, § 257.25 (b) and (d) for assessment monitoring, and § 257.26(b) for corrective action.

(g) The owner or operator must specify in the operating record one of the following statistical methods to be used in evaluating ground-water monitoring data for each hazardous constituent. The statistical test chosen shall be conducted separately for each hazardous constituent in each well.

(1) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

(2) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

(3) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(4) A control chart approach that gives control limits for each constituent.

(5) Another statistical test method that meets the performance standards of paragraph (h) of this section. The owner or operator must place a justification for this alternative in the operating record and notify the State Director of the use of this alternative test. The justification must demonstrate that the alternative method meets the performance standards of paragraph (h) of this section.

(h) Any statistical method chosen under paragraph (g) of this section shall comply with the following performance standards, as appropriate:

(1) The statistical method used to evaluate ground-water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.

(2) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground-water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experiment wise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(3) If a control chart approach is used to evaluate ground-water monitoring data, the specific type of control chart and its associated parameter values shall be protective of human health and the environment. The parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(4) If a tolerance interval or a predictional interval is used to evaluate ground-water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(5) The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (pql) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during

routine laboratory operating conditions that are available to the facility.

(6) If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(i) The owner or operator must determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular ground-water monitoring program that applies to the unit, as determined under §§ 257.24(a) or 257.25(a).

(1) In determining whether a statistically significant increase has occurred, the owner or operator must compare the ground-water quality of each parameter or constituent at each monitoring well designated pursuant to § 257.22(a)(2) to the background value of that constituent, according to the statistical procedures and performance standards specified under paragraphs (g) and (h) of this section.

(2) Within a reasonable period of time after completing sampling and analysis, the owner or operator must determine whether there has been a statistically significant increase over background at each monitoring well.

**§ 257.24 Detection monitoring program.**

(a) Detection monitoring is required at facilities identified in § 257.5(a) at all ground-water monitoring wells defined under §§ 257.22 (a)(1) and (a)(2). At a minimum, a detection monitoring program must include the monitoring for the constituents listed in appendix I of 40 CFR part 258.

(1) The Director of an approved State may delete any of the appendix I (Appendix I of 40 CFR part 258) monitoring parameters for a unit if it can be shown that the removed constituents are not reasonably expected to be contained in or derived from the waste contained in the unit.

(2) The Director of an approved State may establish an alternative list of indicator parameters for a unit, in lieu of some or all of the constituents in appendix I to 40 CFR part 258, if the alternative parameters provide a reliable indication of releases from the unit to the ground water. In determining alternative parameters, the Director shall consider the following factors:

(i) The types, quantities, and concentrations of constituents in waste managed at the unit;

(ii) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the unit;

(iii) The detectability of indicator parameters, waste constituents, and reaction products in the ground water; and

(iv) The concentration or values and coefficients of variation of monitoring parameters or constituents in the groundwater background.

(b) The monitoring frequency for all constituents listed in appendix I to 40 CFR part 258, or in the alternative list approved in accordance with paragraph (a)(2) of this section, shall be at least semiannual during the active life of the unit plus 30 years. A minimum of four independent samples from each well (background and downgradient) must be collected and analyzed for the appendix I (Appendix I of 40 CFR part 258) constituents, or the alternative list approved in accordance with paragraph (a)(2) of this section, during the first semiannual sampling event. At least one sample from each well (background and downgradient) must be collected and analyzed during subsequent semiannual sampling events. The Director of an approved State may specify an appropriate alternative frequency for repeated sampling and analysis for appendix I (Appendix I of 40 CFR part 258) constituents, or the alternative list approved in accordance with paragraph (a)(2) of this section, during the active life plus 30 years. The alternative frequency during the active life shall be no less than annual. The alternative frequency shall be based on consideration of the following factors:

(1) Lithology of the aquifer and unsaturated zone;

(2) Hydraulic conductivity of the aquifer and unsaturated zone;

(3) Ground-water flow rates;

(4) Minimum distance between upgradient edge of the unit and downgradient monitoring well screen (minimum distance of travel); and

(5) Resource value of the aquifer.

(c) If the owner or operator determines, pursuant to §257.23(g), that there is a statistically significant increase over background for one or more of the constituents listed in appendix I to 40 CFR part 258, or in the alternative list approved in accordance with paragraph (a)(2) of this section, at any monitoring well at the boundary specified under §257.22(a)(2), the owner or operator:

(1) Must, within 14 days of this finding, place a notice in the operating record indicating which constituents have shown statistically significant changes from background levels, and notify the State Director that this notice was placed in the operating record; and

(2) Must establish an assessment monitoring program meeting the requirements of §257.25 within 90 days except as provided for in paragraph (c)(3) of this section.

(3) The owner/operator may demonstrate that a source other than the unit caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground-water quality. A report documenting this demonstration must be certified by a qualified ground-water scientist or approved by the Director of an approved State and be placed in the operating record. If a successful demonstration is made and documented, the owner or operator may continue detection monitoring as specified in this section. If, after 90 days, a successful demonstration is not made, the owner or operator must initiate an assessment monitoring program as required in §257.25.

EFFECTIVE DATE NOTE: At 61 FR 34274, July 1, 1996, §257.24 was added. This section contains information collection and record-keeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

### §257.25 Assessment monitoring program.

(a) Assessment monitoring is required whenever a statistically significant increase over background has been detected for one or more of the constituents listed in appendix I of 40 CFR part 258 or in the alternative list approved in accordance with §257.24(a)(2).

(b) Within 90 days of triggering an assessment monitoring program, and annually thereafter, the owner or operator must sample and analyze the ground water for all constituents identified in appendix II of 40 CFR part 258. A minimum of one sample from each downgradient well must be collected and analyzed during each sampling event. For any constituent detected in the downgradient wells as the result of the complete appendix II (Appendix II of 40 CFR part 258) analysis, a minimum of four independent samples from each well (background and downgradient) must be collected and analyzed to establish background for the new constituents. The Director of an approved State may specify an appropriate subset of wells to be sampled and analyzed for appendix II (Appendix II of 40 CFR part 258) constituents during assessment monitoring. The Director of an approved State may delete any of the appendix II (Appendix II of 40 CFR part 258) monitoring parameters for a unit if it can be shown that the removed constituents are not reasonably expected to be in or derived from the waste contained in the unit.

(c) The Director of an approved State may specify an appropriate alternate frequency for repeated sampling and analysis for the full set of appendix II (Appendix II of 40 CFR part 258) constituents, or the alternative list approved in accordance with paragraph (b) of this section, during the active life plus 30 years considering the following factors:

(1) Lithology of the aquifer and unsaturated zone;

(2) Hydraulic conductivity of the aquifer and unsaturated zone;

(3) Ground-water flow rates;

(4) Minimum distance between upgradient edge of the unit and downgradient monitoring well screen (minimum distance of travel);

(5) Resource value of the aquifer; and

(6) Nature (fate and transport) of any constituents detected in response to this section.

(d) After obtaining the results from the initial or subsequent sampling events required in paragraph (b) of this section, the owner or operator must:

(1) Within 14 days, place a notice in the operating record identifying the appendix II (appendix II of 40 CFR part 258) constituents that have been detected and notify the State Director that this notice has been placed in the operating record;

(2) Within 90 days, and on at least a semiannual basis thereafter, resample all wells specified by § 257.22(a) to this section, conduct analyses for all constituents in appendix I (Appendix I of 40 CFR part 258) to this part or in the alternative list approved in accordance with § 257.24(a)(2), and for those constituents in appendix II to 40 CFR part 258 that are detected in response to paragraph (b) of this section, and record their concentrations in the facility operating record. At least one sample from each well (background and downgradient) must be collected and analyzed during these sampling events. The Director of an approved State may specify an alternative monitoring frequency during the active life plus 30 years for the constituents referred to in this paragraph. The alternative frequency for appendix I (appendix I of 40 CFR part 258) constituents, or the alternative list approved in accordance with § 257.24(a)(2), during the active life shall be no less than annual. The alternative frequency shall be based on consideration of the factors specified in paragraph (c) of this section;

(3) Establish background concentrations for any constituents detected pursuant to paragraphs (b) or (d)(2) of this section; and

(4) Establish ground-water protection standards for all constituents detected pursuant to paragraph (b) or (d) of this section. The ground-water protection standards shall be established in accordance with paragraphs (h) or (i) of this section.

(e) If the concentrations of all appendix II (appendix II of 40 CFR part 258) constituents are shown to be at or below background values, using the statistical procedures in § 257.23(g), for two consecutive sampling events, the owner or operator must notify the State Director of this finding and may return to detection monitoring.

(f) If the concentrations of any appendix II (appendix II of part 258) constituents are above background values, but all concentrations are below the ground-water protection standard established under paragraphs (h) or (i) of this section, using the statistical procedures in § 257.23(g), the owner or operator must continue assessment monitoring in accordance with this section.

(g) If one or more appendix II (appendix II of CFR part 258) constituents are detected at statistically significant levels above the ground-water protection standard established under paragraphs (h) or (i) of this section in any sampling event, the owner or operator must, within 14 days of this finding, place a notice in the operating record identifying the appendix II (appendix II of 40 CFR part 258) constituents that have exceeded the ground-water protection standard and notify the State Director and all appropriate local government officials that the notice has been placed in the operating record. The owner or operator also:

(1)(i) Must characterize the nature and extent of the release by installing additional monitoring wells as necessary;

(ii) Must install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with paragraph (d)(2) of this section;

(iii) Must notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site if indicated by sampling of wells in accordance paragraph (g)(1) of this section; and

(iv) Must initiate an assessment of corrective measures as required by § 257.26 within 90 days; or

(2) May demonstrate that a source other than the non-municipal non-hazardous waste disposal unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground-water quality. A report documenting this demonstration must be certified by a qualified ground-water scientist or approved by the Director of

an approved State and placed in the operating record. If a successful demonstration is made the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this §257.25, and may return to detection monitoring if the appendix II (appendix II of 40 CFR part 258) constituents are at or below background as specified in paragraph (e) of this section. Until a successful demonstration is made, the owner or operator must comply with §257.25(g) including initiating an assessment of corrective measures.

(h) The owner or operator must establish a ground-water protection standard for each appendix II (appendix II of 40 CFR part 258) constituent detected in the ground-water. The ground-water protection standard shall be:

(1) For constituents for which a maximum contaminant level (MCL) has been promulgated under section 1412 of the Safe Drinking Water Act (codified) under 40 CFR part 141, the MCL for that constituent;

(2) For constituents for which MCLs have not been promulgated, the background concentration for the constituent established from wells in accordance with §257.22(a)(1); or

(3) For constituents for which the background level is higher than the MCL identified under subparagraph (h)(1) of this section or health based levels identified under paragraph (i)(1) of this section, the background concentration.

(i) The Director of an approved State may establish an alternative ground-water protection standard for constituents for which MCLs have not been established. These ground-water protection standards shall be appropriate health based levels that satisfy the following criteria:

(1) The level is derived in a manner consistent with Agency guidelines for assessing the health risks of environmental pollutants (51 FR 33992, 34006, 34014, 34028, September 24, 1986);

(2) The level is based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act Good Laboratory Practice Standards (40 CFR part 792) or equivalent;

(3) For carcinogens, the level represents a concentration associated with an excess lifetime cancer risk level (due to continuous lifetime exposure) within the $1\times10^{-4}$ to $1\times10^{-6}$ range; and

(4) For systemic toxicants, the level represents a concentration to which the human population (including sensitive subgroups) could be exposed to on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime. For purposes of this subpart, systemic toxicants include toxic chemicals that cause effects other than cancer or mutation.

(j) In establishing ground-water protection standards under paragraph (i) of this section, the Director of an approved State may consider the following:

(1) Multiple contaminants in the ground water;

(2) Exposure threats to sensitive environmental receptors; and

(3) Other site-specific exposure or potential exposure to ground water.

EFFECTIVE DATE NOTE: At 61 FR 34274, July 1, 1996, §257.25 was added. This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

### §257.26 Assessment of corrective measures.

(a) Within 90 days of finding that any of the constituents listed in appendix II (appendix II of 40 CFR Part 258) have been detected at a statistically significant level exceeding the ground-water protection standards defined under §257.25 (h) or (i), the owner or operator must initiate an assessment of corrective measures. Such an assessment must be completed within a reasonable period of time.

(b) The owner or operator must continue to monitor in accordance with the assessment monitoring program as specified in §257.25.

(c) The assessment shall include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under §257.27, addressing at least the following:

(1) The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;

(2) The time required to begin and complete the remedy;

(3) The costs of remedy implementation; and

(4) The institutional requirements such as State or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s).

(d) The owner or operator must discuss the results of the corrective measures assessment, prior to the selection of remedy, in a public meeting with interested and affected parties.

**§ 257.27 Selection of remedy.**

(a) Based on the results of the corrective measures assessment conducted under § 257.26, the owner or operator must select a remedy that, at a minimum, meets the standards listed in paragraph (b) of this section. The owner or operator must notify the State Director, within 14 days of selecting a remedy, that a report describing the selected remedy has been placed in the operating record and how it meets the standards in paragraph (b) of this section.

(b) Remedies must:

(1) Be protective of human health and the environment;

(2) Attain the ground-water protection standard as specified pursuant to §§ 257.25 (h) or (i);

(3) Control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of appendix II (appendix II of 40 CFR part 258) constituents into the environment that may pose a threat to human health or the environment; and

(4) Comply with standards for management of wastes as specified in § 257.28(d).

(c) In selecting a remedy that meets the standards of § 257.27(b), the owner or operator shall consider the following evaluation factors:

(1) The long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following:

(i) Magnitude of reduction of existing risks;

(ii) Magnitude of residual risks in terms of likelihood of further releases due to waste remaining following implementation of a remedy;

(iii) The type and degree of long-term management required, including monitoring, operation, and maintenance;

(iv) Short-term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and re-disposal or containment;

(v) Time until full protection is achieved;

(vi) Potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, re-disposal, or containment;

(vii) Long-term reliability of the engineering and institutional controls; and

(viii) Potential need for replacement of the remedy.

(2) The effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:

(i) The extent to which containment practices will reduce further releases;

(ii) The extent to which treatment technologies may be used.

(3) The ease or difficulty of implementing a potential remedy(s) based on consideration of the following types of factors:

(i) Degree of difficulty associated with constructing the technology;

(ii) Expected operational reliability of the technologies;

(iii) Need to coordinate with and obtain necessary approvals and permits from other agencies;

(iv) Availability of necessary equipment and specialists; and

(v) Available capacity and location of needed treatment, storage, and disposal services.

(4) Practicable capability of the owner or operator, including a consideration of the technical and economic capability.

(5) The degree to which community concerns are addressed by a potential remedy(s).

(d) The owner or operator shall specify as part of the selected remedy a schedule(s) for initiating and completing remedial activities. Such a schedule must require the initiation of remedial activities within a reasonable period of time taking into consideration the factors set forth in paragraphs (d)(1) through (d)(8) of this section. The owner or operator must consider the following factors in determining the schedule of remedial activities:

(1) Extent and nature of contamination;

(2) Practical capabilities of remedial technologies in achieving compliance with ground-water protection standards established under §§257.25 (g) or (h) and other objectives of the remedy;

(3) Availability of treatment or disposal capacity for wastes managed during implementation of the remedy;

(4) Desirability of utilizing technologies that are not currently available, but which may offer significant advantages over already available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;

(5) Potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;

(6) Resource value of the aquifer including:

(i) Current and future uses;

(ii) Proximity and withdrawal rate of users;

(iii) Ground-water quantity and quality;

(iv) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituent;

(v) The hydrogeologic characteristic of the unit and surrounding land;

(vi) Ground-water removal and treatment costs; and

(vii) The cost and availability of alternative water supplies.

(7) Practicable capability of the owner or operator.

(8) Other relevant factors.

(e) The Director of an approved State may determine that remediation of a release of an appendix II (appendix II of 40 CFR part 258) constituent from the unit is not necessary if the owner or operator demonstrates to the Director of the approved state that:

(1) The ground-water is additionally contaminated by substances that have originated from a source other than the unit and those substances are present in concentrations such that cleanup of the release from the unit would provide no significant reduction in risk to actual or potential receptors; or

(2) The constituent(s) is present in ground water that:

(i) Is not currently or reasonably expected to be a source of drinking water; and

(ii) Is not hydraulically connected with waters to which the hazardous constituents are migrating or are likely to migrate in a concentration(s) that would exceed the ground-water protection standards established under §257.25 (h) or (i); or

(3) Remediation of the release(s) is technically impracticable; or

(4) Remediation results in unacceptable cross-media impacts.

(f) A determination by the Director of an approved State pursuant to paragraph (e) of this section shall not affect the authority of the State to require the owner or operator to undertake source control measures or other measures that may be necessary to eliminate or minimize further releases to the ground-water, to prevent exposure to the ground-water, or to remediate the ground-water to concentrations that are technically practicable and significantly reduce threats to human health or the environment.

EFFECTIVE DATE NOTE: At 61 FR 34276, July 1, 1996, §257.27 was added. This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

**§ 257.28 Implementation of the corrective action program.**

(a) Based on the schedule established under § 257.27(d) for initiation and completion of remedial activities the owner/operator must:

(1) Establish and implement a corrective action ground-water monitoring program that:

(i) At a minimum, meets the requirements of an assessment monitoring program under § 257.25;

(ii) Indicates the effectiveness of the corrective action remedy; and

(iii) Demonstrates compliance with ground-water protection standard pursuant to paragraph (e) of this section.

(2) Implement the corrective action remedy selected under § 257.27; and

(3) Take any interim measures necessary to ensure the protection of human health and the environment. Interim measures should, to the greatest extent practicable, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to § 257.27. The following factors must be considered by an owner or operator in determining whether interim measures are necessary:

(i) Time required to develop and implement a final remedy;

(ii) Actual or potential exposure of nearby populations or environmental receptors to hazardous constituents;

(iii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

(iv) Further degradation of the ground-water that may occur if remedial action is not initiated expeditiously;

(v) Weather conditions that may cause hazardous constituents to migrate or be released;

(vi) Risks of fire or explosion, or potential for exposure to hazardous constituents as a result of an accident or failure of a container or handling system; and

(vii) Other situations that may pose threats to human health and the environment.

(b) An owner or operator may determine, based on information developed after implementation of the remedy has begun or other information, that compliance with requirements of § 257.27(b) are not being achieved through the remedy selected. In such cases, the owner or operator must implement other methods or techniques that could practicably achieve compliance with the requirements, unless the owner or operator makes the determination under § 257.28(c).

(c) If the owner or operator determines that compliance with requirements under § 257.27(b) cannot be practically achieved with any currently available methods, the owner or operator must:

(1) Obtain certification of a qualified ground-water scientist or approval by the Director of an approved State that compliance with requirements under § 257.27(b) cannot be practically achieved with any currently available methods;

(2) Implement alternate measures to control exposure of humans or the environment to residual contamination, as necessary to protect human health and the environment; and

(3) Implement alternate measures for control of the sources of contamination, or for removal or decontamination of equipment, units, devices, or structures that are:

(i) Technically practicable; and

(ii) Consistent with the overall objective of the remedy.

(4) Notify the State Director within 14 days that a report justifying the alternative measures prior to implementing the alternative measures has been placed in the operating record.

(d) All solid wastes that are managed pursuant to a remedy required under § 257.27, or an interim measure required under § 257.28(a)(3), shall be managed in a manner:

(1) That is protective of human health and the environment; and

(2) That complies with applicable RCRA requirements.

(e) Remedies selected pursuant to § 257.27 shall be considered complete when:

(1) The owner or operator complies with the ground-water protection standards established under §§ 257.25 (h) or (i) at all points within the plume of contamination that lie beyond the ground-water monitoring well system established under § 257.22(a).

(2) Compliance with the ground-water protection standards established under §§257.25 (h) or (i) has been achieved by demonstrating that concentrations of appendix II (appendix II of Part 258) constituents have not exceeded the ground-water protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in §257.23 (g) and (h). The Director of an approved State may specify an alternative length of time during which the owner or operator must demonstrate that concentrations of appendix II (appendix II of 40 CFR part 258) constituents have not exceeded the ground-water protection standard(s) taking into consideration:

(i) Extent and concentration of the release(s);

(ii) Behavior characteristics of the hazardous constituents in the ground-water;

(iii) Accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that may affect the accuracy; and

(iv) Characteristics of the ground-water.

(3) All actions required to complete the remedy have been satisfied.

(f) Upon completion of the remedy, the owner or operator must notify the State Director within 14 days that a certification that the remedy has been completed in compliance with the requirements of §257.28(e) has been placed in the operating record. The certification must be signed by the owner or operator and by a qualified ground-water scientist or approved by the Director of an approved State.

### §257.29 [Reserved]

RECORDKEEPING REQUIREMENTS

### §257.30 Recordkeeping requirements.

(a) The owner/operator of a non-municipal non-hazardous waste disposal unit must record and retain near the facility in an operating record or in an alternative location approved by the Director of an approved State the following information as it becomes available:

(1) Any location restriction demonstration required under §§257.7 through 257.12; and

(2) Any demonstration, certification, finding, monitoring, testing, or analytical data required in §§257.21 through 257.28.

(b) The owner/operator must notify the State Director when the documents from paragraph (a) of this section have been placed or added to the operating record, and all information contained in the operating record must be furnished upon request to the State Director or be made available at all reasonable times for inspection by the State Director.

(c) The Director of an approved State can set alternative schedules for recordkeeping and notification requirements as specified in paragraphs (a) and (b) of this section, except for the notification requirements in §257.25(g)(1)(iii).

## APPENDIX I TO PART 257—MAXIMUM CONTAMINANT LEVELS (MCLS)

MAXIMUM CONTAMINANT LEVELS (MCLS) PROMULGATED UNDER THE SAFE DRINKING WATER ACT

| Chemical | CAS No. | MCL (mg/l) |
|---|---|---|
| Arsenic | 7440–38–2 | 0.05 |
| Barium | 7440–39–3 | 1.0 |
| Benzene | 71–343–2 | 0.005 |
| Cadmium | 7440–43–9 | 0.01 |
| Carbon tetrachloride | 56–23–5 | 0.005 |
| Chromium (hexavalent) | 7440–47–3 | 0.05 |
| 2,4-Dichlorophenoxy acetic acid | 94–75–7 | 0.1 |
| 1,4-Dichlorobenzene | 106–46–7 | 0.075 |
| 1,2-Dichloroethane | 107–06–2 | 0.005 |
| 1,1-Dichloroethylene | 75–35–4 | 0.007 |
| Endrin | 75–20–8 | 0.0002 |
| Fluoride | 7 | 4.0 |
| Lindane | 58–89–9 | 0.004 |
| Lead | 7439–92–1 | 0.05 |
| Mercury | 7439–97–6 | 0.002 |
| Methoxychlor | 72–43–5 | 0.1 |
| Nitrate | | 10.0 |
| Selenium | 7782–49–2 | 0.01 |
| Silver | 7440–22–4 | 0.05 |
| Toxaphene | 8001–35–2 | 0.005 |
| 1,1,1-Trichloroethane | 71–55–6 | 0.2 |
| Trichloroethylene | 79–01–6 | 0.005 |
| 2,4,5-Trichlorophenoxy acetic acid | 93–76–5 | 0.01 |
| Vinyl chloride | 75–01–4 | 0.002 |

[56 FR 51016, Oct. 9, 1991]

APPENDIX II TO PART 257

*A. Processes to Significantly Reduce Pathogens*

*Aerobic digestion:* The process is conducted by agitating sludge with air or oxygen to maintain aerobic conditions at residence times ranging from 60 days at 15 °C to 40 days at 20 °C, with a volatile solids reduction of at least 38 percent.

*Air Drying:* Liquid sludge is allowed to drain and/or dry on under-drained sand beds, or paved or unpaved basins in which the sludge is at a depth of nine inches. A minimum of three months is needed, two months of which temperatures average on a daily basis above 0 °C.

*Anaerobic digestion:* The process is conducted in the absence of air at residence times ranging from 60 days at 20 °C to 15 days at 35 to 55 °C, with a volatile solids reduction of at least 38 percent.

*Composting:* Using the within-vessel, static aerated pile or windrow composting methods, the solid waste is maintained at minimum operating conditions of 40 °C for 5 days. For four hours during this period the temperature exceeds 55 °C.

*Lime Stabilization:* Sufficient lime is added to produce a pH of 12 after 2 hours of contact.

*Other methods:* Other methods or operating conditions may be acceptable if pathogens and vector attraction of the waste (volatile solids) are reduced to an extent equivalent to the reduction achieved by any of the above methods.

*B. Processes to Further Reduce Pathogens*

*Composting:* Using the within-vessel composting method, the solid waste is maintained at operating conditions of 55 °C or greater for three days. Using the static aerated pile composting method, the solid waste is maintained at operating conditions of 55 °C or greater for three days. Using the windrow composting method, the solid waste attains a temperature of 55 °C or greater for at least 15 days during the composting period. Also, during the high temperature period, there will be a minimum of five turnings of the windrow.

*Heat drying:* Dewatered sludge cake is dried by direct or indirect contact with hot gases, and moisture content is reduced to 10 percent or lower. Sludge particles reach temperatures well in excess of 80 °C, or the wet bulb temperature of the gas stream in contact with the sludge at the point where it leaves the dryer is in excess of 80 °C.

*Heat treatment:* Liquid sludge is heated to temperatures of 180 °C for 30 minutes.

*Thermophilic Aerobic Digestion:* Liquid sludge is agitated with air or oxygen to maintain aerobic conditions at residence times of 10 days at 55–60 °C, with a volatile solids reduction of at least 38 percent.

*Other methods:* Other methods or operating conditions may be acceptable if pathogens and vector attraction of the waste (volatile solids) are reduced to an extent equivalent to the reduction achieved by any of the above methods.

Any of the processes listed below, if added to the processes described in Section A above, further reduce pathogens. Because the processes listed below, on their own, do not reduce the attraction of disease vectors, they are only add-on in nature.

*Beta ray irradiation:* Sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20 °C).

*Gamma ray irradiation:* Sludge is irradiated with gamma rays from certain isotopes, such as $^{60}$Cobalt and $^{137}$Cesium, at dosages of at least 1.0 megarad at room temperature (ca. 20 °C).

*Pasteurization:* Sludge is maintained for at least 30 minutes at a minimum temperature of 70 °C.

*Other methods:* Other methods or operating conditions may be acceptable if pathogens are reduced to an extent equivalent to the reduction achieved by any of the above add-on methods.

# PART 258—CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS

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APPENDIX I TO PART 258—CONSTITUENTS FOR DETECTION MONITORING
APPENDIX II TO PART 258—LIST OF HAZARDOUS AND ORGANIC CONSTITUENTS

AUTHORITY: 33 U.S.C. 1345(d) and (e); 42 U.S.C. 6902(a), 6907, 6912(a), 6944, 6945(c) and 6949a(c).

SOURCE: 56 FR 51016, Oct. 9, 1991, unless otherwise noted.

## Subpart A—General

### §258.1 Purpose, scope, and applicability.

(a) The purpose of this part is to establish minimum national criteria under the Resource Conservation and Recovery Act (RCRA or the Act), as amended, for all municipal solid waste landfill (MSWLF) units and under the Clean Water Act, as amended, for municipal solid waste landfills that are used to dispose of sewage sludge. These minimum national criteria ensure the protection of human health and the environment.

(b) These Criteria apply to owners and operators of new MSWLF units, existing MSWLF units, and lateral expansions, except as otherwise specifically provided in this part; all other solid waste disposal facilities and practices that are not regulated under subtitle C of RCRA are subject to the criteria contained in part 257 of this chapter.

(c) These Criteria do not apply to municipal solid waste landfill units that do not receive waste after October 9, 1991.

(d)(1) MSWLF units that meet the conditions of §258.1(e)(2) and receive waste after October 9, 1991 but stop receiving waste before April 9, 1994, are exempt from all the requirements of this part 258, except the final cover requirement specified in §258.60(a). The final cover must be installed by October 9, 1994. Owners or operators of MSWLF units described in this paragraph that fail to complete cover installation by October 9, 1994 will be subject to all the requirements of this part 258, unless otherwise specified.

(2) MSWLF units that meet the conditions of §258.1(e)(3) and receive waste after October 9, 1991 but stop receiving waste before the date designated by the state pursuant to §258.1(e)(3), are exempt from all the requirements of this part 258, except the final cover requirement specified in §258.60(a). The final cover must be installed within one year after the date designated by the state pursuant to §258.1(e)(3). Owners or operators of MSWLF units described in this paragraph that fail to complete cover installation within one year after the date designated by the state pursuant to §258.1(e)(3) will be subject to all the requirements of this part 258, unless otherwise specified.

(3) MSWLF units that meet the conditions of paragraph (f)(1) of this section and receive waste after October 9, 1991 but stop receiving waste before October 9, 1997, are exempt from all the requirements of this part 258, except the final cover requirement specified in §258.60(a). The final cover must be installed by October 9, 1998. Owners or operators of MSWLF units described in this paragraph that fail to complete cover installation by October 9, 1998 will be subject to all the requirements

of this part 258, unless otherwise specified.

(4) MSWLF units that do not meet the conditions of § 258.1 (e)(2), (e)(3), or (f) and receive waste after October 9, 1991 but stop receiving waste before October 9, 1993, are exempt from all the requirements this part 258, except the final cover requirement specified in § 258.60(a). The final cover must be installed by October 9, 1994. Owners or operators of MSWLF units described in this paragraph that fail to complete cover installation by October 9, 1994 will be subject to all the requirements of this part 258, unless otherwise specified.

(e)(1) The compliance date for all requirements of this part 258, unless otherwise specified, is October 9, 1993 for all MSWLF units that receive waste on or after October 9, 1993, except those units that qualify for an extension under (e)(2), (3), or (4) of this section.

(2) The compliance date for all requirements of this part 258, unless otherwise specified, is April 9, 1994 for an existing MSWLF unit or a lateral expansion of an existing MSWLF unit that meets the following conditions:

(i) The MSWLF unit disposed of 100 tons per day or less of solid waste during a representative period prior to October 9, 1993;

(ii) The unit does not dispose of more than an average of 100 TPD of solid waste each month between October 9, 1993 and April 9, 1994;

(iii) The MSWLF unit is located in a state that has submitted an application for permit program approval to EPA by October 9, 1993, is located in the state of Iowa, or is located on Indian Lands or Indian Country; and

(iv) The MSWLF unit is not on the National Priorities List (NPL) as found in appendix B to 40 CFR part 300.

(3) The compliance date for all requirements of this part 258, unless otherwise specified, for an existing MSWLF unit or lateral expansion of an existing MSWLF unit receiving flood-related waste from federally-designated areas within the major disasters declared for the states of Iowa, Illinois, Minnesota, Wisconsin, Missouri, Nebraska, Kansas, North Dakota, and South Dakota by the President during the summer of 1993 pursuant to 42 U.S.C. 5121 *et seq.*, shall be designated by the state in which the MSWLF unit is located in accordance with the following:

(i) The MSWLF unit may continue to accept waste up to April 9, 1994 without being subject to part 258, if the state in which the MSWLF unit is located determines that the MSWLF unit is needed to receive flood-related waste from a federally-designated disaster area as specified in (e)(3) of this section.

(ii) The MSWLF unit that receives an extension under paragraph (e)(3)(i) of this section may continue to accept waste up to an additional six months beyond April 9, 1994 without being subject to part 258, if the state in which the MSWLF unit is located determines that the MSWLF unit is needed to receive flood-related waste from a federally-designated disaster area specified in (e)(3) of this section.

(iii) In no case shall a MSWLF unit receiving an extension under paragraph (e)(3) (i) or (ii) of this section accept waste beyond October 9, 1994 without being subject to part 258.

(4) For a MSWLF unit that meets the conditions for the exemption in paragraph (f)(1) of this section, the compliance date for all applicable requirements of part 258, unless otherwise specified, is October 9, 1997.

(f)(1) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that dispose of less than twenty (20) tons of municipal solid waste daily, based on an annual average, are exempt from subparts D and E of this part, so long as there is no evidence of ground-water contamination from the MSWLF unit, and the MSWLF unit serves:

(i) A community that experiences an annual interruption of at least three consecutive months of surface transportation that prevents access to a regional waste management facility, or

(ii) A community that has no practicable waste management alternative and the landfill unit is located in an area that annually receives less than or equal to 25 inches of precipitation.

(2) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that meet the criteria in paragraph (f)(1)(i) or (f)(1)(ii)

of this section must place in the operating record information demonstrating this.

(3) If the owner or operator of a new MSWLF unit, existing MSWLF unit, or lateral expansion has knowledge of ground-water contamination resulting from the unit that has asserted the exemption in paragraph (f)(1)(i) or (f)(1)(ii) of this section, the owner or operator must notify the state Director of such contamination and, thereafter, comply with subparts D and E of this part.

(g) Municipal solid waste landfill units failing to satisfy these criteria are considered open dumps for purposes of State solid waste management planning under RCRA.

(h) Municipal solid waste landfill units failing to satisfy these criteria constitute open dumps, which are prohibited under section 4005 of RCRA.

(i) Municipal solid waste landfill units containing sewage sludge and failing to satisfy these Criteria violate sections 309 and 405(e) of the Clean Water Act.

(j) Subpart G of this part is effective April 9, 1995, except for MSWLF units meeting the requirements of paragraph (f)(1) of this section, in which case the effective date of subpart G is October 9, 1995.

[56 FR 51016, Oct. 9, 1991, as amended at 58 FR 51546, Oct. 1, 1993; 60 FR 52342, Oct. 6, 1995; 61 FR 50413, Sept. 25, 1996]

### §258.2 Definitions.

Unless otherwise noted, all terms contained in this part are defined by their plain meaning. This section contains definitions for terms that appear throughout this part; additional definitions appear in the specific sections to which they apply.

*Active life* means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities in accordance with §258.60 of this part.

*Active portion* means that part of a facility or unit that has received or is receiving wastes and that has not been closed in accordance with §258.60 of this part.

*Aquifer* means a geological formation, group of formations, or porton of a formation capable of yielding significant quantities of ground water to wells or springs.

*Commercial solid waste* means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

*Director of an approved State* means the chief administrative officer of a State agency responsible for implementing the State municipal solid waste permit program or other system of prior approval that is deemed to be adequate by EPA under regulations published pursuant to sections 2002 and 4005 of RCRA.

*Existing MSWLF unit* means any municipal solid waste landfill unit that is receiving solid waste as of the appropriate dates specified in §258.1(e). Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management.

*Facility* means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

*Ground water* means water below the land surface in a zone of saturation.

*Household waste* means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

*Indian lands* or *Indian country* means:

(1) All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running throughout the reservation;

(2) All dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of the State; and

(3) All Indian allotments, the Indian titles to which have not been extinguished, including rights of way running through the same.

*Indian Tribe* or *Tribe* means any Indian tribe, band, nation, or community

recognized by the Secretary of the Interior and exercising substantial governmental duties and powers on Indian lands.

*Industrial solid waste* means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under subtitle C of RCRA. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

*Lateral expansion* means a horizontal expansion of the waste boundaries of an existing MSWLF unit.

*Leachate* means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

*Municipal solid waste landfill unit* means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under § 257.2. A MSWLF unit also may receive other types of RCRA subtitle D wastes, such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste and industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion.

*New MSWLF unit* means any municipal solid waste landfill unit that has not received waste prior to October 9, 1993, or prior to October 9, 1997 if the MSWLF unit meets the conditions of § 258.1(f)(1).

*Open burning* means the combustion of solid waste without:

(1) Control of combustion air to maintain adequate temperature for efficient combustion,

(2) Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and

(3) Control of the emission of the combustion products.

*Operator* means the person(s) responsible for the overall operation of a facility or part of a facility.

*Owner* means the person(s) who owns a facility or part of a facility.

*Run-off* means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

*Run-on* means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

*Saturated zone* means that part of the earth's crust in which all voids are filled with water.

*Sludge* means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

*Solid waste* means any garbage, or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

*State* means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

*State Director* means the chief administrative officer of the State agency responsible for implementing the State

municipal solid waste permit program or other system of prior approval.

*Uppermost aquifer* means the geologic formation nearest the natural ground surface that is an aquifer, as well as, lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

*Waste management unit boundary* means a vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer.

[56 FR 51016, Oct. 9, 1991; 57 FR 28627, June 26, 1992, as amended at 58 FR 51547, Oct. 1, 1993; 60 FR 52342, Oct. 6, 1995]

### § 258.3 Consideration of other Federal laws.

The owner or operator of a municipal solid waste landfill unit must comply with any other applicable Federal rules, laws, regulations, or other requirements.

### §§ 258.4–258.9 [Reserved]

## Subpart B—Location Restrictions

### § 258.10 Airport safety.

(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that are located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF unit does not pose a bird hazard to aircraft.

(b) Owners or operators proposing to site new MSWLF units and lateral expansions within a five-mile radius of any airport runway end used by turbojet or piston-type aircraft must notify the affected airport and the Federal Aviation Administration (FAA).

(c) The owner or operator must place the demonstration in paragraph (a) of this section in the operating record and notify the State Director that it has been placed in the operating record.

(d) For purposes of this section:

(1) *Airport* means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(2) *Bird hazard* means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

### § 258.11 Floodplains.

(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in 100-year floodplains must demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record.

(b) For purposes of this section:

(1) *Floodplain* means the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.

(2) *100-year flood* means a flood that has a 1-percent or greater chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

(3) *Washout* means the carrying away of solid waste by waters of the base flood.

### § 258.12 Wetlands.

(a) New MSWLF units and lateral expansions shall not be located in wetlands, unless the owner or operator can make the following demonstrations to the Director of an approved State:

(1) Where applicable under section 404 of the Clean Water Act or applicable State wetlands laws, the presumption that practicable alternative to the proposed landfill is available which does not involve wetlands is clearly rebutted;

(2) The construction and operation of the MSWLF unit will not:

(i) Cause or contribute to violations of any applicable State water quality standard,

(ii) Violate any applicable toxic effluent standard or prohibition under Section 307 of the Clean Water Act,

(iii) Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973, and

(iv) Violate any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary;

(3) The MSWLF unit will not cause or contribute to significant degradation of wetlands. The owner or operator must demonstrate the integrity of the MSWLF unit and its ability to protect ecological resources by addressing the following factors:

(i) Erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the MSWLF unit;

(ii) Erosion, stability, and migration potential of dredged and fill materials used to support the MSWLF unit;

(iii) The volume and chemical nature of the waste managed in the MSWLF unit;

(iv) Impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(v) The potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

(vi) Any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected.

(4) To the extent required under section 404 of the Clean Water Act or applicable State wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent practicable as required by paragraph (a)(1) of this section, then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands); and

(5) Sufficient information is available to make a reasonable determination with respect to these demonstrations.

(b) For purposes of this section, *wetlands* means those areas that are defined in 40 CFR 232.2(r).

### § 258.13 Fault areas.

(a) New MSWLF units and lateral expansions shall not be located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the Director of an approved State that an alternative setback distance of less than 200 feet (60 meters) will prevent damage to the structural integrity of the MSWLF unit and will be protective of human health and the environment.

(b) For the purposes of this section:

(1) *Fault* means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

(2) *Displacement* means the relative movement of any two sides of a fault measured in any direction.

(3) *Holocene* means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.

### § 258.14 Seismic impact zones.

(a) New MSWLF units and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates to the Director of an approved State/Tribe that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record.

(b) For the purposes of this section:

(1) *Seismic impact zone* means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10g in 250 years.

(2) *Maximum horizontal acceleration in lithified earth material* means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that

the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

(3) *Lithified earth material* means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

[56 FR 51016, Oct. 9, 1991; 57 FR 28627, June 26, 1992]

### § 258.15 Unstable areas.

(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in an unstable area must demonstrate that engineering measures have been incorporated into the MSWLF unit's design to ensure that the integrity of the structural components of the MSWLF unit will not be disrupted. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record. The owner or operator must consider the following factors, at a minimum, when determining whether an area is unstable:

(1) On-site or local soil conditions that may result in significant differential settling;

(2) On-site or local geologic or geomorphologic features; and

(3) On-site or local human-made features or events (both surface and subsurface).

(b) For purposes of this section:

(1) *Unstable area* means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and Karst terranes.

(2) *Structural components* means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment.

(3) *Poor foundation conditions* means those areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of an MSWLF unit.

(4) *Areas susceptible to mass movement* means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the MSWLF unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluction, block sliding, and rock fall.

(5) *Karst terranes* means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

### § 258.16 Closure of existing municipal solid waste landfill units.

(a) Existing MSWLF units that cannot make the demonstration specified in § 258.10(a), pertaining to airports, § 258.11(a), pertaining to floodplains, or § 258.15(a), pertaining to unstable areas, must close by October 9, 1996, in accordance with § 258.60 of this part and conduct post-closure activities in accordance with § 258.61 of this part.

(b) The deadline for closure required by paragraph (a) of this section may be extended up to two years if the owner or operator demonstrates to the Director of an approved State that:

(1) There is no available alternative disposal capacity;

(2) There is no immediate threat to human health and the environment.

NOTE TO SUBPART B: Owners or operators of MSWLFs should be aware that a State in which their landfill is located or is to be located, may have adopted a state wellhead protection program in accordance with section 1428 of the Safe Drinking Water Act. Such state wellhead protection programs may impose additional requirements on owners or operators of MSWLFs than those set forth in this part.

**§§ 258.17–258.19 [Reserved]**

## Subpart C—Operating Criteria

### § 258.20 Procedures for excluding the receipt of hazardous waste.

(a) Owners or operators of all MSWLF units must implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes as defined in part 261 of this chapter and polychlorinated biphenyls (PCB) wastes as defined in part 761 of this chapter. This program must include, at a minimum:

(1) Random inspections of incoming loads unless the owner or operator takes other steps to ensure that incoming loads do not contain regulated hazardous wastes or PCB wastes;

(2) Records of any inspections;

(3) Training of facility personnel to recognize regulated hazardous waste and PCB wastes; and

(4) Notification of State Director of authorized States under Subtitle C of RCRA or the EPA Regional Administrator if in an unauthorized State if a regulated hazardous waste or PCB waste is discovered at the facility.

(b) For purposes of this section, *regulated hazardous waste* means a solid waste that is a hazardous waste, as defined in 40 CFR 261.3, that is not excluded from regulation as a hazardous waste under 40 CFR 261.4(b) or was not generated by a conditionally exempt small quantity generator as defined in § 261.5 of this chapter.

### § 258.21 Cover material requirements.

(a) Except as provided in paragraph (b) of this section, the owners or operators of all MSWLF units must cover disposed solid waste with six inches of earthen material at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.

(b) Alternative materials of an alternative thickness (other than at least six inches of earthen material) may be approved by the Director of an approved State if the owner or operator demonstrates that the alternative material and thickness control disease vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment.

(c) The Director of an approved State may grant a temporary waiver from the requirement of paragraph (a) and (b) of this section if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical.

(d) The Director of an Approved State may establish alternative frequencies for cover requirements in paragraphs (a) and (b) of this section, after public review and comment, for any owners or operators of MSWLFs that dispose of 20 tons of municipal solid waste per day or less, based on an annual average. Any alternative requirements established under this paragraph must:

(1) Consider the unique characteristics of small communities;

(2) Take into account climatic and hydrogeologic conditions; and

(3) Be protective of human health and the environment.

[56 FR 51016, Oct. 9, 1991, as amended at 62 FR 40713, July 29, 1997]

### § 258.22 Disease vector control.

(a) Owners or operators of all MSWLF units must prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment.

(b) For purposes of this section, *disease vectors* means any rodents, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans.

### § 258.23 Explosive gases control.

(a) Owners or operators of all MSWLF units must ensure that:

(1) The concentration of methane gas generated by the facility does not exceed 25 percent of the lower explosive

limit for methane in facility structures (excluding gas control or recovery system components); and

(2) The concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary.

(b) Owners or operators of all MSWLF units must implement a routine methane monitoring program to ensure that the standards of paragraph (a) of this section are met.

(1) The type and frequency of monitoring must be determined based on the following factors:

(i) Soil conditions;

(ii) The hydrogeologic conditions surrounding the facility;

(iii) The hydraulic conditions surrounding the facility; and

(iv) The location of facility structures and property boundaries.

(2) The minimum frequency of monitoring shall be quarterly.

(c) If methane gas levels exceeding the limits specified in paragraph (a) of this section are detected, the owner or operator must:

(1) Immediately take all necessary steps to ensure protection of human health and notify the State Director;

(2) Within seven days of detection, place in the operating record the methane gas levels detected and a description of the steps taken to protect human health; and

(3) Within 60 days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, and notify the State Director that the plan has been implemented. The plan shall describe the nature and extent of the problem and the proposed remedy.

(4) The Director of an approved State may establish alternative schedules for demonstrating compliance with paragraphs (c) (2) and (3) of this section.

(d) For purposes of this section, *lower explosive limit* means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25°C and atmospheric pressure.

(e) The Director of an approved State may establish alternative frequencies for the monitoring requirement of paragraph (b)(2) of this section, after public review and comment, for any owners or operators of MSWLFs that dispose of 20 tons of municipal solid waste per day or less, based on an annual average. Any alternative monitoring frequencies established under this paragraph must:

(1) Consider the unique characteristics of small communities;

(2) Take into account climatic and hydrogeologic conditions; and

(3) Be protective of human health and the environment.

[56 FR 51016, Oct. 9, 1991, as amended at 62 FR 40713, July 29, 1997]

### § 258.24 Air criteria.

(a) Owners or operators of all MSWLFs must ensure that the units not violate any applicable requirements developed under a State Implementation Plan (SIP) approved or promulgated by the Administrator pursuant to section 110 of the Clean Air Act, as amended.

(b) Open burning of solid waste, except for the infrequent burning of agricultural wastes, silvicultural wastes, landclearing debris, diseased trees, or debris from emergency cleanup operations, is prohibited at all MSWLF units.

### § 258.25 Access requirements.

Owners or operators of all MSWLF units must control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment.

### § 258.26 Run-on/run-off control systems.

(a) Owners or operators of all MSWLF units must design, construct, and maintain:

(1) A run-on control system to prevent flow onto the active portion of the landfill during the peak discharge from a 25-year storm;

(2) A run-off control system from the active portion of the landfill to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(b) Run-off from the active portion of the landfill unit must be handled in accordance with § 258.27(a) of this part.

[56 FR 51016, Oct. 9, 1991; 57 FR 28627, June 26, 1992]

### § 258.27 Surface water requirements.

MSWLF units shall not:

(a) Cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to section 402.

(b) Cause the discharge of a nonpoint source of pollution to waters of the United States, including wetlands, that violates any requirement of an areawide or State-wide water quality management plan that has been approved under section 208 or 319 of the Clean Water Act, as amended.

### § 258.28 Liquids restrictions.

(a) Bulk or noncontainerized liquid waste may not be placed in MSWLF units unless:

(1) The waste is household waste other than septic waste; or

(2) The waste is leachate or gas condensate derived from the MSWLF unit and the MSWLF unit, whether it is a new or existing MSWLF, or lateral expansion, is designed with a composite liner and leachate collection system as described in § 258.40(a)(2) of this part. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record.

(b) Containers holding liquid waste may not be placed in a MSWLF unit unless:

(1) The container is a small container similar in size to that normally found in household waste;

(2) The container is designed to hold liquids for use other than storage; or

(3) The waste is household waste.

(c) For purposes of this section:

(1) *Liquid waste* means any waste material that is determined to contain ''free liquids'' as defined by Method 9095 (Paint Filter Liquids Test), as described in ''Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods'' (EPA Pub. No. SW–846).

(2) *Gas condensate* means the liquid generated as a result of gas recovery process(es) at the MSWLF unit.

### § 258.29 Recordkeeping requirements.

(a) The owner or operator of a MSWLF unit must record and retain near the facility in an operating record or in an alternative location approved by the Director of an approved State the following information as it becomes available:

(1) Any location restriction demonstration required under subpart B of this part;

(2) Inspection records, training procedures, and notification procedures required in § 258.20 of this part;

(3) Gas monitoring results from monitoring and any remediation plans required by § 258.23 of this part;

(4) Any MSWLF unit design documentation for placement of leachate or gas condensate in a MSWLF unit as required under § 258.28(a)(2) of this part;

(5) Any demonstration, certification, finding, monitoring, testing, or analytical data required by subpart E of this part;

(6) Closure and post-closure care plans and any monitoring, testing, or analytical data as required by §§ 258.60 and 258.61 of this part; and

(7) Any cost estimates and financial assurance documentation required by subpart G of this part.

(8) Any information demonstrating compliance with small community exemption as required by § 258.1(f)(2).

(b) The owner/operator must notify the State Director when the documents from paragraph (a) of this section have been placed or added to the operating record, and all information contained in the operating record must be furnished upon request to the State Director or be made available at all reasonable times for inspection by the State Director.

(c) The Director of an approved State can set alternative schedules for recordkeeping and notification requirements as specified in paragraphs (a) and (b) of this section, except for the notification requirements in § 258.10(b) and § 258.55(g)(1)(iii).

**§§258.30–258.39 [Reserved]**

## Subpart D—Design Criteria

### §258.40 Design criteria.

(a) New MSWLF units and lateral expansions shall be constructed:

(1) In accordance with a design approved by the Director of an approved State or as specified in §258.40(e) for unapproved States. The design must ensure that the concentration values listed in Table 1 of this section will not be exceeded in the uppermost aquifer at the relevant point of compliance, as specified by the Director of an approved State under paragraph (d) of this section, or

(2) With a composite liner, as defined in paragraph (b) of this section and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner.

(b) For purposes of this section, *composite liner* means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than $1\times10^{-7}$ cm/sec. FML components consisting of high density polyethylene (HDPE) shall be at least 60-mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component.

(c) When approving a design that complies with paragraph (a)(1) of this section, the Director of an approved State shall consider at least the following factors:

(1) The hydrogeologic characteristics of the facility and surrounding land;

(2) The climatic factors of the area; and

(3) The volume and physical and chemical characteristics of the leachate.

(d) The relevant point of compliance specified by the Director of an approved State shall be no more than 150 meters from the waste management unit boundary and shall be located on land owned by the owner of the MSWLF unit. In determining the relevant point of compliance State Director shall consider at least the following factors:

(1) The hydrogeologic characteristics of the facility and surrounding land;

(2) The volume and physical and chemical characteristics of the leachate;

(3) The quantity, quality, and direction, of flow of ground water;

(4) The proximity and withdrawal rate of the ground-water users;

(5) The availability of alternative drinking water supplies;

(6) The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water, and whether the ground water is currently used or reasonably expected to be used for drinking water;

(7) Public health, safety, and welfare effects; and

(8) Practicable capability of the owner or operator.

(e) If EPA does not promulgate a rule establishing the procedures and requirements for State compliance with RCRA section 4005(c)(1)(B) by October 9, 1993, owners and operators in unapproved States may utilize a design meeting the performance standard in §258.40(a)(1) if the following conditions are met:

(1) The State determines the design meets the performance standard in §258.40(a)(1);

(2) The State petitions EPA to review its determination; and

(3) EPA approves the State determination or does not disapprove the determination within 30 days.

NOTE TO SUBPART D: 40 CFR part 239 is reserved to establish the procedures and requirements for State compliance with RCRA section 4005(c)(1)(B).

TABLE 1

| Chemical | MCL (mg/l) |
|---|---|
| Arsenic | 0.05 |
| Barium | 1.0 |
| Benzene | 0.005 |
| Cadmium | 0.01 |
| Carbon tetrachloride | 0.005 |
| Chromium (hexavalent) | 0.05 |
| 2,4-Dichlorophenoxy acetic acid | 0.1 |
| 1,4-Dichlorobenzene | 0.075 |
| 1,2-Dichloroethane | 0.005 |
| 1,1-Dichloroethylene | 0.007 |
| Endrin | 0.0002 |
| Fluoride | 4 |

TABLE 1—Continued

| Chemical | MCL (mg/l) |
|---|---|
| Lindane | 0.004 |
| Lead | 0.05 |
| Mercury | 0.002 |
| Methoxychlor | 0.1 |
| Nitrate | 10 |
| Selenium | 0.01 |
| Silver | 0.05 |
| Toxaphene | 0.005 |
| 1,1,1-Trichloromethane | 0.2 |
| Trichloroethylene | 0.005 |
| 2,4,5-Trichlorophenoxy acetic acid | 0.01 |
| Vinyl Chloride | 0.002 |

**§§ 258.41–258.49 [Reserved]**

## Subpart E—Ground-Water Monitoring and Corrective Action

### § 258.50 Applicability.

(a) The requirements in this part apply to MSWLF units, except as provided in paragraph (b) of this section.

(b) Ground-water monitoring requirements under § 258.51 through § 258.55 of this part may be suspended by the Director of an approved State for a MSWLF unit if the owner or operator can demonstrate that there is no potential for migration of hazardous constituents from that MSWLF unit to the uppermost aquifer (as defined in § 258.2) during the active life of the unit and the post-closure care period. This demonstration must be certified by a qualified ground-water scientist and approved by the Director of an approved State, and must be based upon:

(1) Site-specific field collected measurements, sampling, and analysis of physical, chemical, and biological processes affecting contaminant fate and transport, and

(2) Contaminant fate and transport predictions that maximize contaminant migration and consider impacts on human health and environment.

(c) Owners and operators of MSWLF units, except those meeting the conditions of § 258.1(f), must comply with the ground-water monitoring requirements of this part according to the following schedule unless an alternative schedule is specified under paragraph (d) of this section:

(1) Existing MSWLF units and lateral expansions less than one mile from a drinking water intake (surface or subsurface) must be in compliance with the ground-water monitoring requirements specified in §§ 258.51–258.55 by October 9, 1994;

(2) Existing MSWLF units and lateral expansions greater than one mile but less than two miles from a drinking water intake (surface or subsurface) must be in compliance with the ground-water monitoring requirements specified in §§ 258.51–258.55 by October 9, 1995;

(3) Existing MSWLF units and lateral expansions greater than two miles from a drinking water intake (surface or subsurface) must be in compliance with the ground-water monitoring requirements specified in §§ 258.51–258.55 by October 9, 1996.

(4) New MSWLF units must be in compliance with the ground-water monitoring requirements specified in §§ 258.51–258.55 before waste can be placed in the unit.

(d) The Director of an approved State may specify an alternative schedule for the owners or operators of existing MSWLF units and lateral expansions to comply with the ground-water monitoring requirements specified in §§ 258.51–258.55. This schedule must ensure that 50 percent of all existing MSWLF units are in compliance by October 9, 1994 and all existing MSWLF units are in compliance by October 9, 1996. In setting the compliance schedule, the Director of an approved State must consider potential risks posed by the unit to human health and the environment. The following factors should be considered in determining potential risk:

(1) Proximity of human and environmental receptors;

(2) Design of the MSWLF unit;

(3) Age of the MSWLF unit;

(4) The size of the MSWLF unit; and

(5) Types and quantities of wastes disposed including sewage sludge; and

(6) Resource value of the underlying aquifer, including:

(i) Current and future uses;

(ii) Proximity and withdrawal rate of users; and

(iii) Ground-water quality and quantity.

(e) Owners and operators of all MSWLF units that meet the conditions

of §258.1(f)(1) must comply with all applicable ground-water monitoring requirements of this part by October 9, 1997.

(f) Once established at a MSWLF unit, ground-water monitoring shall be conducted throughout the active life and post-closure care period of that MSWLF unit as specified in §258.61.

(g) For the purposes of this subpart, a *qualified ground-water scientist* is a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by State registration, professional Certifications, or completion of accredited university programs that enable that individual to make sound professional judgements regarding ground-water monitoring, contaminant fate and transport, and corrective-action.

(h) The Director of an approved State may establish alternative schedules for demonstrating compliance with §258.51(d)(2), pertaining to notification of placement of certification in operating record; §258.54(c)(1), pertaining to notification that statistically significant increase (SSI) notice is in operating record; §258.54(c) (2) and (3), pertaining to an assessment monitoring program; §258.55(b), pertaining to sampling and analyzing appendix II constituents; §258.55(d)(1), pertaining to placement of notice (appendix II constituents detected) in record and notification of notice in record; §258.55(d)(2), pertaining to sampling for appendix I and II to this part; §258.55(g), pertaining to notification (and placement of notice in record) of SSI above groundwater protection standard; §§258.55(g)(1)(iv) and 258.56(a), pertaining to assessment of corrective measures; §258.57(a), pertaining to selection of remedy and notification of placement in record; §258.58(c)(4), pertaining to notification of placement in record (alternative corrective action measures); and §258.58(f), pertaining to notification of placement in record (certification of remedy completed).

[56 FR 51016, Oct. 9, 1991; 57 FR 28628, June 26, 1992, as amended at 58 FR 51547, Oct. 1, 1993; 60 FR 52342, Oct. 6, 1995]

**§258.51 Ground-water monitoring systems.**

(a) A ground-water monitoring system must be installed that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield ground-water samples from the uppermost aquifer (as defined in §258.2) that:

(1) Represent the quality of background ground water that has not been affected by leakage from a unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

(i) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; or

(ii) Sampling at other wells will provide an indication of background ground-water quality that is as representative or more representative than that provided by the upgradient wells; and

(2) Represent the quality of ground water passing the relevant point of compliance specified by Director of an approved State under §258.40(d) or at the waste management unit boundary in unapproved States. The down-gradient monitoring system must be installed at the relevant point of compliance specified by the Director of an approved State under §258.40(d) or at the waste management unit boundary in unapproved States that ensures detection of ground-water contamination in the uppermost aquifer. When physical obstacles preclude installation of ground-water monitoring wells at the relevant point of compliance at existing units, the down-gradient monitoring system may be installed at the closest practicable distance hydraulically down-gradient from the relevant point of compliance specified by the Director of an approved State under §258.40 that ensure detection of groundwater contamination in the uppermost aquifer.

(b) The Director of an approved State may approve a multiunit ground-water monitoring system instead of separate ground-water monitoring systems for each MSWLF unit when the facility has several units, provided the multiunit ground-water monitoring system

meets the requirement of § 258.51(a) and will be as protective of human health and the environment as individual monitoring systems for each MSWLF unit, based on the following factors:

(1) Number, spacing, and orientation of the MSWLF units;

(2) Hydrogeologic setting;

(3) Site history;

(4) Engineering design of the MSWLF units, and

(5) Type of waste accepted at the MSWLF units.

(c) Monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of ground-water samples. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the ground water.

(1) The owner or operator must notify the State Director that the design, installation, development, and decommission of any monitoring wells, piezometers and other measurement, sampling, and analytical devices documentation has been placed in the operating record; and

(2) The monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

(d) The number, spacing, and depths of monitoring systems shall be:

(1) Determined based upon site-specific technical information that must include thorough characterization of:

(i) Aquifer thickness, ground-water flow rate, ground-water flow direction including seasonal and temporal fluctuations in ground-water flow; and

(ii) Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer; including, but not limited to: Thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities and effective porosities.

(2) Certified by a qualified ground-water scientist or approved by the Director of an approved State. Within 14 days of this certification, the owner or operator must notify the State Director that the certification has been placed in the operating record.

**§ 258.52 [Reserved]**

**§ 258.53 Ground-water sampling and analysis requirements.**

(a) The ground-water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground-water quality at the background and downgradient wells installed in compliance with § 258.51(a) of this part. The owner or operator must notify the State Director that the sampling and analysis program documentation has been placed in the operating record and the program must include procedures and techniques for:

(1) Sample collection;

(2) Sample preservation and shipment;

(3) Analytical procedures;

(4) Chain of custody control; and

(5) Quality assurance and quality control.

(b) The ground-water monitoring program must include sampling and analytical methods that are appropriate for ground-water sampling and that accurately measure hazardous constituents and other monitoring parameters in ground-water samples. Ground-water samples shall not be field-filtered prior to laboratory analysis.

(c) The sampling procedures and frequency must be protective of human health and the environment.

(d) Ground-water elevations must be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator must determine the rate and direction of ground-water flow each time ground water is sampled. Ground-water elevations in wells which monitor the same waste management area must be measured within a period of time short enough to avoid temporal variations in ground-water flow which could preclude accurate determination of ground-water flow rate and direction.

(e) The owner or operator must establish background ground-water quality in a hydraulically upgradient or background well(s) for each of the monitoring parameters or constituents required in the particular ground-water monitoring program that applies to the MSWLF unit, as determined under § 258.54(a) or § 258.55(a) of this part. Background ground-water quality may be established at wells that are not located hydraulically upgradient from the MSWLF unit if it meets the requirements of § 258.51(a)(1).

(f) The number of samples collected to establish ground-water quality data must be consistent with the appropriate statistical procedures determined pursuant to paragraph (g) of this section. The sampling procedures shall be those specified under § 258.54(b) for detection monitoring, § 258.55 (b) and (d) for assessment monitoring, and § 258.56(b) of corrective action.

(g) The owner or operator must specify in the operating record one of the following statistical methods to be used in evaluating ground-water monitoring data for each hazardous constituent. The statistical test chosen shall be conducted separately for each hazardous constituent in each well.

(1) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

(2) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

(3) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(4) A control chart approach that gives control limits for each constituent.

(5) Another statistical test method that meets the performance standards of § 258.53(h). The owner or operator must place a justification for this alternative in the operating record and notify the State Director of the use of this alternative test. The justification must demonstrate that the alternative method meets the performance standards of § 258.53(h).

(h) Any statistical method chosen under § 258.53(g) shall comply with the following performance standards, as appropriate:

(1) The statistical method used to evaluate ground-water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.

(2) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground-water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experiment wise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(3) If a control chart approach is used to evaluate ground-water monitoring data, the specific type of control chart and its associated parameter values shall be protective of human health and the environment. The parameters shall be determined after considering

the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(4) If a tolerance interval or a predictional interval is used to evaluate ground-water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(5) The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (pql) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

(6) If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(i) The owner or operator must determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular ground-water monitoring program that applies to the MSWLF unit, as determined under §§ 258.54(a) or 258.55(a) of this part.

(1) In determining whether a statistically significant increase has occurred, the owner or operator must compare the ground-water quality of each parameter or constituent at each monitoring well designated pursuant to § 258.51(a)(2) to the background value of that constituent, according to the statistical procedures and performance standards specified under paragraphs (g) and (h) of this section.

(2) Within a reasonable period of time after completing sampling and analysis, the owner or operator must determine whether there has been a statistically significant increase over background at each monitoring well.

**§ 258.54 Detection monitoring program.**

(a) Detection monitoring is required at MSWLF units at all ground-water monitoring wells defined under §§ 258.51 (a)(1) and (a)(2) of this part. At a minimum, a detection monitoring program must include the monitoring for the constituents listed in appendix I to this part.

(1) The Director of an approved State may delete any of the appendix I monitoring parameters for a MSWLF unit if it can be shown that the removed constituents are not reasonably expected to be in or derived from the waste contained in the unit.

(2) The Director of an approved State may establish an alternative list of inorganic indicator parameters for a MSWLF unit, in lieu of some or all of the heavy metals (constituents 1–15 in appendix I to this part), if the alternative parameters provide a reliable indication of inorganic releases from the MSWLF unit to the ground water. In determining alternative parameters, the Director shall consider the following factors:

(i) The types, quantities, and concentrations of constituents in wastes managed at the MSWLF unit;

(ii) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the MSWLF unit;

(iii) The detectability of indicator parameters, waste constituents, and reaction products in the ground water; and

(iv) The concentration or values and coefficients of variation of monitoring parameters or constituents in the groundwater background.

(b) The monitoring frequency for all constituents listed in appendix I to thispart, or in the alternative list approved in accordance with paragraph (a)(2) of this section, shall be at least semiannual during the active life of the facility (including closure) and the post-closure period. A minimum of four independent samples from each well (background and downgradient) must

be collected and analyzed for the appendix I constituents, or the alternative list approved in accordance with paragraph (a)(2) of this section, during the first semiannual sampling event. At least one sample from each well (background and downgradient) must be collected and analyzed during subsequent semiannual sampling events. The Director of an approved State may specify an appropriate alternative frequency for repeated sampling and analysis for appendix I constituents, or the alternative list approved in accordance with paragraph (a)(2) of this section, during the active life (including closure) and the post-closure care period. The alternative frequency during the active life (including closure) shall be no less than annual. The alternative frequency shall be based on consideration of the following factors:

(1) Lithology of the aquifer and unsaturated zone;

(2) Hydraulic conductivity of the aquifer and unsaturated zone;

(3) Ground-water flow rates;

(4) Minimum distance between upgradient edge of the MSWLF unit and downgradient monitoring well screen (minimum distance of travel); and

(5) Resource value of the aquifer.

(c) If the owner or operator determines, pursuant to §258.53(g) of this part, that there is a statistically significant increase over background for one or more of the constituents listed in appendix I to this part or in the alternative list approved in accordance with paragraph (a)(2) of this section, at any monitoring well at the boundary specified under §258.51(a)(2), the owner or operator:

(1) Must, within 14 days of this finding, place a notice in the operating record indicating which constituents have shown statistically significant changes from background levels, and notify the State director that this notice was placed in the operating record; and

(2) Must establish an assessment monitoring program meeting the requirements of §258.55 of this part within 90 days except as provided for in paragraph (c)(3) of this section.

(3) The owner/operator may demonstrate that a source other than a MSWLF unit caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground-water quality. A report documenting this demonstration must be certified by a qualified ground-water scientist or approved by the Director of an approved State and be placed in the operating record. If a successful demonstration is made and documented, the owner or operator may continue detection monitoring as specified in this section. If, after 90 days, a successful demonstration is not made, the owner or operator must initiate an assessment monitoring program as required in §258.55.

**§258.55 Assessment monitoring program.**

(a) Assessment monitoring is required whenever a statistically significant increase over background has been detected for one or more of the constituents listed in the appendix I to this part or in the alternative list approved in accordance with §258.54(a)(2).

(b) Within 90 days of triggering an assessment monitoring program, and annually thereafter, the owner or operator must sample and analyze the ground water for all constituents identified in appendix II to this part. A minimum of one sample from each downgradient well must be collected and analyzed during each sampling event. For any constituent detected in the downgradient wells as a result of the complete appendix II analysis, a minimum of four independent samples from each well (background and downgradient) must be collected and analyzed to establish background for the constituents. The Director of an approved State may specify an appropriate subset of wells to be sampled and analyzed for appendix II constituents during assessment monitoring. The Director of an approved State may delete any of the appendix II monitoring parameters for a MSWLF unit if it can be shown that the removed constituents are not reasonably expected to be in or derived from the waste contained in the unit.

(c) The Director of an approved State may specify an appropriate alternate frequency for repeated sampling and

analysis for the full set of appendix II constituents required by § 258.55(b) of this part, during the active life (including closure) and post-closure care of the unit considering the following factors:

(1) Lithology of the aquifer and unsaturated zone;

(2) Hydraulic conductivity of the aquifer and unsaturated zone;

(3) Ground-water flow rates;

(4) Minimum distance between upgradient edge of the MSWLF unit and downgradient monitoring well screen (minimum distance of travel);

(5) Resource value of the aquifer; and

(6) Nature (fate and transport) of any constituents detected in response to this section.

(d) After obtaining the results from the initial or subsequent sampling events required in paragraph (b) of this section, the owner or operator must:

(1) Within 14 days, place a notice in the operating record identifying the appendix II constituents that have been detected and notify the State Director that this notice has been placed in the operating record;

(2) Within 90 days, and on at least a semiannual basis thereafter, resample all wells specified by § 258.51(a), conduct analyses for all constituents in appendix I to this part or in the alternative list approved in accordance with § 258.54(a)(2), and for those constituents in appendix II to this part that are detected in response to paragraph (b) of this section, and record their concentrations in the facility operating record. At least one sample from each well (background and downgradient) must be collected and analyzed during these sampling events. The Director of an approved State may specify an alternative monitoring frequency during the active life (including closure) and the post-closure period for the constituents referred to in this paragraph. The alternative frequency for appendix I constituents, or the alternative list approved in accordance with § 258.54(a)(2), during the active life (including closure) shall be no less than annual. The alternative frequency shall be based on consideration of the factors specified in paragraph (c) of this section;

(3) Establish background concentrations for any constituents detected pursuant to paragraph (b) or (d)(2) of this section; and

(4) Establish ground-water protection standards for all constituents detected pursuant to paragraph (b) or (d) of this section. The ground-water protection standards shall be established in accordance with paragraphs (h) or (i) of this section.

(e) If the concentrations of all appendix II constituents are shown to be at or below background values, using the statistical procedures in § 258.53(g), for two consecutive sampling events, the owner or operator must notify the State Director of this finding and may return to detection monitoring.

(f) If the concentrations of any appendix II constituents are above background values, but all concentrations are below the ground-water protection standard established under paragraphs (h) or (i) of this section, using the statistical procedures in § 258.53(g), the owner or operator must continue assessment monitoring in accordance with this section.

(g) If one or more appendix II constituents are detected at statistically significant levels above the ground-water protection standard established under paragraphs (h) or (i) of this section in any sampling event, the owner or operator must, within 14 days of this finding, place a notice in the operating record identifying the appendix II constituents that have exceeded the ground-water protection standard and notify the State Director and all appropriate local government officials that the notice has been placed in the operating record. The owner or operator also:

(1)(i) Must characterize the nature and extent of the release by installing additional monitoring wells as necessary;

(ii) Must install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with § 258.55(d)(2);

(iii) Must notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have

migrated off-site if indicated by sampling of wells in accordance with § 258.55 (g)(1); and

(iv) Must initiate an assessment of corrective measures as required by § 255.56 of this part within 90 days; or

(2) May demonstrate that a source other than a MSWLF unit caused the contamination, or that the SSI increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground-water quality. A report documenting this demonstration must be certified by a qualified ground-water scientist or approved by the Director of an approved State and placed in the operating record. If a successful demonstration is made the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to § 258.55, and may return to detection monitoring if the appendix II constituents are at or below background as specified in § 258.55(e). Until a successful demonstration is made, the owner or operator must comply with § 258.55(g) including initiating an assessment of corrective measures.

(h) The owner or operator must establish a ground-water protection standard for each appendix II constituent detected in the ground-water. The ground-water protection standard shall be:

(1) For constituents for which a maximum contaminant level (MCL) has been promulgated under section 1412 of the Safe Drinking Water Act (codified) under 40 CFR part 141, the MCL for that constituent;

(2) For constituents for which MCLs have not been promulgated, the background concentration for the constituent established from wells in accordance with § 258.51(a)(1); or

(3) For constituents for which the background level is higher than the MCL identified under paragraph (h)(1) of this section or health based levels identified under § 258.55(i)(1), the background concentration.

(i) The Director of an approved State may establish an alternative ground-water protection standard for constituents for which MCLs have not been established. These ground-water protection standards shall be appropriate health based levels that satisfy the following criteria:

(1) The level is derived in a manner consistent with Agency guidelines for assessing the health risks of environmental pollutants (51 FR 33992, 34006, 34014, 34028, Sept. 24, 1986);

(2) The level is based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act Good Laboratory Practice Standards (40 CFR part 792) or equivalent;

(3) For carcinogens, the level represents a concentration associated with an excess lifetime cancer risk level (due to continuous lifetime exposure) with the $1\times10^{-4}$ to $1\times10^{-6}$ range; and

(4) For systemic toxicants, the level represents a concentration to which the human population (including sensitive subgroups) could be exposed to on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime. For purposes of this subpart, systemic toxicants include toxic chemicals that cause effects other than cancer or mutation.

(ii) [Reserved]

(j) In establishing ground-water protection standards under paragraph (i) of this section, the Director of an approved State may consider the following:

(1) Multiple contaminants in the ground water;

(2) Exposure threats to sensitive environmental receptors; and

(3) Other site-specific exposure or potential exposure to ground water.

### § 258.56 Assessment of corrective measures.

(a) Within 90 days of finding that any of the constituents listed in appendix II to this part have been detected at a statistically significant level exceeding the ground-water protection standards defined under § 258.55 (h) or (i) of this part, the owner or operator must initiate an assessment of corrective measures. Such an assessment must be completed within a reasonable period of time.

(b) The owner or operator must continue to monitor in accordance with the assessment monitoring program as specified in § 258.55.

(c) The assessment shall include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under § 258.57, addressing at least the following:

(1) The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;

(2) The time required to begin and complete the remedy;

(3) The costs of remedy implementation; and

(4) The institutional requirements such as State or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s).

(d) The owner or operator must discuss the results of the corrective measures assessment, prior to the selection of remedy, in a public meeting with interested and affected parties.

**§ 258.57 Selection of remedy.**

(a) Based on the results of the corrective measures assessment conducted under § 258.56, the owner or operator must select a remedy that, at a minimum, meets the standards listed in paragraph (b) of this section. The owner or operator must notify the State Director, within 14 days of selecting a remedy, a report describing the selected remedy has been placed in the operating record and how it meets the standards in paragraph (b) of this section.

(b) Remedies must:

(1) Be protective of human health and the environment;

(2) Attain the ground-water protection standard as specified pursuant to §§ 258.55 (h) or (i);

(3) Control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of appendix II constituents into the environment that may pose a threat to human health or the environment; and

(4) Comply with standards for management of wastes as specified in § 258.58(d).

(c) In selecting a remedy that meets the standards of § 258.57(b), the owner or operator shall consider the following evaluation factors:

(1) The long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following:

(i) Magnitude of reduction of existing risks;

(ii) Magnitude of residual risks in terms of likelihood of further releases due to waste remaining following implementation of a remedy;

(iii) The type and degree of long-term management required, including monitoring, operation, and maintenance;

(iv) Short-term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and redisposal of containment;

(v) Time until full protection is achieved;

(vi) Potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, redisposal, or containment;

(vii) Long-term reliability of the engineering and institutional controls; and

(viii) Potential need for replacement of the remedy.

(2) The effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:

(i) The extent to which containment practices will reduce further releases;

(ii) The extent to which treatment technologies may be used.

(3) The ease or difficulty of implementing a potential remedy(s) based on consideration of the following types of factors:

(i) Degree of difficulty associated with constructing the technology;

(ii) Expected operational reliability of the technologies;

(iii) Need to coordinate with and obtain necessary approvals and permits from other agencies;

(iv) Availability of necessary equipment and specialists; and

(v) Available capacity and location of needed treatment, storage, and disposal services.

(4) Practicable capability of the owner or operator, including a consideration of the technical and economic capability.

(5) The degree to which community concerns are addressed by a potential remedy(s).

(d) The owner or operator shall specify as part of the selected remedy a schedule(s) for initiating and completing remedial activities. Such a schedule must require the initiation of remedial activities within a reasonable period of time taking into consideration the factors set forth in paragraphs (d) (1)–(8) of this section. The owner or operator must consider the following factors in determining the schedule of remedial activities:

(1) Extent and nature of contamination;

(2) Practical capabilities of remedial technologies in achieving compliance with ground-water protection standards established under § 258.55 (g) or (h) and other objectives of the remedy;

(3) Availability of treatment or disposal capacity for wastes managed during implementation of the remedy;

(4) Desirability of utilizing technologies that are not currently available, but which may offer significant advantages over already available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;

(5) Potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;

(6) Resource value of the aquifer including:

(i) Current and future uses;

(ii) Proximity and withdrawal rate of users;

(iii) Ground-water quantity and quality;

(iv) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituent;

(v) The hydrogeologic characteristic of the facility and surrounding land;

(vi) Ground-water removal and treatment costs; and

(vii) The cost and availability of alternative water supplies.

(7) Practicable capability of the owner or operator.

(8) Other relevant factors.

(e) The Director of an approved State may determine that remediation of a release of an appendix II constituent from a MSWLF unit is not necessary if the owner or operator demonstrates to the satisfaction of the Director of the approved State that:

(1) The ground-water is additionally contaminated by substances that have originated from a source other than a MSWLF unit and those substances are present in concentrations such that cleanup of the release from the MSWLF unit would provide no significant reduction in risk to actual or potential receptors; or

(2) The constituent(s) is present in ground water that:

(i) Is not currently or reasonably expected to be a source of drinking water; and

(ii) Is not hydraulically connected with waters to which the hazardous constituents are migrating or are likely to migrate in a concentration(s) that would exceed the ground-water protection standards established under § 258.55 (h) or (i); or

(3) Remediation of the release(s) is technically impracticable; or

(4) Remediation results in unacceptable cross-media impacts.

(f) A determination by the Director of an approved State pursuant to paragraph (e) of this section shall not affect the authority of the State to require the owner or operator to undertake source control measures or other measures that may be necessary to eliminate or minimize further releases to the ground-water, to prevent exposure to the ground-water, or to remediate the ground-water to concentrations that are technically practicable and significantly reduce threats to human health or the environment.

**§ 258.58 Implementation of the corrective action program.**

(a) Based on the schedule established under § 258.57(d) for initiation and completion of remedial activities the owner/operator must:

(1) Establish and implement a corrective action ground-water monitoring program that:

(i) At a minimum, meet the requirements of an assessment monitoring program under § 258.55;

(ii) Indicate the effectiveness of the corrective action remedy; and

(iii) Demonstrate compliance with ground-water protection standard pursuant to paragraph (e) of this section.

(2) Implement the corrective action remedy selected under § 258.57; and

(3) Take any interim measures necessary to ensure the protection of human health and the environment. Interim measures should, to the greatest extent practicable, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to § 258.57. The following factors must be considered by an owner or operator in determining whether interim measures are necessary:

(i) Time required to develop and implement a final remedy;

(ii) Actual or potential exposure of nearby populations or environmental receptors to hazardous constituents;

(iii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

(iv) Further degradation of the ground-water that may occur if remedial action is not initiated expeditiously;

(v) Weather conditions that may cause hazardous constituents to migrate or be released;

(vi) Risks of fire or explosion, or potential for exposure to hazardous constituents as a result of an accident or failure of a container or handling system; and

(vii) Other situations that may pose threats to human health and the environment.

(b) An owner or operator may determine, based on information developed after implementation of the remedy has begun or other information, that compliance with requirements of § 258.57(b) are not being achieved through the remedy selected. In such cases, the owner or operator must implement other methods or techniques that could practicably achieve compliance with the requirements, unless the owner or operator makes the determination under § 258.58(c).

(c) If the owner or operator determines that compliance with requirements under § 258.57(b) cannot be practically achieved with any currently available methods, the owner or operator must:

(1) Obtain certification of a qualified ground-water scientist or approval by the Director of an approved State that compliance with requirements under § 258.57(b) cannot be practically achieved with any currently available methods;

(2) Implement alternate measures to control exposure of humans or the environment to residual contamination, as necessary to protect human health and the environment; and

(3) Implement alternate measures for control of the sources of contamination, or for removal or decontamination of equipment, units, devices, or structures that are:

(i) Technically practicable; and

(ii) Consistent with the overall objective of the remedy.

(4) Notify the State Director within 14 days that a report justifying the alternative measures prior to implementing the alternative measures has been placed in the operating record.

(d) All solid wastes that are managed pursuant to a remedy required under § 258.57, or an interim measure required under § 258.58(a)(3), shall be managed in a manner:

(1) That is protective of human health and the environment; and

(2) That complies with applicable RCRA requirements.

(e) Remedies selected pursuant to § 258.57 shall be considered complete when:

(1) The owner or operator complies with the ground-water protection standards established under §§ 258.55(h) or (i) at all points within the plume of contamination that lie beyond the ground-water monitoring well system established under § 258.51(a).

(2) Compliance with the ground-water protection standards established under §§258.55(h) or (i) has been achieved by demonstrating that concentrations of appendix II constituents have not exceeded the ground-water protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in §258.53(g) and (h). The Director of an approved State may specify an alternative length of time during which the owner or operator must demonstrate that concentrations of appendix II constituents have not exceeded the ground-water protection standard(s) taking into consideration:

(i) Extent and concentration of the release(s);

(ii) Behavior characteristics of the hazardous constituents in the ground-water;

(iii) Accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that may affect the accuracy; and

(iv) Characteristics of the ground-water.

(3) All actions required to complete the remedy have been satisfied.

(f) Upon completion of the remedy, the owner or operator must notify the State Director within 14 days that a certification that the remedy has been completed in compliance with the requirements of §258.58(e) has been placed in the operating record. The certification must be signed by the owner or operator and by a qualified ground-water scientist or approved by the Director of an approved State.

(g) When, upon completion of the certification, the owner or operator determines that the corrective action remedy has been completed in accordance with the requirements under paragraph (e) of this section, the owner or operator shall be released from the requirements for financial assurance for corrective action under §258.73.

**§258.59 [Reserved]**

## Subpart F—Closure and Post-Closure Care

**§258.60 Closure criteria.**

(a) Owners or operators of all MSWLF units must install a final cover system that is designed to minimize infiltration and erosion. The final cover system must be designed and constructed to:

(1) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than $1\times10^{-5}$ cm/sec, whichever is less, and

(2) Minimize infiltration through the closed MSWLF by the use of an infiltration layer that contains a minimum 18-inches of earthen material, and

(3) Minimize erosion of the final cover by the use of an erosion layer that contains a minimum 6-inches of earthen material that is capable of sustaining native plant growth.

(b) The Director of an approved State may approve an alternative final cover design that includes:

(1) An infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (a)(1) and (a)(2) of this section, and

(2) An erosion layer that provides equivalent protection from wind and water erosion as the erosion layer specified in paragraph (a)(3) of this section.

(3) The Director of an approved State may establish alternative requirements for the infiltration barrier in a paragraph (b)(1) of this section, after public review and comment, for any owners or operators of MSWLFs that dispose of 20 tons of municipal solid waste per day or less, based on an annual average. Any alternative requirements established under this paragraph must:

(i) Consider the unique characteristics of small communities;

(ii) Take into account climatic and hydrogeologic conditions; and

(iii) Be protective of human health and the environment.

(c) The owner or operator must prepare a written closure plan that describes the steps necessary to close all MSWLF units at any point during their active life in accordance with the cover design requirements in § 258.60(a) or (b), as applicable. The closure plan, at a minimum, must include the following information:

(1) A description of the final cover, designed in accordance with § 258.60(a) and the methods and procedures to be used to install the cover;

(2) An estimate of the largest area of the MSWLF unit ever requiring a final cover as required under § 258.60(a) at any time during the active life;

(3) An estimate of the maximum inventory of wastes ever on-site over the active life of the landfill facility; and

(4) A schedule for completing all activities necessary to satisfy the closure criteria in § 258.60.

(d) The owner or operator must notify the State Director that a closure plan has been prepared and placed in the operating record no later than the effective date of this part, or by the initial receipt of waste, whichever is later.

(e) Prior to beginning closure of each MSWLF unit as specified in § 258.60(f), an owner or operator must notify the State Director that a notice of the intent to close the unit has been placed in the operating record.

(f) The owner or operator must begin closure activities of each MSWLF unit no later than 30 days after the date on which the MSWLF unit receives the known final receipt of wastes or, if the MSWLF unit has remaining capacity and there is a reasonable likelihood that the MSWLF unit will receive additional wastes, no later than one year after the most recent receipt of wastes. Extensions beyond the one-year deadline for beginning closure may be granted by the Director of an approved State if the owner or operator demonstrates that the MSWLF unit has the capacity to receive additional wastes and the owner or operator has taken and will continue to take all steps necessary to prevent threats to human health and the environmental from the unclosed MSWLF unit.

(g) The owner or operator of all MSWLF units must complete closure activities of each MSWLF unit in accordance with the closure plan within 180 days following the beginning of closure as specified in paragraph (f) of this section. Extensions of the closure period may be granted by the Director of an approved State if the owner or operator demonstrates that closure will, of necessity, take longer than 180 days and he has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed MSWLF unit.

(h) Following closure of each MSWLF unit, the owner or operator must notify the State Director that a certification, signed by an independent registered professional engineer or approved by Director of an approved State, verifying that closure has been completed in accordance with the closure plan, has been placed in the operating record.

(i)(1) Following closure of all MSWLF units, the owner or operator must record a notation on the deed to the landfill facility property, or some other instrument that is normally examined during title search, and notify the State Director that the notation has been recorded and a copy has been placed in the operating record.

(2) The notation on the deed must in perpetuity notify any potential purchaser of the property that:

(i) The land has been used as a landfill facility; and

(ii) Its use is restricted under § 258.61(c)(3).

(j) The owner or operator may request permission from the Director of an approved State to remove the notation from the deed if all wastes are removed from the facility.

[56 FR 51016, Oct. 9, 1991; 57 FR 28628, June 26, 1992, as amended at 62 FR 40713, July 29, 1997]

### § 258.61 Post-closure care requirements.

(a) Following closure of each MSWLF unit, the owner or operator must conduct post-closure care. Post-closure care must be conducted for 30 years, except as provided under paragraph (b)

of this section, and consist of at least the following:

(1) Maintaining the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and runoff from eroding or otherwise damaging the final cover;

(2) Maintaining and operating the leachate collection system in accordance with the requirements in § 258.40, if applicable. The Director of an approved State may allow the owner or operator to stop managing leachate if the owner or operator demonstrates that leachate no longer poses a threat to human health and the environment;

(3) Monitoring the ground water in accordance with the requirements of subpart E of this part and maintaining the ground-water monitoring system, if applicable; and

(4) Maintaining and operating the gas monitoring system in accordance with the requirements of § 258.23.

(b) The length of the post-closure care period may be:

(1) Decreased by the Director of an approved State if the owner or operator demonstrates that the reduced period is sufficient to protect human health and the environment and this demonstration is approved by the Director of an approved State; or

(2) Increased by the Director of an approved State if the Director of an approved State determines that the lengthened period is necessary to protect human health and the environment.

(c) The owner or operator of all MSWLF units must prepare a written post-closure plan that includes, at a minimum, the following information:

(1) A description of the monitoring and maintenance activities required in § 258.61(a) for each MSWLF unit, and the frequency at which these activities will be performed;

(2) Name, address, and telephone number of the person or office to contact about the facility during the post-closure period; and

(3) A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in this part 258. The Director of an approved State may approve any other disturbance if the owner or operator demonstrates that disturbance of the final cover, liner or other component of the containment system, including any removal of waste, will not increase the potential threat to human health or the environment.

(d) The owner or operator must notify the State Director that a post-closure plan has been prepared and placed in the operating record no later than the effective date of this part, October 9, 1993, or by the initial receipt of waste, whichever is later.

(e) Following completion of the post-closure care period for each MSWLF unit, the owner or operator must notify the State Director that a certification, signed by an independent registered professional engineer or approved by the Director of an approved State, verifying that post-closure care has been completed in accordance with the post-closure plan, has been placed in the operating record.

[56 FR 51016, Oct. 9, 1991; 57 FR 28628, June 26, 1992]

**§§ 258.62–258.69 [Reserved]**

## Subpart G—Financial Assurance Criteria

SOURCE: 56 FR 51029, Oct. 9, 1991, unless otherwise noted.

### § 258.70 Applicability and effective date.

(a) The requirements of this section apply to owners and operators of all MSWLF units, except owners or operators who are State or Federal government entities whose debts and liabilities are the debts and liabilities of a State or the United States.

(b) The requirements of this section are effective April 9, 1997 except for MSWLF units meeting the conditions of § 258.1(f)(1), in which case the effective date is October 9, 1997.

(c) The Director of an approved State may waive the requirements of this section for up to one year until April 9,

1998 for good cause if an owner or operator demonstrates to the Director's satisfaction that the April 9, 1997 effective date for the requirements of this section does not provide sufficient time to comply with these requirements and that such a waiver will not adversely affect human health and the environment.

[56 FR 51029, Oct. 9, 1991, as amended at 60 FR 52342, Oct. 6, 1995; 61 FR 60337, Nov. 27, 1996]

### § 258.71 Financial assurance for closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of hiring a third party to close the largest area of all MSWLF units ever requiring a final cover as required under § 258.60 at any time during the active life in accordance with the closure plan. The owner or operator must notify the State Director that the estimate has been placed in the operating record.

(1) The cost estimate must equal the cost of closing the largest area of all MSWLF unit ever requiring a final cover at any time during the active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see § 258.60(c)(2) of this part).

(2) During the active life of the MSWLF unit, the owner or operator must annually adjust the closure cost estimate for inflation.

(3) The owner or operator must increase the closure cost estimate and the amount of financial assurance provided under paragraph (b) of this section if changes to the closure plan or MSWLF unit conditions increase the maximum cost of closure at any time during the remaining active life.

(4) The owner or operator may reduce the closure cost estimate and the amount of financial assurance provided under paragraph (b) of this section if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the MSWLF unit. The owner or operator must notify the State Director that the justification for the reduction of the closure cost estimate and the amount of financial assurance has been placed in the operating record.

(b) The owner or operator of each MSWLF unit must establish financial assurance for closure of the MSWLF unit in compliance with § 258.74. The owner or operator must provide continuous coverage for closure until released from financial assurance requirements by demonstrating compliance with § 258.60 (h) and (i).

[56 FR 51029, Oct. 9, 1991; 57 FR 28628, June 26, 1992]

### § 258.72 Financial assurance for post-closure care.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the MSWLF unit in compliance with the post-closure plan developed under § 258.61 of this part. The post-closure cost estimate used to demonstrate financial assurance in paragraph (b) of this section must account for the total costs of conducting post-closure care, including annual and periodic costs as described in the post-closure plan over the entire post-closure care period. The owner or operator must notify the State Director that the estimate has been placed in the operating record.

(1) The cost estimate for post-closure care must be based on the most expensive costs of post-closure care during the post-closure care period.

(2) During the active life of the MSWLF unit and during the post-closure care period, the owner or operator must annually adjust the post-closure cost estimate for inflation.

(3) The owner or operator must increase the post-closure care cost estimate and the amount of financial assurance provided under paragraph (b) of this section if changes in the post-closure plan or MSWLF unit conditions increase the maximum costs of post-closure care.

(4) The owner or operator may reduce the post-closure cost estimate and the amount of financial assurance provided under paragraph (b) of this section if the cost estimate exceeds the maximum costs of post-closure care remaining over the post-closure care period. The owner or operator must notify the State Director that the justification for the reduction of the post-closure

cost estimate and the amount of financial assurance has been placed in the operating record.

(b) The owner or operator of each MSWLF unit must establish, in a manner in accordance with §258.74, financial assurance for the costs of post-closure care as required under §258.61 of this part. The owner or operator must provide continuous coverage for post-closure care until released from financial assurance requirements for post-closure care by demonstrating compliance with §258.61(e).

**§258.73 Financial assurance for corrective action.**

(a) An owner or operator of a MSWLF unit required to undertake a corrective action program under §258.58 of this part must have a detailed written estimate, in current dollars, of the cost of hiring a third party to perform the corrective action in accordance with the program required under §258.58 of this part. The corrective action cost estimate must account for the total costs of corrective action activities as described in the corrective action plan for the entire corrective action period. The owner or operator must notify the State Director that the estimate has been placed in the operating record.

(1) The owner or operator must annually adjust the estimate for inflation until the corrective action program is completed in accordance with §258.58(f) of this part.

(2) The owner or operator must increase the corrective action cost estimate and the amount of financial assurance provided under paragraph (b) of this section if changes in the corrective action program or MSWLF unit conditions increase the maximum costs of corrective action.

(3) The owner or operator may reduce the amount of the corrective action cost estimate and the amount of financial assurance provided under paragraph (b) of this section if the cost estimate exceeds the maximum remaining costs of corrective action. The owner or operator must notify the State Director that the justification for the reduction of the corrective action cost estimate and the amount of financial assurance has been placed in the operating record.

(b) The owner or operator of each MSWLF unit required to undertake a corrective action program under §258.58 of this part must establish, in a manner in accordance with §258.74, financial assurance for the most recent corrective action program. The owner or operator must provide continuous coverage for corrective action until released from financial assurance requirements for corrective action by demonstrating compliance with §258.58 (f) and (g).

**§258.74 Allowable mechanisms.**

The mechanisms used to demonstrate financial assurance under this section must ensure that the funds necessary to meet the costs of closure, post-closure care, and corrective action for known releases will be available whenever they are needed. Owners and operators must choose from the options specified in paragraphs (a) through (j) of this section.

(a) *Trust Fund.* (1) An owner or operator may satisfy the requirements of this section by establishing a trust fund which conforms to the requirements of this paragraph. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency. A copy of the trust agreement must be placed in the facility's operating record.

(2) Payments into the trust fund must be made annually by the owner or operator over the term of the initial permit or over the remaining life of the MSWLF unit, whichever is shorter, in the case of a trust fund for closure or post-closure care, or over one-half of the estimated length of the corrective action program in the case of corrective action for known releases. This period is referred to as the pay-in period.

(3) For a trust fund used to demonstrate financial assurance for closure and post-closure care, the first payment into the fund must be at least equal to the current cost estimate for closure or post-closure care, except as provided in paragraph (k) of this section, divided by the number of years in the pay-in period as defined in paragraph (a)(2) of this section. The amount

of subsequent payments must be determined by the following formula:

Next Payment = [CE − CV]/Y

where CE is the current cost estimate for closure or post-closure care (updated for inflation or other changes), CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) For a trust fund used to demonstrate financial assurance for corrective action, the first payment into the trust fund must be at least equal to one-half of the current cost estimate for corrective action, except as provided in paragraph (k) of this section, divided by the number of years in the corrective action pay-in period as defined in paragraph (a)(2) of this section. The amount of subsequent payments must be determined by the following formula:

Next Payment = [RB − CV]/Y

where RB is the most recent estimate of the required trust fund balance for corrective action (i.e., the total costs that will be incurred during the second half of the corrective action period), CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(5) The initial payment into the trust fund must be made before the initial receipt of waste or before the effective date of the requirements of this section (April 9, 1997, or October 9, 1997 for MSWLF units meeting the conditions of § 258.1(f)(1)), whichever is later, in the case of closure and post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of § 258.58.

(6) If the owner or operator establishes a trust fund after having used one or more alternate mechanisms specified in this section, the initial payment into the trust fund must be at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to the specifications of this paragraph and paragraph (a) of this section, as applicable.

(7) The owner or operator, or other person authorized to conduct closure, post-closure care, or corrective action activities may request reimbursement from the trustee for these expenditures. Requests for reimbursement will be granted by the trustee only if sufficient funds are remaining in the trust fund to cover the remaining costs of closure, post-closure care, or corrective action, and if justification and documentation of the cost is placed in the operating record. The owner or operator must notify the State Director that the documentation of the justification for reimbursement has been placed in the operating record and that reimbursement has been received.

(8) The trust fund may be terminated by the owner or operator only if the owner or operator substitutes alternate financial assurance as specified in this section or if he is no longer required to demonstrate financial responsibility in accordance with the requirements of §§ 258.71(b), 258.72(b), or 258.73(b).

(b) *Surety Bond Guaranteeing Payment or Performance.* (1) An owner or operator may demonstrate financial assurance for closure or post-closure care by obtaining a payment or performance surety bond which conforms to the requirements of this paragraph. An owner or operator may demonstrate financial assurance for corrective action by obtaining a performance bond which conforms to the requirements of this paragraph. The bond must be effective before the initial receipt of waste or before the effective date of the requirements of this section (April 9, 1997, or October 9, 1997 for MSWLF units meeting the conditions of § 258.1(f)(1)), whichever is later, in the case of closure and post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of § 258.58. The owner or operator must notify the State Director that a copy of the bond has been placed in the operating record. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The penal sum of the bond must be in an amount at least equal to the current closure, post-closure care or corrective action cost estimate, whichever is applicable, except as provided in § 258.74(k).

(3) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(4) The owner or operator must establish a standby trust fund. The standby trust fund must meet the requirements of § 258.74(a) except the requirements for initial payment and subsequent annual payments specified in § 258.74 (a)(2), (3), (4) and (5).

(5) Payments made under the terms of the bond will be deposited by the surety directly into the standby trust fund. Payments from the trust fund must be approved by the trustee.

(6) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner and operator and to the State Director 120 days in advance of cancellation. If the surety cancels the bond, the owner or operator must obtain alternate financial assurance as specified in this section.

(7) The owner or operator may cancel the bond only if alternate financial assurance is substituted as specified in this section or if the owner or operator is no longer required to demonstrate financial responsibility in accordance with § 258.71(b), § 258.72(b) or § 258.73(b).

(c) *Letter of credit.* (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph. The letter of credit must be effective before the initial receipt of waste or before the effective date of the requirements of this section (April 9, 1997, or October 9, 1997 for MSWLF units meeting the conditions of § 258.1(f)(1)), whichever is later, in the case of closure and post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of § 258.58. The owner or operator must notify the State Director that a copy of the letter of credit has been placed in the operating record. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) A letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: Name, and address of the facility, and the amount of funds assured, must be included with the letter of credit in the operating record.

(3) The letter of credit must be irrevocable and issued for a period of at least one year in an amount at least equal to the current cost estimate for closure, post-closure care or corrective action, whichever is applicable, except as provided in paragraph (k) of this section. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless the issuing institution has cancelled the letter of credit by sending notice of cancellation by certified mail to the owner and operator and to the State Director 120 days in advance of cancellation. If the letter of credit is cancelled by the issuing institution, the owner or operator must obtain alternate financial assurance.

(4) The owner or operator may cancel the letter of credit only if alternate financial assurance is substituted as specified in this section or if the owner or operator is released from the requirements of this section in accordance with § 258.71(b), § 258.72(b) or § 258.73(b).

(d) *Insurance.* (1) An owner or operator may demonstrate financial assurance for closure and post-closure care by obtaining insurance which conforms to the requirements of this paragraph. The insurance must be effective before the initial receipt of waste or before the effective date of the requirements of this section (April 9, 1997, or October 9, 1997 for MSWLF units meeting the conditions of § 258.1(f)(1)), whichever is later, in the case of closure and post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of § 258.58. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States. The owner or operator must notify the State Director that a copy of the insurance policy has been placed in the operating record.

(2) The closure or post-closure care insurance policy must guarantee that funds will be available to close the MSWLF unit whenever final closure occurs or to provide post-closure care for the MSWLF unit whenever the post-closure care period begins, whichever is applicable. The policy must also guarantee that once closure or post-closure care begins, the insurer will be responsible for the paying out of funds to the owner or operator or other person authorized to conduct closure or post-closure care, up to an amount equal to the face amount of the policy.

(3) The insurance policy must be issued for a face amount at least equal to the current cost estimate for closure or post-closure care, whichever is applicable, except as provided in paragraph (k) of this section. The term *face amount* means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) An owner or operator, or any other person authorized to conduct closure or post-closure care, may receive reimbursements for closure or post-closure expenditures, whichever is applicable. Requests for reimbursement will be granted by the insurer only if the remaining value of the policy is sufficient to cover the remaining costs of closure or post-closure care, and if justification and documentation of the cost is placed in the operating record. The owner or operator must notify the State Director that the documentation of the justification for reimbursement has been placed in the operating record and that reimbursement has been received.

(5) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided that such consent is not unreasonably refused.

(6) The insurance policy must provide that the insurer may not cancel, terminate or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may cancel the policy by sending notice of cancellation by certified mail to the owner and operator and to the State Director 120 days in advance of cancellation. If the insurer cancels the policy, the owner or operator must obtain alternate financial assurance as specified in this section.

(7) For insurance policies providing coverage for post-closure care, commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

(8) The owner or operator may cancel the insurance policy only if alternate financial assurance is substituted as specified in this section or if the owner or operator, is no longer required to demonstrate financial responsibility in accordance with the requirements of § 258.71(b), § 258.72(b) or § 258.73(b).

(e) *Corporate financial test.* An owner or operator that satisfies the requirements of this paragraph (e) may demonstrate financial assurance up to the amount specified in this paragraph (e):

(1) *Financial component.* (i) The owner or operator must satisfy one of the following three conditions:

(A) A current rating for its senior unsubordinated debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; or

(B) A ratio of less than 1.5 comparing total liabilities to net worth; or

(C) A ratio of greater than 0.10 comparing the sum of net income plus depreciation, depletion and amortization, minus $10 million, to total liabilities.

(ii) The tangible net worth of the owner or operator must be greater than: (A) The sum of the current closure, post-closure care, corrective action cost estimates and any other environmental obligations, including guarantees, covered by a financial test plus

$10 million except as provided in paragraph (e)(1)(ii)(B) of this section.

(B) $10 million in net worth plus the amount of any guarantees that have not been recognized as liabilities on the financial statements provided all of the current closure, post-closure care, and corrective action costs and any other environmental obligations covered by a financial test are recognized as liabilities on the owner's or operator's audited financial statements, and subject to the approval of the State Director.

(iii) The owner or operator must have assets located in the United States amounting to at least the sum of current closure, post-closure care, corrective action cost estimates and any other environmental obligations covered by a financial test as described in paragraph (e)(3) of this section.

(2) *Recordkeeping and reporting requirements.* (i) The owner or operator must place the following items into the facility's operating record:

(A) A letter signed by the owner's or operator's chief financial officer that:

(*1*) Lists all the current cost estimates covered by a financial test, including, but not limited to, cost estimates required for municipal solid waste management facilities under this part 258, cost estimates required for UIC facilities under 40 CFR part 144, if applicable, cost estimates required for petroleum underground storage tank facilities under 40 CFR part 280, if applicable, cost estimates required for PCB storage facilities under 40 CFR part 761, if applicable, and cost estimates required for hazardous waste treatment, storage, and disposal facilities under 40 CFR parts 264 and 265, if applicable; and

(*2*) Provides evidence demonstrating that the firm meets the conditions of either paragraph (e)(1)(i)(A) or (e)(1)(i)(B) or (e)(1)(i)(C) of this section and paragraphs (e)(1)(ii) and (e)(1)(iii) of this section.

(B) A copy of the independent certified public accountant's unqualified opinion of the owner's or operator's financial statements for the latest completed fiscal year. To be eligible to use the financial test, the owner's or operator's financial statements must receive an unqualified opinion from the independent certified public accountant. An adverse opinion, disclaimer of opinion, or other qualified opinion will be cause for disallowance, with the potential exception for qualified opinions provided in the next sentence. The Director of an approved State may evaluate qualified opinions on a case-by-case basis and allow use of the financial test in cases where the Director deems that the matters which form the basis for the qualification are insufficient to warrant disallowance of the test. If the Director of an approved State does not allow use of the test, the owner or operator must provide alternate financial assurance that meets the requirements of this section.

(C) If the chief financial officer's letter providing evidence of financial assurance includes financial data showing that owner or operator satisfies paragraph (e)(1)(i)(B) or (e)(1)(i)(C) of this section that are different from data in the audited financial statements referred to in paragraph (e)(2)(i)(B) of this section or any other audited financial statement or data filed with the SEC, then a special report from the owner's or operator's independent certified public accountant to the owner or operator is required. The special report shall be based upon an agreed upon procedures engagement in accordance with professional auditing standards and shall describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements, the findings of that comparison, and the reasons for any differences.

(D) If the chief financial officer's letter provides a demonstration that the firm has assured for environmental obligations as provided in paragraph (e)(1)(ii)(B) of this section, then the letter shall include a report from the independent certified public accountant that verifies that all of the environmental obligations covered by a financial test have been recognized as liabilities on the audited financial statements, how these obligations have been measured and reported, and that the tangible net worth of the firm is at

least $10 million plus the amount of any guarantees provided.

(ii) An owner or operator must place the items specified in paragraph (e)(2)(i) of this section in the operating record and notify the State Director that these items have been placed in the operating record before the initial receipt of waste or before the effective date of the requirements of this section (April 9, 1997 or October 9, 1997 for MSWLF units meeting the conditions of § 258.1(f)(1)), whichever is later in the case of closure, and post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of § 258.58.

(iii) After the initial placement of items specified in paragraph (e)(2)(i) of this section in the operating record, the owner or operator must annually update the information and place updated information in the operating record within 90 days following the close of the owner or operator's fiscal year. The Director of a State may provide up to an additional 45 days for an owner or operator who can demonstrate that 90 days is insufficient time to acquire audited financial statements. The updated information must consist of all items specified in paragraph (e)(2)(i) of this section.

(iv) The owner or operator is no longer required to submit the items specified in this paragraph (e)(2) or comply with the requirements of this paragraph (e) when:

(A) He substitutes alternate financial assurance as specified in this section that is not subject to these recordkeeping and reporting requirements; or

(B) He is released from the requirements of this section in accordance with § 258.71(b), § 258.72(b), or § 258.73(b).

(v) If the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must, within 120 days following the close of the owner or operator's fiscal year, obtain alternative financial assurance that meets the requirements of this section, place the required submissions for that assurance in the operating record, and notify the State Director that the owner or operator no longer meets the criteria of the financial test and that alternate assurance has been obtained.

(vi) The Director of an approved State may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (e)(1) of this section, require at any time the owner or operator to provide reports of its financial condition in addition to or including current financial test documentation as specified in paragraph (e)(2) of this section. If the Director of an approved State finds that the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must provide alternate financial assurance that meets the requirements of this section.

(3) *Calculation of costs to be assured.* When calculating the current cost estimates for closure, post-closure care, corrective action, or the sum of the combination of such costs to be covered, and any other environmental obligations assured by a financial test referred to in this paragraph (e), the owner or operator must include cost estimates required for municipal solid waste management facilities under this part, as well as cost estimates required for the following environmental obligations, if it assures them through a financial test: obligations associated with UIC facilities under 40 CFR part 144, petroleum underground storage tank facilities under 40 CFR part 280, PCB storage facilities under 40 CFR part 761, and hazardous waste treatment, storage, and disposal facilities under 40 CFR parts 264 and 265.

(f) *Local government financial test.* An owner or operator that satisfies the requirements of paragraphs (f)(1) through (3) of this section may demonstrate financial assurance up to the amount specified in paragraph (f)(4) of this section:

(1) *Financial component.* (i) The owner or operator must satisfy paragraph (f)(1)(i)(A) or (B) of this section as applicable:

(A) If the owner or operator has outstanding, rated, general obligation bonds that are not secured by insurance, a letter of credit, or other collateral or guarantee, it must have a current rating of Aaa, Aa, A, or Baa, as issued by Moody's, or AAA, AA, A, or

BBB, as issued by Standard and Poor's on all such general obligation bonds; or

(B) The owner or operator must satisfy each of the following financial ratios based on the owner or operator's most recent audited annual financial statement:

(*1*) A ratio of cash plus marketable securities to total expenditures greater than or equal to 0.05; and

(*2*) A ratio of annual debt service to total expenditures less than or equal to 0.20.

(ii) The owner or operator must prepare its financial statements in conformity with Generally Accepted Accounting Principles for governments and have its financial statements audited by an independent certified public accountant (or appropriate State agency).

(iii) A local government is not eligible to assure its obligations under § 258.74(f) if it:

(A) Is currently in default on any outstanding general obligation bonds; or

(B) Has any outstanding general obligation bonds rated lower than Baa as issued by Moody's or BBB as issued by Standard and Poor's; or

(C) Operated at a deficit equal to five percent or more of total annual revenue in each of the past two fiscal years; or

(D) Receives an adverse opinion, disclaimer of opinion, or other qualified opinion from the independent certified public accountant (or appropriate State agency) auditing its financial statement as required under paragraph (f)(1)(ii) of this section. However, the Director of an approved State may evaluate qualified opinions on a case-by-case basis and allow use of the financial test in cases where the Director deems the qualification insufficient to warrant disallowance of use of the test.

(iv) The following terms used in this paragraph are defined as follows:

(A) *Deficit* equals total annual revenues minus total annual expenditures;

(B) *Total revenues* include revenues from all taxes and fees but does not include the proceeds from borrowing or asset sales, excluding revenue from funds managed by local government on behalf of a specific third party;

(C) *Total expenditures* include all expenditures excluding capital outlays and debt repayment;

(D) *Cash plus marketable securities* is all the cash plus marketable securities held by the local government on the last day of a fiscal year, excluding cash and marketable securities designated to satisfy past obligations such as pensions; and

(E) *Debt service* is the amount of principal and interest due on a loan in a given time period, typically the current year.

(2) *Public notice component.* The local government owner or operator must place a reference to the closure and post-closure care costs assured through the financial test into its next comprehensive annual financial report (CAFR) after the effective date of this section or prior to the initial receipt of waste at the facility, whichever is later. Disclosure must include the nature and source of closure and post-closure care requirements, the reported liability at the balance sheet date, the estimated total closure and post-closure care cost remaining to be recognized, the percentage of landfill capacity used to date, and the estimated landfill life in years. A reference to corrective action costs must be placed in the CAFR not later than 120 days after the corrective action remedy has been selected in accordance with the requirements of § 258.58. For the first year the financial test is used to assure costs at a particular facility, the reference may instead be placed in the operating record until issuance of the next available CAFR if timing does not permit the reference to be incorporated into the most recently issued CAFR or budget. For closure and post-closure costs, conformance with Government Accounting Standards Board Statement 18 assures compliance with this public notice component.

(3) *Recordkeeping and reporting requirements.* (i) The local government owner or operator must place the following items in the facility's operating record:

(A) A letter signed by the local government's chief financial officer that:

(*1*) Lists all the current cost estimates covered by a financial test, as

described in paragraph (f)(4) of this section;

(*2*) Provides evidence and certifies that the local government meets the conditions of paragraphs (f)(1)(i), (f)(1)(ii), and (f)(1)(iii) of this section; and

(*3*) Certifies that the local government meets the conditions of paragraphs (f)(2) and (f)(4) of this section.

(B) The local government's independently audited year-end financial statements for the latest fiscal year (except for local governments where audits are required every two years where unaudited statements may be used in years when audits are not required), including the unqualified opinion of the auditor who must be an independent, certified public accountant or an appropriate State agency that conducts equivalent comprehensive audits;

(C) A report to the local government from the local government's independent certified public accountant (CPA) or the appropriate State agency based on performing an agreed upon procedures engagement relative to the financial ratios required by paragraph (f)(1)(i)(B) of this section, if applicable, and the requirements of paragraphs (f)(1)(ii) and (f)(1)(iii) (C) and (D) of this section. The CPA or State agency's report should state the procedures performed and the CPA or State agency's findings; and

(D) A copy of the comprehensive annual financial report (CAFR) used to comply with paragraph (f)(2) of this section or certification that the requirements of General Accounting Standards Board Statement 18 have been met.

(ii) The items required in paragraph (f)(3)(i) of this section must be placed in the facility operating record as follows:

(A) In the case of closure and post-closure care, either before the effective date of this section, which is April 9, 1997, or prior to the initial receipt of waste at the facility, whichever is later, or

(B) In the case of corrective action, not later than 120 days after the corrective action remedy is selected in accordance with the requirements of § 258.58.

(iii) After the initial placement of the items in the facility's operating record, the local government owner or operator must update the information and place the updated information in the operating record within 180 days following the close of the owner or operator's fiscal year.

(iv) The local government owner or operator is no longer required to meet the requirements of paragraph (f)(3) of this section when:

(A) The owner or operator substitutes alternate financial assurance as specified in this section; or

(B) The owner or operator is released from the requirements of this section in accordance with § 258.71(b), 258.72(b), or 258.73(b).

(v) A local government must satisfy the requirements of the financial test at the close of each fiscal year. If the local government owner or operator no longer meets the requirements of the local government financial test it must, within 210 days following the close of the owner or operator's fiscal year, obtain alternative financial assurance that meets the requirements of this section, place the required submissions for that assurance in the operating record, and notify the State Director that the owner or operator no longer meets the criteria of the financial test and that alternate assurance has been obtained.

(vi) The Director of an approved State, based on a reasonable belief that the local government owner or operator may no longer meet the requirements of the local government financial test, may require additional reports of financial condition from the local government at any time. If the Director of an approved State finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of the local government financial test, the local government must provide alternate financial assurance in accordance with this section.

(4) *Calculation of costs to be assured.* The portion of the closure, post-closure, and corrective action costs for which an owner or operator can assure under this paragraph is determined as follows:

(i) If the local government owner or operator does not assure other environmental obligations through a financial test, it may assure closure, post-closure, and corrective action costs that equal up to 43 percent of the local government's total annual revenue.

(ii) If the local government assures other environmental obligations through a financial test, including those associated with UIC facilities under 40 CFR 144.62, petroleum underground storage tank facilities under 40 CFR Part 280, PCB storage facilities under 40 CFR Part 761, and hazardous waste treatment, storage, and disposal facilities under 40 CFR Parts 264 and 265, it must add those costs to the closure, post-closure, and corrective action costs it seeks to assure under this paragraph. The total that may be assured must not exceed 43 percent of the local government's total annual revenue.

(iii) The owner or operator must obtain an alternate financial assurance instrument for those costs that exceed the limits set in paragraphs (f)(4) (i) and (ii) of this section.

(g) *Corporate Guarantee.* (1) An owner or operator may meet the requirements of this section by obtaining a written guarantee. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a ''substantial business relationship'' with the owner or operator. The guarantor must meet the requirements for owners or operators in paragraph (e) of this section and must comply with the terms of the guarantee. A certified copy of the guarantee must be placed in the facility's operating record along with copies of the letter from the guarantor's chief financial officer and accountants' opinions. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter from the guarantor's chief financial officer must describe the value received in consideration of the guarantee. If the guarantor is a firm with a ''substantial business relationship'' with the owner or operator, this letter must describe this ''substantial business relationship'' and the value received in consideration of the guarantee.

(2) The guarantee must be effective and all required submissions placed in the operating record before the initial receipt of waste or before the effective date of the requirements of this section (April 9, 1997 or October 9, 1997 for MSWLF units meeting the conditions of § 258.1(f)(1), whichever is later, in the case of closure and post-closure care, or in the case of corrective action no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of § 258.58.

(3) The terms of the guarantee must provide that:

(i) If the owner or operator fails to perform closure, post-closure care, and/or corrective action of a facility covered by the guarantee, the guarantor will:

(A) Perform, or pay a third party to perform, closure, post-closure care, and/or corrective action as required (performance guarantee); or

(B) Establish a fully funded trust fund as specified in paragraph (a) of this section in the name of the owner or operator (payment guarantee).

(ii) The guarantee will remain in force for as long as the owner or operator must comply with the applicable financial assurance requirements of this Subpart unless the guarantor sends prior notice of cancellation by certified mail to the owner or operator and to the State Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the State Director, as evidenced by the return receipts.

(iii) If notice of cancellation is given, the owner or operator must, within 90 days following receipt of the cancellation notice by the owner or operator and the State Director, obtain alternate financial assurance, place evidence of that alternate financial assurance in the facility operating record, and notify the State Director. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor must provide that alternate assurance within

120 days of the cancellation notice, obtain alternative assurance, place evidence of the alternate assurance in the facility operating record, and notify the State Director.

(4) If a corporate guarantor no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must, within 90 days, obtain alternative assurance, place evidence of the alternate assurance in the facility operating record, and notify the State Director. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor must provide that alternate assurance within the next 30 days.

(5) The owner or operator is no longer required to meet the requirements of this paragraph (g) when:

(i) The owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The owner or operator is released from the requirements of this section in accordance with § 258.71(b), § 258.72(b), or § 258.73(b).

(h) *Local government guarantee.* An owner or operator may demonstrate financial assurance for closure, post-closure, and corrective action, as required by §§ 258.71, 258.72, and 258.73, by obtaining a written guarantee provided by a local government. The guarantor must meet the requirements of the local government financial test in paragraph (f) of this section, and must comply with the terms of a written guarantee.

(1) *Terms of the written guarantee.* The guarantee must be effective before the initial receipt of waste or before the effective date of this section, whichever is later, in the case of closure, post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of § 258.58. The guarantee must provide that:

(i) If the owner or operator fails to perform closure, post-closure care, and/or corrective action of a facility covered by the guarantee, the guarantor will:

(A) Perform, or pay a third party to perform, closure, post-closure care, and/or corrective action as required; or

(B) Establish a fully funded trust fund as specified in paragraph (a) of this section in the name of the owner or operator.

(ii) The guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the State Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the State Director, as evidenced by the return receipts.

(iii) If a guarantee is cancelled, the owner or operator must, within 90 days following receipt of the cancellation notice by the owner or operator and the State Director, obtain alternate financial assurance, place evidence of that alternate financial assurance in the facility operating record, and notify the State Director. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor must provide that alternate assurance within 120 days following the guarantor's notice of cancellation, place evidence of the alternate assurance in the facility operating record, and notify the State Director.

(2) *Recordkeeping and reporting.* (i) The owner or operator must place a certified copy of the guarantee along with the items required under paragraph (f)(3) of this section into the facility's operating record before the initial receipt of waste or before the effective date of this section, whichever is later, in the case of closure, post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of § 258.58.

(ii) The owner or operator is no longer required to maintain the items specified in paragraph (h)(2) of this section when:

(A) The owner or operator substitutes alternate financial assurance as specified in this section; or

(B) The owner or operator is released from the requirements of this section in accordance with § 258.71(b), 258.72(b), or 258.73(b).

(iii) If a local government guarantor no longer meets the requirements of paragraph (f) of this section, the owner or operator must, within 90 days, obtain alternative assurance, place evidence of the alternate assurance in the

facility operating record, and notify the State Director. If the owner or operator fails to obtain alternate financial assurance within that 90-day period, the guarantor must provide that alternate assurance within the next 30 days.

(i) *State-Approved mechanism.* An owner or operator may satisfy the requirements of this section by obtaining any other mechanism that meets the criteria specified in §258.74(1), and that is approved by the Director of an approved State.

(j) *State assumption of responsibility.* If the State Director either assumes legal responsibility for an owner or operator's compliance with the closure, post-closure care and/or corrective action requirements of this part, or assures that the funds will be available from State sources to cover the requirements, the owner or operator will be in compliance with the requirements of this section. Any State assumption of responsibility must meet the criteria specified in §258.74(l).

(k) *Use of multiple mechanisms.* An owner or operator may demonstrate financial assurance for closure, post-closure, and corrective action, as required by §§258.71, 258.72, and 258.73 by establishing more than one mechanism per facility, except that mechanisms guaranteeing performance rather than payment, may not be combined with other instruments. The mechanisms must be as specified in paragraphs (a), (b), (c), (d), (e), (f), (g), (h), (i), and (j) of this section, except that financial assurance for an amount at least equal to the current cost estimate for closure, post-closure care, and/or corrective action may be provided by a combination of mechanisms rather than a single mechanism.

(l) The language of the mechanisms listed in paragraphs (a), (b), (c), (d), (e), (f), (g), (h), (i), and (j) of this section must ensure that the instruments satisfy the following criteria:

(1) The financial assurance mechanisms must ensure that the amount of funds assured is sufficient to cover the costs of closure, post-closure care, and corrective action for known releases when needed;

(2) The financial assurance mechanisms must ensure that funds will be available in a timely fashion when needed;

(3) The financial assurance mechanisms must be obtained by the owner or operator by the effective date of these requirements or prior to the initial receipt of solid waste, whichever is later, in the case of closure and post-closure care, and no later that 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58, until the owner or operator is released from the financial assurance requirements under §§258.71, 258.72 and 258.73.

(4) The financial assurance mechanisms must be legally valid, binding, and enforceable under State and Federal law.

[56 FR 51029, Oct. 9, 1991, as amended at 58 FR 51547, Oct. 1, 1993; 60 FR 40105, Aug. 7, 1995; 60 FR 52342, Oct. 6, 1995; 61 FR 60337, Nov. 27, 1996; 63 FR 17729, Apr. 10, 1998]

### §258.75 Discounting.

The Director of an approved State may allow discounting of closure cost estimates in §258.71(a), post-closure cost estimates in §258.72(a), and/or corrective action costs in §258.73(a) up to the rate of return for essentially risk free investments, net of inflation, under the following conditions:

(a) The State Director determines that cost estimates are complete and accurate and the owner or operator has submitted a statement from a Registered Professional Engineer so stating;

(b) The State finds the facility in compliance with applicable and appropriate permit conditions;

(c) The State Director determines that the closure date is certain and the owner or operator certifies that there are no foreseeable factors that will change the estimate of site life; and

(d) Discounted cost estimates must be adjusted annually to reflect inflation and years of remaining life.

[61 FR 60339, Nov. 27, 1996]

## APPENDIX I TO PART 258—CONSTITUENTS FOR DETECTION MONITORING [1]

| Common name [2] | CAS RN [3] |
|---|---|
| Inorganic Constituents: | |
| (1) Antimony | (Total) |
| (2) Arsenic | (Total) |

| Common name[2] | CAS RN[3] |
|---|---|
| (3) Barium | (Total) |
| (4) Beryllium | (Total) |
| (5) Cadmium | (Total) |
| (6) Chromium | (Total) |
| (7) Cobalt | (Total) |
| (8) Copper | (Total) |
| (9) Lead | (Total) |
| (10) Nickel | (Total) |
| (11) Selenium | (Total) |
| (12) Silver | (Total) |
| (13) Thallium | (Total) |
| (14) Vanadium | (Total) |
| (15) Zinc | (Total) |
| Organic Constituents: | |
| (16) Acetone | 67–64–1 |
| (17) Acrylonitrile | 107–13–1 |
| (18) Benzene | 71–43–2 |
| (19) Bromochloromethane | 74–97–5 |
| (20) Bromodichloromethane | 75–27–4 |
| (21) Bromoform; Tribromomethane | 75–25–2 |
| (22) Carbon disulfide | 75–15–0 |
| (23) Carbon tetrachloride | 56–23–5 |
| (24) Chlorobenzene | 108–90–7 |
| (25) Chloroethane; Ethyl chloride | 75–00–3 |
| (26) Chloroform; Trichloromethane | 67–66–3 |
| (27) Dibromochloromethane; Chlorodibromomethane | 124–48–1 |
| (28) 1,2-Dibromo-3-chloropropane; DBCP | 96–12–8 |
| (29) 1,2-Dibromoethane; Ethylene dibromide; EDB | 106–93–4 |
| (30) o-Dichlorobenzene; 1,2-Dichlorobenzene | 95–50–1 |
| (31) p-Dichlorobenzene; 1,4-Dichlorobenzene | 106–46–7 |
| (32) trans–1,4-Dichloro-2-butene | 110–57–6 |
| (33) 1,1-Dichloroethane; Ethylidene chloride | 75–34–3 |
| (34) 1,2-Dichloroethane; Ethylene dichloride | 107–06–2 |
| (35) 1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride | 75–35–4 |
| (36) cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene | 156–59–2 |
| (37) trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene | 156–60–5 |
| (38) 1,2-Dichloropropane; Propylene dichloride | 78–87–5 |
| (39) cis-1,3-Dichloropropene | 10061–01–5 |
| (40) trans-1,3-Dichloropropene | 10061–02–6 |
| (41) Ethylbenzene | 100–41–4 |
| (42) 2-Hexanone; Methyl butyl ketone | 591–78–6 |
| (43) Methyl bromide; Bromomethane | 74–83–9 |
| (44) Methyl chloride; Chloromethane | 74–87–3 |
| (45) Methylene bromide; Dibromomethane | 74–95–3 |
| (46) Methylene chloride; Dichloromethane | 75–09–2 |
| (47) Methyl ethyl ketone; MEK; 2-Butanone | 78–93–3 |
| (48) Methyl iodide; Iodomethane | 74–88–4 |
| (49) 4-Methyl-2-pentanone; Methyl isobutyl ketone | 108–10–1 |
| (50) Styrene | 100–42–5 |
| (51) 1,1,1,2-Tetrachloroethane | 630–20–6 |
| (52) 1,1,2,2-Tetrachloroethane | 79–34–5 |
| (53) Tetrachloroethylene; Tetrachloroethene; Perchloroethylene | 127–18–4 |
| (54) Toluene | 108–88–3 |
| (55) 1,1,1-Trichloroethane; Methylchloroform | 71–55–6 |
| (56) 1,1,2-Trichloroethane | 79–00–5 |
| (57) Trichloroethylene; Trichloroethene | 79–01–6 |
| (58) Trichlorofluoromethane; CFC-11 | 75–69–4 |
| (59) 1,2,3-Trichloropropane | 96–18–4 |
| (60) Vinyl acetate | 108–05–4 |
| (61) Vinyl chloride | 75–01–4 |
| (62) Xylenes | 1330–20–7 |

[1] This list contains 47 volatile organics for which possible analytical procedures provided in EPA Report SW–846 ''Test Methods for Evaluating Solid Waste,'' third edition, November 1986, as revised December 1987, includes Method 8260; and 15 metals for which SW–846 provides either Method 6010 or a method from the 7000 series of methods.

[2] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3] Chemical Abstracts Service registry number. Where ''Total'' is entered, all species in the ground water that contain this element are included.

## APPENDIX II TO PART 258—LIST OF HAZARDOUS INORGANIC AND ORGANIC CONSTITUENTS[1]

| Common Name[2] | CAS RN[3] | Chemical abstracts service index name[4] | Suggested methods[5] | PQL (μ g/L)[6] |
|---|---|---|---|---|
| Acenaphthene | 83–32–9 | Acenaphthylene, 1,2-dihydro- | 8100 | 200 |
| | | | 8270 | 10 |
| Acenaphthylene | 208–96–8 | Acenaphthylene | 8100 | 200 |
| | | | 8270 | 10 |
| Acetone | 67–64–1 | 2-Propanone | 8260 | 100 |
| Acetonitrile; Methyl cyanide | 75–05–8 | Acetonitrile | 8015 | 100 |
| Acetophenone | 98–86–2 | Ethanone, 1-phenyl- | 8270 | 10 |
| 2-Acetylaminofluorene; 2-AAF | 53–96–3 | Acetamide, N-9H-fluoren-2-yl- | 8270 | 20 |
| Acrolein | 107–02–8 | 2-Propenal | 8030 | 5 |
| | | | 8260 | 100 |
| Acrylonitrile | 107–13–1 | 2-Propenenitrile | 8030 | 5 |
| | | | 8260 | 200 |
| Aldrin | 309–00–2 | 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1α,4α,4aβ,5α,8α,8aβ)- | 8080 | 0.05 |
| | | | 8270 | 10 ... |
| Allyl chloride | 107–05–1 | 1-Propene, 3-chloro- | 8010 | 5 |
| | | | 8260 | 10 |
| 4-Aminobiphenyl | 92–67–1 | [1,1[1]-Biphenyl]-4-amine | 8270 | 20 |
| Anthracene | 120–12–7 | Anthracene | 8100 | 200 |
| | | | 8270 | 10 |
| Antimony | (Total) | Antimony | 6010 | 300 |
| | | | 7040 | 2000 |
| | | | 7041 | 30 |

| Common Name [2] | CAS RN [3] | Chemical abstracts service index name [4] | Suggested methods [5] | PQL (μ g/L) [6] |
|---|---|---|---|---|
| Arsenic | (Total) | Arsenic | 6010 | 500 |
| | | | 7060 | 10 |
| | | | 7061 | 20 |
| Barium | (Total) | Barium | 6010 | 20 |
| | | | 7080 | 1000 |
| Benzene | 71–43–2 | Benzene | 8020 | 2 |
| | | | 8021 | 0.1 |
| | | | 8260 | 5 ..... |
| Benzo[a]anthracene; Benzanthracene | 56–55–3 | Benz[a]anthracene | 8100 | 200 |
| | | | 8270 | 10 |
| Benzo[b]fluoranthene | 205–99–2 | Benz[e]acephenanthrylene | 8100 | 200 |
| | | | 8270 | 10 |
| Benzo[k]fluoranthene | 207–08–9 | Benzo[k]fluoranthene | 8100 | 200 |
| | | | 8270 | 10 |
| Benzo[ghi]perylene | 191–24–2 | Benzo[ghi]perylene | 8100 | 200 |
| | | | 8270 | 10 |
| Benzo[a]pyrene | 50–32–8 | Benzo[a]pyrene | 8100 | 200 |
| | | | 8270 | 10 |
| Benzyl alcohol | 100–51–6 | Benzenemethanol | 8270 | 20 |
| Beryllium | (Total) | Beryllium | 6010 | 3 |
| | | | 7090 | 50 |
| | | | 7091 | 2 |
| alpha-BHC | 319–84–6 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5β,6β)-. | 8080 | 0.05 |
| | | | 8270 | 10 ... |
| beta-BHC | 319–85–7 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2β,3α,4β,5α,6β)-. | 8080 | 0.05 |
| | | | 8270 | 20 ... |
| delta-BHC | 319–86–8 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3α,4β,5α,6β)-. | 8080 | 0.1 |
| | | | 8270 | 20 ... |
| gamma-BHC; Lindane | 58–89–9 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)-. | 8080 | 0.05 |
| | | | 8270 | 20 ... |
| Bis(2-chloroethoxy)methane | 111–91–1 | Ethane, 1,1¹-[methylenebis(oxy)]bis[2-chloro-. | 8110 | 5 |
| | | | 8270 | 10 |
| Bis(2-chloroethyl) ether; Dichloroethyl ether. | 111-44-4 | Ethane, 1,1¹-oxybis[2-chloro- | 8110 | 3 |
| | | | 8270 | 10 |
| Bis-(2-chloro-1-methylethyl) ether; 2,2¹-Dichlorodiisopropyl ether; DCIP, See note 7 | 108–60–1 | Propane, 2,2¹-oxybis[1-chloro- | 8110 | 10 |
| | | | 8270 | 10 |
| Bis(2-ethylhexyl) phthalate | 117–81–7 | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester. | 8060 | 20 |
| Bromochloromethane; Chlorobromomethane. | 74–97–5 | Methane, bromochloro- | 8021 | 0.1 |
| | | | 8260 | 5 ..... |
| Bromodichloromethane; Dibromochloromethane. | 75–27–4 | Methane, bromodichloro- | 8010 | 1 |
| | | | 8021 | 0.2 |
| | | | 8260 | 5 ..... |
| Bromoform; Tribromomethane | 75–25–2 | Methane, tribromo- | 8010 | 2 |
| | | | 8021 | 15 |
| | | | 8260 | 5 |
| 4-Bromophenyl phenyl ether | 101–55–3 | Benzene, 1-bromo-4-phenoxy- | 8110 | 25 |
| | | | 8270 | 10 |
| Butyl benzyl phthalate; Benzyl butyl phthalate. | 85–68–7 | 1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester. | 8060 | 5 |
| | | | 8270 | 10 |
| Cadmium | (Total) | Cadmium | 6010 | 40 |
| | | | 7130 | 50 |
| | | | 7131 | 1 |
| Carbon disulfide | 75–15–0 | Carbon disulfide | 8260 | 100 |
| Carbon tetrachloride | 56–23–5 | Methane, tetrachloro- | 8010 | 1 |
| | | | 8021 | 0.1 |
| | | | 8260 | 10 ... |
| Chlordane | See Note 8 | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-. | 8080 | 0.1 |
| | | | 8270 | 50 ... |
| p-Chloroaniline | 106–47–8 | Benzenamine, 4-chloro- | 8270 | 20 |
| Chlorobenzene | 108–90–7 | Benzene, chloro- | 8010 | 2 |
| | | | 8020 | 2 |
| | | | 8021 | 0.1 |
| | | | 8260 | 5 ..... |
| Chlorobenzilate | 510–15–6 | Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester. | 8270 | 10 |
| p-Chloro-m-cresol; 4-Chloro-3-methylphenol. | 59–50–7 | Phenol, 4-chloro-3-methyl- | 8040 | 5 |
| | | | 8270 | 20 |

| Common Name [2] | CAS RN [3] | Chemical abstracts service index name [4] | Suggested methods [5] | PQL (μ g/L) [6] |
|---|---|---|---|---|
| Chloroethane; Ethyl chloride | 75–00–3 | Ethane, chloro- | 8010 | 5 |
| | | | 8021 | 1 |
| | | | 8260 | 10 |
| Chloroform; Trichloromethane | 67–66–3 | Methane, trichloro- | 8010 | 0.5 |
| | | | 8021 | 0.2 |
| | | | 8260 | 5 |
| 2-Chloronaphthalene | 91–58–7 | Naphthalene, 2-chloro- | 8120 | 10 |
| | | | 8270 | 10 |
| 2-Chlorophenol | 95–57–8 | Phenol, 2-chloro- | 8040 | 5 |
| | | | 8270 | 10 |
| 4-Chlorophenyl phenyl ether | 7005–72–3 | Benzene, 1-chloro-4-phenoxy- | 8110 | 40 |
| | | | 8270 | 10 |
| Chloroprene | 126–99–8 | 1,3-Butadiene, 2-chloro- | 8010 | 50 |
| | | | 8260 | 20 |
| Chromium | (Total) | Chromium | 6010 | 70 |
| | | | 7190 | 500 |
| | | | 7191 | 10 |
| Chrysene | 218–01–9 | Chrysene | 8100 | 200 |
| | | | 8270 | 10 |
| Cobalt | (Total) | Cobalt | 6010 | 70 |
| | | | 7200 | 500 |
| | | | 7201 | 10 |
| Copper | (Total) | Copper | 6010 | 60 |
| | | | 7210 | 200 |
| | | | 7211 | 10 |
| m-Cresol; 3-methylphenol | 108–39–4 | Phenol, 3-methyl- | 8270 | 10 |
| o-Cresol; 2-methylphenol | 95–48–7 | Phenol, 2-methyl- | 8270 | 10 |
| p-Cresol; 4-methylphenol | 106–44–5 | Phenol, 4-methyl- | 8270 | 10 |
| Cyanide | 57–12–5 | Cyanide | 9010 | 200 |
| 2,4-D; 2,4-Dichlorophenoxyacetic acid | 94–75–7 | Acetic acid, (2,4-dichlorophenoxy)- | 8150 | 10 |
| 4,4[1]-DDD | 72–54–8 | Benzene 1,1[1]-(2,2-dichloroethylidene)bis[4-chloro-. | 8080 | 0.1 |
| | | | 8270 | 10 |
| 4,4[1]-DDE | 72–55–9 | Benzene, 1,1[1]-(dichloroethyenylidene)bis[4-chloro-. | 8080 | 0.05 |
| | | | 8270 | 10 |
| 4,4[1]-DDT | 50–29–3 | Benzene, 1,1[1]-(2,2,2-trichloroethylidene)bis[4-chloro-. | 8080 | 0.1 |
| | | | 8270 | 10 |
| Diallate | 2303–16–4 | Carbamothioic acid, bis(1-methylethyl)-,S-(2,3-dichloro-2-propenyl) ester. | 8270 | 10 |
| Dibenz[a,h]anthracene | 53–70–3 | Dibenz[a,h]anthracene | 8100 | 200 |
| | | | 8270 | 10 |
| Dibenzofuran | 132–64–9 | Dibenzofuran | 8270 | 10 |
| Dibromochloromethane; Chlorodibromomethane. | 124–48–1 | Methane, dibromochloro- | 8010 | 1 |
| | | | 8021 | 0.3 |
| | | | 8260 | 5 |
| 1,2-Dibromo-3-chloropropane; DBCP | 96–12–8 | Propane, 1,2-dibrome-3-chloro- | 8011 | 0.1 |
| | | | 8021 | 30 |
| | | | 8260 | 25 |
| 1,2-Dibromoethane; Ethylene dribromide; EDB. | 106–93–4 | Ethane, 1,2-dibromo- | 8011 | 0.1 |
| | | | 8021 | 10 |
| | | | 8260 | 5 |
| Di-n-butyl phthalate | 84–74–2 | 1,2-Benzenedicarboxylic acid, dibutyl ester. | 8060 | 5 |
| | | | 8270 | 10 |
| o-Dichlorobenzene; 1,2-Dichlorobenzene | 95–50–1 | Benzene, 1,2-dichloro- | 8010 | 2 |
| | | | 8020 | 5 |
| | | | 8021 | 0.5 |
| | | | 8120 | 10 |
| | | | 8260 | 5 |
| | | | 8270 | 10 |
| m-Dichlorobenzene; 1,3-Dichlorobenzene. | 541–73–1 | Benzene, 1,3-Dichloro- | 8010 | 5 |
| | | | 8020 | 5 |
| | | | 8021 | 0.2 |
| | | | 8120 | 10 |
| | | | 8260 | 5 |
| | | | 8270 | 10 |
| p-Dichlorobenzene; 1,4-Dichlorobenzene | 106–46–7 | Benzene, 1,4-dichloro- | 8010 | 2 |
| | | | 8020 | 5 |
| | | | 8021 | 0.1 |
| | | | 8120 | 15 |
| | | | 8260 | 5 |
| | | | 8270 | 10 |
| 3,3[1]-Dichlorobenzidine | 91–94–1 | [1,1[1]-Biphenyl]-4,4[1]-diamine, 3,3[1]-dichloro-. | 8270 | 20 |

| Common Name [2] | CAS RN [3] | Chemical abstracts service index name [4] | Suggested methods [5] | PQL (μ g/L) [6] |
|---|---|---|---|---|
| trans-1,4-Dichloro-2-butene | 110-57-6 | 2-Butene, 1,4-dichloro-, (E)- | 8260 | 100 |
| Dichlorodifluoromethane; CFC 12; | 75–71–8 | Methane, dichlorodifluoro- | 8021 | 0.5 |
| | | | 8260 | 5 |
| 1,1-Dichloroethane; Ethyldidene chloride | 75–34–3 | Ethane, 1,1-dichloro- | 8010 | 1 |
| | | | 8021 | 0.5 |
| | | | 8260 | 5 |
| 1,2-Dichloroethane; Ethylene dichloride | 107–06–2 | Ethane, 1,1-dichloro- | 8010 | 0.5 |
| | | | 8021 | 0.3 |
| | | | 8260 | 5 |
| 1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride. | 75–35–4 | Ethene, 1,1-dichloro- | 8010 | 1 |
| | | | 8021 | 0.5 |
| | | | 8260 | 5 |
| cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene. | 156–59–2 | Ethene, 1,2-dichloro-, (Z)- | 8021 | 0.2 |
| | | | 8260 | 5 |
| trans-1,2-Dichloroethylene trans-1,2-Dichloroethene. | 156–60–5 | Ethene, 1,2-dichloro-, (E)- | 8010 | 1 |
| | | | 8021 | 0.5 |
| | | | 8260 | 5 |
| 2,4-Dichlorophenol | 120–83–2 | Phenol, 2,4-dichloro- | 8040 | 5 |
| | | | 8270 | 10 |
| 2,6-Dichlorophenol | 87–65–0 | Phenol, 2,6-dichloro- | 8270 | 10 |
| 1,2-Dichloropropane; Propylene dichloride. | 78–87–5 | Propane, 1,2-dichloro- | 8010 | 0.5 |
| | | | 8021 | 0.05 |
| | | | 8260 | 5 |
| 1,3-Dichloropropane; Trimethylene dichloride. | 142–28–9 | Propane, 1,3-dichloro- | 8021 | 0.3 |
| | | | 8260 | 5 |
| 2,2-Dichloropropane; Isopropylidene chloride. | 594–20–7 | Propane, 2,2-dichloro- | 8021 | 0.5 |
| | | | 8260 | 15 |
| 1,1-Dichloropropene | 563–58–6 | 1-Propene, 1,1-dichloro- | 8021 | 0.2 |
| | | | 8260 | 5 |
| cis-1,3-Dichloropropene | 10061–01–5 | 1-Propene, 1,3-dichloro-, (Z)- | 8010 | 20 |
| | | | 8260 | 10 |
| trans-1,3-Dichloropropene | 10061–02–6 | 1-Propene, 1,3-dichloro-, (E)- | 8010 | 5 |
| | | | 8260 | 10 |
| Dieldrin | 60–57–1 | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexa, chloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-. | 8080 | 0.05 |
| | | | 8270 | 10 |
| Diethyl phthalate | 84–66–2 | 1,2-Benzenedicarboxylic acid, diethyl ester. | 8060 | 5 |
| | | | 8270 | 10 |
| 0,0-Diethyl 0-2-pyrazinyl phosphorothioate; Thionazin. | 297–97–2 | Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester. | 8141 | 5 |
| | | | 8270 | 20 |
| Dimethoate | 60–51–5 | Phosphorodithioic acid, 0,0-dimethyl S-[2-(methylamino)-2-oxoethyl] ester. | 8141 | 3 |
| | | | 8270 | 20 |
| p-(Dimethylamino)azobenzene | 60–11–7 | Benzenamine, N,N-dimethyl-4-(phenylazo)-. | 8270 | 10 |
| 7,12-Dimethylbenz[a]anthracene | 57–97–6 | Benz[a]anthracene, 7,12-dimethyl- | 8270 | 10 |
| 3,3¹-Dimethylbenzidine | 119–93–7 | [1,1¹-Biphenyl]-4,4¹-diamine, 3,3¹-dimethyl-. | 8270 | 10 |
| 2,4-Dimethylphenol; m-Xylenol | 105–67–9 | Phenol, 2,4-dimethyl- | 8040 | 5 |
| | | | 8270 | 10 |
| Dimethyl phthalate | 131–11–3 | 1,2-Benzenedicarboxylic acid, dimethyl ester. | 8060 | 5 |
| | | | 8270 | 10 |
| m-Dinitrobenzene | 99–65–0 | Benzene, 1,3-dinitro- | 8270 | 20 |
| 4,6-Dinitro-o-cresol 4,6-Dinitro-2-methylphenol. | 534–52–1 | Phenol, 2-methyl-4,6-dinitro | 8040 | 150 |
| | | | 8270 | 50 |
| 2,4-Dinitrophenol; | 51–28–5 | Phenol, 2,4-dinitro- | 8040 | 150 |
| | | | 8270 | 50 |
| 2,4-Dinitrotoluene | 121–14–2 | Benzene, 1-methyl-2,4-dinitro- | 8090 | 0.2 |
| | | | 8270 | 10 |
| 2,6-Dinitrotoluene | 606–20–2 | Benzene, 2-methyl-1,3-dinitro- | 8090 | 0.1 |
| | | | 8270 | 10 |
| Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol. | 88–85–7 | Phenol, 2-(1-methylpropyl)-4,6-dinitro- | 8150 | 1 |
| | | | 8270 | 20 |
| Di-n-octyl phthalate | 117–84–0 | 1,2-Benzenedicarboxylic acid, dioctyl ester. | 8060 | 30 |
| | | | 8270 | 10 |
| Diphenylamine | 122–39–4 | Benzenamine, N-phenyl- | 8270 | 10 |
| Disulfoton | 298–04–4 | Phosphorodithioic acid, 0,0-diethyl S-[2-(ethylthio)ethyl] ester. | 8140 | 2 |
| | | | 8141 | 0.5 |
| | | | 8270 | 10 |
| Endosulfan I | 959–98–8 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, | 8080 | 0.1 |
| | | | 8270 | 20 |

| Common Name [2] | CAS RN [3] | Chemical abstracts service index name [4] | Suggested methods [5] | PQL (μ g/L) [6] |
|---|---|---|---|---|
| Endosulfan II | 33213–65–9 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα,6β,9β,9aα)-. | 8080<br>8270 | 0.05<br>20 ... |
| Endosulfan sulfate | 1031–07–8 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-,3-3-dioxide. | 8080<br>8270 | 0.5<br>10 ... |
| Endrin | 72–20–8 | 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-, (1aα, 2β,2aβ,3α,6α,6aβ,7β,7aα)-. | 8080<br>8270 | 0.1<br>20 ... |
| Endrin aldehyde | 7421–93–4 | 1,2,4-Methenocyclopenta[cd]pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro-, (1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R*)-. | 8080<br>8270 | 0.2<br>10 ... |
| Ethylbenzene | 100–41–4 | Benzene, ethyl- | 8020<br>8221<br>8260 | 2<br>0.05<br>5 ..... |
| Ethyl methacrylate | 97–63–2 | 2-Propenoic acid, 2-methyl-, ethyl ester | 8015<br>8260<br>8270 | 5<br>10<br>10 |
| Ethyl methanesulfonate | 62–50–0 | Methanesulfonic acid, ethyl ester | 8270 | 20 |
| Famphur | 52–85–7 | Phosphorothioic acid, 0-[4-[(dimethylamino)sulfonyl]phenyl] 0,0-dimethyl ester. | 8270 | 20 |
| Fluoranthene | 206–44–0 | Fluoranthene | 8100<br>8270 | 200<br>10 |
| Fluorene | 86–73–7 | 9H-Fluorene | 8100<br>8270 | 200<br>10 |
| Heptachlor | 76–44–8 | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-. | 8080<br>8270 | 0.05<br>10 ... |
| Heptachlor epoxide | 1024–57–3 | 2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα, 1bβ, 2α, 5α, 5aβ, 6β, 6aα). | 8080<br>8270 | 1<br>10 |
| Hexachlorobenzene | 118–74–1 | Benzene, hexachloro- | 8120<br>8270 | 0.5<br>10 ... |
| Hexachlorobutadiene | 87–68–3 | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- | 8021<br>8120<br>8260<br>8270 | 0.5<br>5 .....<br>10 ...<br>10 ... |
| Hexachlorocyclopentadiene | 77–47–4 | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-. | 8120<br>8270 | 5<br>10 |
| Hexachloroethane | 67–72–1 | Ethane, hexachloro- | 8120<br>8260<br>8270 | 0.5<br>10 ...<br>10 ... |
| Hexachloropropene | 1888–71–7 | 1-Propene, 1,1,2,3,3,3-hexachloro- | 8270 | 10 |
| 2-Hexanone; Methyl butyl ketone | 591–78–6 | 2-Hexanone | 8260 | 50 |
| Indeno(1,2,3-cd)pyrene | 193–39–5 | Indeno(1,2,3-cd)pyrene | 8100<br>8270 | 200<br>10 |
| Isobutyl alcohol | 78–83–1 | 1-Propanol, 2-methyl- | 8015<br>8240 | 50<br>100 |
| Isodrin | 465–73–6 | 1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10- hexachloro-1,4,4a,5,8,8a hexahydro-(1α,4α,4aβ,5β,8β,8aβ)-. | 8270<br>8260 | 20<br>10 |
| Isophorone | 78–59–1 | 2-Cyclohexen-1-one, 3,5,5-trimethyl- | 8090<br>8270 | 60<br>10 |
| Isosafrole | 120–58–1 | 1,3-Benzodioxole, 5-(1-propenyl)- | 8270 | 10 |
| Kepone | 143–50–0 | 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-. | 8270 | 20 |
| Lead | (Total) | Lead | 6010<br>7420<br>7421 | 400<br>1000<br>10 |
| Mercury | (Total) | Mercury | 7470 | 2 |
| Methacrylonitrile | 126–98–7 | 2-Propenenitrile, 2-methyl- | 8015<br>8260 | 5<br>100 |
| Methapyrilene | 91–80–5 | 1,2-Ethanediamine, N.N-dimethyl-N[1]-2-pyridinyl-N1/2-thienylmethyl)-. | 8270 | 100 |

| Common Name [2] | CAS RN [3] | Chemical abstracts service index name [4] | Suggested methods [5] | PQL (μ g/L) [6] |
|---|---|---|---|---|
| Methoxychlor | 72–43–5 | Benzene,1,1[1]-(2,2,2,trichloroethylidene)bis[4-methoxy-. | 8080 | 2 |
| | | | 8270 | 10 |
| Methyl bromide; Bromomethane | 74–83–9 | Methane, bromo- | 8010 | 20 |
| | | | 8021 | 10 |
| Methyl chloride; Chloromethane | 74–87–3 | Methane, chloro- | 8010 | 1 |
| | | | 8021 | 0.3 |
| 3-Methylcholanthrene | 56–49–5 | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-. | 8270 | 10 |
| Methyl ethyl ketone; MEK; 2-Butanone | 78–93–3 | 2-Butanone | 8015 | 10 |
| | | | 8260 | 100 |
| Methyl iodide; Iodomethane | 74–88–4 | Methane, iodo- | 8010 | 40 |
| | | | 8260 | 10 |
| Methyl methacrylate | 80–62–6 | 2-Propenoic acid, 2-methyl-, methyl ester. | 8015 | 2 |
| | | | 8260 | 30 |
| Methyl methanesulfonate | 66–27–3 | Methanesulfonic acid, methyl ester | 8270 | 10 |
| 2-Methylnaphthalene | 91–57–6 | Naphthalene, 2-methyl- | 8270 | 10 |
| Methyl parathion; Parathion methyl | 298–00–0 | Phosphorothioic acid, 0,0-dimethyl | 8140 | 0.5 |
| | | | 8141 | 1 |
| | | | 8270 | 10 |
| 4-Methyl-2-pentanone; Methyl isobutyl ketone. | 108–10–1 | 2-Pentanone, 4-methyl- | 8015 | 5 |
| | | | 8260 | 100 |
| Methylene bromide; Dibromomethane | 74–95–3 | Methane, dibromo- | 8010 | 15 |
| | | | 8021 | 20 |
| | | | 8260 | 10 |
| Methylene chloride; Dichloromethane | 75–09–2 | Methane, dichloro- | 8010 | 5 |
| | | | 8021 | 0.2 |
| | | | 8260 | 10 |
| Naphthalene | 91–20–3 | Naphthalene | 8021 | 0.5 |
| | | | 8100 | 200 |
| | | | 8260 | 5 |
| | | | 8270 | 10 |
| 1,4-Naphthoquinone | 130–15–4 | 1,4-Naphthalenedione | 8270 | 10 |
| 1-Naphthylamine | 134–32–7 | 1-Naphthalenamine | 8270 | 10 |
| 2-Naphthylamine | 91–59–8 | 2-Naphthalenamine | 8270 | 10 |
| Nickel | (Total) | Nickel | 6010 | 150 |
| | | | 7520 | 400 |
| o-Nitroaniline; 2-Nitroaniline | 88–74–4 | Benzenamine, 2-nitro- | 8270 | 50 |
| m-Nitroaniline; 3-Nitroanile | 99–09–2 | Benzenamine, 3-nitro- | 8270 | 50 |
| p-Nitroaniline; 4-Nitroaniline | 100–01–6 | Benzenamine, 4-nitro | 8270 | 20 |
| Nitrobenzene | 98–95–3 | Benzene, nitro- | 8090 | 40 |
| | | | 8270 | 10 |
| o-Nitrophenol; 2-Nitrophenol | 88–75–5 | Phenol, 2-nitro- | 8040 | 5 |
| | | | 8270 | 10 |
| p-Nitrophenol; 4-Nitrophenol | 100–02–7 | Phenol, 4-nitro- | 8040 | 10 |
| | | | 8270 | 50 |
| N-Nitrosodi-n-butylamine | 924–16–3 | 1-Butanamine, N-butyl-N-nitroso- | 8270 | 10 |
| N-Nitrosodiethylamine | 55–18–5 | Ethanamine, N-ethyl-N-nitroso- | 8270 | 20 |
| N-Nitrosodimethylamine | 62–75–9 | Methanamine, N-methyl-N-nitroso- | 8070 | 2 |
| N-Nitrosodiphenylamine | 86–30–6 | Benzenamine, N-nitroso-N-phenyl- | 8070 | 5 |
| N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine. | 621–64–7 | 1-Propanamine, N-nitroso-N-propyl- | 8070 | 10 |
| N-Nitrosomethylethalamine | 10595–95–6 | Ethanamine, N-methyl-N-nitroso- | 8270 | 10 |
| N-Nitrosopiperidine | 100–75–4 | Piperidine, 1-nitroso- | 8270 | 20 |
| N-Nitrosopyrrolidine | 930–55–2 | Pyrrolidine, 1-nitroso- | 8270 | 40 |
| 5-Nitro-o-toluidine | 99–55–8 | Benzenamine, 2-methyl-5-nitro- | 8270 | 10 |
| Parathion | 56–38–2 | Phosphorothioic acid, 0,0-diethyl 0-(4-nitrophenyl) ester. | 8141 | 0.5 |
| | | | 8270 | 10 |
| Pentachlorobenzene | 608–93–5 | Benzene, pentachloro- | 8270 | 10 |
| Pentachloronitrobenzene | 82–68–8 | Benzene, pentachloronitro- | 8270 | 20 |
| Pentachlorophenol | 87–86–5 | Phenol, pentachloro- | 8040 | 5 |
| | | | 8270 | 50 |
| Phenacetin | 62–44–2 | Acetamide, N-(4-ethoxyphenl) | 8270 | 20 |
| Phenanthrene | 85–01–8 | Phenanthrene | 8100 | 200 |
| | | | 8270 | 10 |
| Phenol | 108–95–2 | Phenol | 8040 | 1 |
| p-Phenylenediamine | 106–50–3 | 1,4-Benzenediamine | 8270 | 10 |
| Phorate | 298–02–2 | Phosphorodithioic acid, 0,0-diethyl S-[(ethylthio)methyl] ester. | 8140 | 2 |
| | | | 8141 | 0.5 |
| | | | 8270 | 10 |
| Polychlorinated biphenyls; PCBs; Aroclors. | See Note 9 | 1,1'-Biphenyl, chloro derivatives | 8080 | 50 |
| | | | 8270 | 200 |

| Common Name [2] | CAS RN [3] | Chemical abstracts service index name [4] | Suggested methods [5] | PQL (μ g/L) [6] |
|---|---|---|---|---|
| Pronamide | 23950–58–5 | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-. | 8270 | 10 |
| Propionitrile; Ethyl cyanide | 107–12–0 | Propanenitrile | 8015 | 60 |
| | | | 8260 | 150 |
| Pyrene | 129–00–0 | Pyrene | 8100 | 200 |
| | | | 8270 | 10 |
| Safrole | 94–59–7 | 1,3-Benzodioxole, 5-(2-propenyl)- | 8270 | 10 |
| Selenium | (Total) | Selenium | 6010 | 750 |
| | | | 7740 | 20 |
| | | | 7741 | 20 |
| Silver | (Total) | Silver | 6010 | 70 |
| | | | 7760 | 100 |
| | | | 7761 | 10 |
| Silvex; 2,4,5-TP | 93–72–1 | Propanoic acid, 2-(2,4,5-trichlorophenoxy)-. | 8150 | 2 |
| Styrene | 100–42–5 | Benzene, ethenyl- | 8020 | 1 |
| | | | 8021 | 0.1 |
| | | | 8260 | 10 ... |
| Sulfide | 18496–25–8 | Sulfide | 9030 | 4000 |
| 2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid. | 93–76–5 | Acetic acid, (2,4,5-trichlorophenoxy)- | 8150 | 2 |
| 1,2,4,5-Tetrachlorobenzene | 95–94–3 | Benzene, 1,2,4,5-tetrachloro- | 8270 | 10 |
| 1,1,1,2-Tetrachloroethane | 630–20–6 | Ethane, 1,1,1,2-tetrachloro- | 8010 | 5 |
| | | | 8021 | 0.05 |
| | | | 8260 | 5 ..... |
| 1,1,2,2-Tetrachloroethane | 79–34–5 | Ethane, 1,1,2,2-tetrachloro- | 8010 | 0.5 |
| | | | 8021 | 0.1 .. |
| | | | 8260 | 5 ..... |
| Tetrachloroethylene; Tetrachloroethene; Perchloroethylene. | 127–18–4 | Ethene, tetrachloro- | 8010 | 0.5 |
| | | | 8021 | 0.5 .. |
| | | | 8260 | 5 ..... |
| 2,3,4,6-Tetrachlorophenol | 58–90–2 | Phenol, 2,3,4,6-tetrachloro- | 8270 | 10 |
| Thallium | (Total) | Thallium | 6010 | 400 |
| | | | 7840 | 1000 |
| | | | 7841 | 10 |
| Tin | (Total) | Tin | 6010 | 40 |
| Toluene | 108–88–3 | Benzene, methyl- | 8020 | 2 |
| | | | 8021 | 0.1 |
| | | | 8260 | 5 ..... |
| o-Toluidine | 95–53–4 | Benzenamine, 2-methyl- | 8270 | 10 |
| Toxaphene | See Note 10 | Toxaphene | 8080 | 2 |
| 1,2,4-Trichlorobenzene | 120–82–1 | Benzene, 1,2,4-trichloro- | 8021 | 0.3 |
| | | | 8120 | 0.5 .. |
| | | | 8260 | 10 ... |
| | | | 8270 | 10 ... |
| 1,1,1-Trichloroethane; Methylchloroform | 71–55–6 | Ethane, 1,1,1-trichloro- | 8010 | 0.3 |
| | | | 8021 | 0.3 .. |
| | | | 8260 | 5 ..... |
| 1,1,2-Trichloroethane | 79–00–5 | Ethane, 1,1,2-trichloro- | 8010 | 0.2 |
| | | | 8260 | 5 ..... |
| Trichloroethylene; Trichloroethene | 79–01–6 | Ethene, trichloro- | 8010 | 1 |
| | | | 8021 | 0.2 |
| | | | 8260 | 5 ..... |
| Trichlorofluoromethane; CFC–11 | 75–69–4 | Methane, trichlorofluoro- | 8010 | 10 |
| | | | 8021 | 0.3 |
| | | | 8260 | 5 ..... |
| 2,4,5-Trichlorophenol | 95–95–4 | Phenol, 2,4,5-trichloro- | 8270 | 10 |
| 2,4,6-Trichlorophenol | 88–06–2 | Phenol, 2,4,6-trichloro- | 8040 | 5 |
| | | | 8270 | 10 |
| 1,2,3-Trichloropropane | 96–18–4 | Propane, 1,2,3-trichloro- | 8010 | 10 |
| | | | 8021 | 5 |
| | | | 8260 | 15 |
| 0,0,0-Triethyl phosphorothioate | 126–68–1 | Phosphorothioic acid, 0,0,0-triethylester | 8270 | 10 |
| sym-Trinitrobenzene | 99–35–4 | Benzene, 1,3,5-trinitro- | 8270 | 10 |
| Vanadium | (Total) | Vanadium | 6010 | 80 |
| | | | 7910 | 2000 |
| | | | 7911 | 40 |
| Vinyl acetate | 108–05–4 | Acetic acid, ethenyl ester | 8260 | 50 |
| Vinyl chloride; Chloroethene | 75–01–4 | Ethene, chloro- | 8010 | 2 |
| | | | 8021 | 0.4 |
| | | | 8260 | 10 ... |

| Common Name [2] | CAS RN [3] | Chemical abstracts service index name [4] | Suggested methods [5] | PQL (μ g/L) [6] |
|---|---|---|---|---|
| Xylene (total) | See Note 11 | Benzene, dimethyl- | 8020 | 5 |
| | | | 8021 | 0.2 |
| | | | 8260 | 5 |
| Zinc | (Total) | Zinc | 6010 | 20 |
| | | | 7950 | 50 |
| | | | 7951 | 0.5 |

Notes

[1] The regulatory requirements pertain only to the list of substances; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnotes 5 and 6.

[2] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3] Chemical Abstracts Service registry number. Where ''Total'' is entered, all species in the ground water that contain this element are included.

[4] CAS index are those used in the 9th Collective Index.

[5] Suggested Methods refer to analytical procedure numbers used in EPA Report SW–846 ''Test Methods for Evaluating Solid Waste'', third edition, November 1986, as revised, December 1987. Analytical details can be found in SW–846 and in documentation on file at the agency. CAUTION: The methods listed are representative SW–846 procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

[6] Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in ground waters that can be realiably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 mL samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

[7] This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2″-oxybis[2-chloro- (CAS RN 39638–32–9).

[8] Chlordane: This entry includes alpha-chlordane (CAS RN 5103–71–9), beta-chlordane (CAS RN 5103–74–2), gamma-chlordane (CAS RN 5566–34–7), and constituents of chlordane (CAS RN 57–74–9 and CAS RN 12789–03–6). PQL shown is for technical chlordane. PQLs of specific isomers are about 20 μg/L by method 8270.

[9] Polychlorinated biphenyls (CAS RN 1336–36–3); this category contains congener chemicals, including constituents of Aroclor 1016 (CAS RN 12674–11–2), Aroclor 1221 (CAS RN 11104–28–2), Aroclor 1232 (CAS RN 11141–16–5), Aroclor 1242 (CAS RN 53469–21–9), Aroclor 1248 (CAS RN 12672–29–6), Aroclor 1254 (CAS RN 11097–69–1), and Aroclor 1260 (CAS RN 11096–82–5). The PQL shown is an average value for PCB congeners.

[10] Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001–35–2), i.e., chlorinated camphene.

[11] Xylene (total): This entry includes o-xylene (CAS RN 96–47–6), m-xylene (CAS RN 108–38–3), p-xylene (CAS RN 106–42–3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330–20–7). PQLs for method 8021 are 0.2 for o-xylene and 0.1 for m- or p-xylene. The PQL for m-xylene is 2.0 μg/L by method 8020 or 8260.

## PART 259 [Reserved]

# FINDING AIDS

A list of CFR titles, subtitles, chapters, subchapters and parts and an alphabetical list of agencies publishing in the CFR are included in the CFR Index and Finding Aids volume to the Code of Federal Regulations which is published separately and revised annually.

Material Approved for Incorporation by Reference
Table of CFR Titles and Chapters
Alphabetical List of Agencies Appearing in the CFR
Table of OMB Control Numbers
List of CFR Sections Affected

# Material Approved for Incorporation by Reference

**(Revised as of July 1, 1998)**

The Director of the Federal Register has approved under 5 U.S.C. 552(a) and 1 CFR Part 51 the incorporation by reference of the following publications. This list contains only those incorporations by reference effective as of the revision date of this volume. Incorporations by reference found within a regulation are effective upon the effective date of that regulation. For more information on incorporation by reference, see the preliminary pages of this volume.

**40 CFR (PARTS 190 TO 259):**
**ENVIRONMENTAL PROTECTION AGENCY**

| | **40 CFR** |
|---|---|
| **American Society of Mechanical Engineers (ASME)** | |
| Service Center, 22 Law Drive, P.O. Box 2900, Fairfield, NJ 07007, Telephone (610) 832–9585, FAX (610) 832-9555 | |
| ASME NQA–1–1989 ed., Quality Assurance Program Requirements for Nuclear Facilities. | 194.22 |
| ASME NQA–2a–1990 addenda, part 2.7, to ASME NQA–2–1989 ed., Quality Assurance Requirements for Nuclear Facility Applications. | 194.22; 194.23 |
| ASME NQA–3–1989 ed., Quality Assurance Program Requirements for the Collection of Scientific and Technical Information for Site Characterization of High-Level Nuclear Waste Repositories (excluding section 2.1(b) and (c)). | 194.22 |
| **American Society for Testing and Materials** | |
| 1916 Race St., Philadelphia, PA 19103 | |
| ASTM D 3826–91, Standard Practice for Determining Degradation End Point in Degradable Polyolefins Using a Tensile Test. | 238.30 |
| ASTM D 5208–91, Standard Practice for Operating Fluorescent Ultraviolet (UV) and Condensation Apparatus for Exposure of Photogradable Plastics. | 238.30 |
| **Nuclear Regulatory Commission (NRC)** | |
| 2120 L St. NW., Washington, DC 20555 | |
| NUREG 1297, Peer Review for High Level Nuclear Waste Repositories, Feb. 1988. | 194.22; 194.23; 194.27 |
| State Statutes and Regulations (PART 233): OCEAN DUMPING | |
| ..... | |

**40 CFR (PARTS 190 TO 259):**—Continued

**ENVIRONMENTAL PROTECTION AGENCY**—Continued

| | **40 CFR** |
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| Michigan: (1) The Great Lakes Submerged Lands Act, MCL 322.701 *et seq.,* reprinted in Michigan 1983 Natural Resources Law; (2) The Water Resources Commission Act, MCL 323.1 *et seq.,* reprinted in Michigan 1983 Natural Resources Law; (3) The Goemaere-Anderson Wetland Protection Act, MCL 281.701 *et seq.,* reprinted in Michigan 1983 Natural Resources Law; (4) The Inland Lakes and Stream Act, MCL 281.951 *et seq.,* reprinted in Michigan 1983 Natural Resources Law; (5) Michigan Administrative Procedures Act of 1969, MCL 24.201 *et seq.;* (6) An act concerning the Erection of Dams, MCL 281.131 *et seq.,* reprinted in Michigan 1983 Natural Resources Law; (7) R 281.811 through R 281.819 inclusive, R 281.821, R 281.823, R 281.824, R 281.832 through R 281.839 inclusive, and R 281.841 through R 281.845 inclusive of the Michigan Administrative Code (1979 ed., 1982 Supp.). | 233.70 |
| New Jersey Statutory Requirements Applicable to the Freshwater Wetlands Program, 1994. | 233.71 |
| New Jersey Regulatory Requirements Applicable to the Freshwater Wetlands Program, 1994. | 233.71 |

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II Office of the Federal Register (Parts 50—299)

IV Miscellaneous Agencies (Parts 400—500)


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I General Accounting Office (Parts 1—99)

II Federal Claims Collection Standards (General Accounting Office—Department of Justice) (Parts 100—299)


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II Merit Systems Protection Board (Parts 1200—1299)

III Office of Management and Budget (Parts 1300—1399)

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VI Federal Retirement Thrift Investment Board (Parts 1600—1699)

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IX Appalachian Regional Commission (Parts 1900—1999)

XI Armed Forces Retirement Home (Part 2100)

XIV Federal Labor Relations Authority, General Counsel of the Federal Labor Relations Authority and Federal Service Impasses Panel (Parts 2400—2499)

XV Office of Administration, Executive Office of the President (Parts 2500—2599)

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| XXIII | Department of Energy (Part 3301) |
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| XXVI | Department of Defense (Part 3601) |
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| XXIX | Federal Communications Commission (Parts 3900—3999) |
| XXX | Farm Credit System Insurance Corporation (Parts 4000—4099) |
| XXXI | Farm Credit Administration (Parts 4100—4199) |
| XXXIII | Overseas Private Investment Corporation (Part 4301) |
| XXXV | Office of Personnel Management (Part 4501) |
| XL | Interstate Commerce Commission (Part 5001) |
| XLI | Commodity Futures Trading Commission (Part 5101) |
| XLII | Department of Labor (Part 5201) |
| XLIII | National Science Foundation (Part 5301) |
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| LXXVII | Office of Management and Budget (Part 8701) |


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| III | Animal and Plant Health Inspection Service, Department of Agriculture (Parts 300—399) |
| IV | Federal Crop Insurance Corporation, Department of Agriculture (Parts 400—499) |
| V | Agricultural Research Service, Department of Agriculture (Parts 500—599) |
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The OMB control numbers for chapter I of title 40 were consolidated into §9.1 at 58 FR 27472, May 10, 1993. Section 9.1 is reprinted below for the convenience of the user.

## PART 9—OMB APPROVALS UNDER THE PAPERWORK REDUCTION ACT

AUTHORITY: 7 U.S.C. 135 *et seq.*, 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 *et seq.*, 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 *et seq.*, 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

### §9.1 OMB approvals under the Paperwork Reduction Act.

This part consolidates the display of control numbers assigned to collections of information in certain EPA regulations by the Office of Management and Budget (OMB) under the Paperwork Reduction Act (PRA). This part fulfills the requirements of section 3507(f) of the PRA.

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| 158.162 | 2070–0040, 2070–0057, 2070–0060, 2070–0107 |
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| 262.34 | 2050–0035, 2050–0085 |
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| 262.40(b) | 2050–0024 |
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| 262.44(a)–(b) | 2050–0039 |
| 262.44(c) | 2050–0035 |
| 262.53–262.57 | 2050–0035 |
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| 264.97(h) | 2050–0009 |
| 264.97(j) | 2050–0120 |
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| 264.98(g)(4), (h) | 2050–0009 |
| 264.99(c), (g), (h)(1), (i)(1), (i)(2) | 2050–0033 |
| 264.99(h)(2), (i)(3), (j) | 2050–0009 |
| 264.100(e), (f), (g) | 2050–0033 |
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| 264.112(a), (b), (c) | 2050–0009 |
| 264.112(d) | 2050–0120 |
| 264.113(a), (b), (d) | 2050–0120 |
| 264.113(e) | 2050–0050 |
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| 264.119(a), (b) | 2050–0120 |
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| 264.142(b), (c), (d) | 2050–0120 |
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| 264.144(b), (c), (d) | 2050–0120 |
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| 264.147(a)(7), (b)(7), (f),(g) | 2050–0120 |
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| 264.226(d) | 2050–0050 |
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[1] The ICRs referenced in this section of the table encompass the applicable general provisions contained in 40 CFR part 60, subpart A, which are not independent information collection requirements.

[2] The ICRs referenced in this section of the table encompass the applicable general provisions contained in 40 CFR part 61, subpart A, which are not independent information collection requirements.

[3] The ICRs referenced in this section of the table encompass the applicable general provisions contained in 40 CFR part 63, subpart A, which are not independent information collection requirements.

[58 FR 27472, May 10, 1993]

EDITORIAL NOTE: For Federal Register citations affecting §9.1 see the List of CFR Sections Affected in the Finding Aids section of this volume.

# List of CFR Sections Affected

All changes in this volume of the Code of Federal Regulations which were made by documents published in the FEDERAL REGISTER since January 1, 1986, are enumerated in the following list. Entries indicate the nature of the changes effected. Page numbers refer to FEDERAL REGISTER pages. The user should consult the entries for chapters and parts as well as sections for revisions.

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