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Title 40—Protection of Environment

(This book contains parts 190 to 259)

Part

CHAPTER I—Environmental Protection Agency (Continued) 190

CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)

EDITORIAL NOTE: Nomenclature changes to chapter I appear at 65 FR 47324, 47325, Aug. 2, 2000; 66 FR 34375, 34376, June 28, 2001.

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SUBCHAPTER F—RADIATION PROTECTION PROGRAMS

PART 190—ENVIRONMENTAL RADIATION PROTECTION STANDARDS FOR NUCLEAR POWER 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

Subpart A—Environmental Standards for Management and Storage

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Subpart B—Environmental Standards for Disposal

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APPENDIX A TO PART 191—TABLE FOR SUBPART B

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, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

[50 FR 38084, Sept. 19, 1985, as amended at 65 FR 47325, Aug. 2, 2000]

§ 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, τ, 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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TABLE A TO SUBPART D OF PART 192

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

192.40 Applicability.

192.41 Provisions.
192.42 Substitute provisions.
192.43 Effective date.
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.

(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

§ 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 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

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[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 OF PART 192—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 postclosure 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, 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 OF PART 192

	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.

	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)
Benzenearsonic acid (Arsenic acid, phenyl-)
Benzidine ([1,1′-Biphenyl]-4,4′-diamine)
Benzo[b]fluoranthene (Benz[e]acephananthrylene)

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

Benzo[j]fluoranthene
Benzo[k]fluoranthene
Benzo[a]pyrene
p-Benzoquinone (2,5-Cyclohexadiene-1,4-dione)
Benzotrichloride (Benzene, (trichloro-methyl)-)
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-dimeth-oxy-)
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 $[(H_2 N)C(S)]_2 NH$)
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-octahydro,(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-trimethyl-)
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-trichlorophenoxy)-)
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.

Acceptable knowledge means any information about the process used to generate waste, material inputs to the process, and the time period during which the waste was generated, as well as data resulting from the analysis of waste, conducted prior to or separate from the waste certification process authorized by EPA's Certification Decision, to show compliance with Condition 3 of the certification decision (appendix A of this part).

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.

Minor alternative provision means an alternative provision to the Compliance Criteria that only clarifies an existing regulatory provision, or does not substantively alter the existing regulatory requirements.

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; 69 FR 42580, July 16, 2004]

§ 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, 1200 Pennsylvania Ave., NW., Washington, DC 20460, or copies may be inspected at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.* 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.

[61 FR 5235, Feb. 9, 1996, as amended at 65 FR 47325, Aug. 2, 2000; 69 FR 18803, Apr. 9, 2004]

§ 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, or minor alternative provisions, in accordance with the following procedures:

(a) Alternative provisions may be substituted after:

(1) 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;

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

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

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

(b) Minor alternative provisions may be substituted after:

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

(2) A public comment period of at least 30 days has been completed for the minor alternative provisions and the public comments received have been fully considered;

(3) A notice of final rulemaking is published in the FEDERAL REGISTER for the minor alternative provisions.

[69 FR 42581, July 16, 2004]

§ 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 transuranic waste sites.* The Agency will establish compliance with Condition 3 of the certification using the following process:

(1) DOE will implement waste characterization programs and processes 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 § 194.24(c). Waste characterization processes will include the collection and use of acceptable knowledge; destructive and/or nondestructive techniques for identifying and measuring waste components; and the validation, control, and transmittal to the WIPP Waste Information System database of waste characterization data, in accordance with § 194.24(c)(4).

(2) The Agency will verify the compliance of waste characterization programs and processes identified in paragraph (b)(1) of this section at sites without EPA approval prior to October 14, 2004, using the following process:

(i) DOE will notify EPA by letter that a transuranic waste site is prepared to ship waste to the WIPP and has established adequate waste characterization processes and programs. DOE also will provide the relevant waste characterization program plans and documentation. EPA may request additional information from DOE.

(ii) EPA will conduct a baseline compliance inspection at the site to verify that adequate waste characterization program plans and technical procedures have been established, and that those plans and procedures are effectively implemented. The inspection will include a demonstration or test by the site of the waste characterization processes identified in paragraph (b)(1) of this section. If an inspection does not lead to approval, we will send an

inspection report to DOE identifying deficiencies and place the report in the public docket described in §194.67. More than one inspection may be necessary to resolve compliance issues.

(iii) The Agency will announce in the FEDERAL REGISTER a proposed Baseline Compliance Decision to accept the site's compliance with §194.24(c)(4). We will place the inspection report(s) and any supporting documentation in the public docket described in §194.67. The site inspection report supporting the proposal will describe any limitations on approved waste streams or waste characterization processes. It will also identify (through tier designations in accordance with paragraph (b)(4) of this section) what changes to the approved waste characterization processes must be reported to and approved by EPA before they can be implemented. In the notice, we will solicit public comment (for a minimum of 45 days) on the proposed Baseline Compliance Decision, including any limitations and the tier designations for future changes or expansions to the site's waste characterization program.

(iv) Our written decision regarding compliance with the requirements for waste characterization programs and processes described in paragraph (b)(1) of this section will be conveyed in a letter from the Administrator's authorized representative to DOE. EPA will not issue a compliance decision until after the end of the public comment period described in paragraph (b)(2)(iii) of this section. EPA's compliance decision will respond to significant and timely-received comments. A copy of our compliance decision will be placed in the public docket described in §194.67. DOE will comply with any requirements identified in the compliance decision and the accompanying inspection report.

(3) Subsequent to any positive determination of compliance as described in paragraph (b)(2)(iv) of this section, the Agency intends to conduct inspections, in accordance with §194.24(h), to confirm the continued compliance of approved waste characterization programs and processes at transuranic waste sites. EPA will make the results of these inspections available to the public in the dockets described in §194.67.

(4) Subsequent to any positive determination of compliance as described in paragraph (b)(2)(iv) of this section, the Department must report changes or expansions to the approved waste characterization program at a site in accordance with the tier designations established in the Baseline Compliance Decision.

(i) For changes or expansions to the waste characterization program designated as ''Tier 1,'' the Department shall provide written notification to the Agency. The Department shall not ship for disposal at WIPP any waste that has been characterized using the new or revised processes, equipment, or waste streams until EPA has provided written approval of such new or revised systems.

(ii) For changes or expansions to the waste characterization program designated as ''Tier 2,'' the Department shall provide written notification to the Agency. Waste characterized using the new or revised processes, equipment, or waste streams may be disposed at WIPP without written EPA approval.

(iii) EPA may conduct inspections in accordance with §194.24(h) to evaluate the implementation of Tier 1 and Tier 2 changes or expansions to the waste characterization program at a site.

(iv) Waste characterization program changes or expansions that are not identified as either ''Tier 1'' or ''Tier 2'' will not require written notification by the Department to the Agency before implementation or before shipping waste for disposal at WIPP.

(5) Subsequent to any positive determination of compliance as described in paragraph (b)(2)(iii) of this section, EPA may revise the tier designations for approving changes or expansions to the waste characterization program at a site using the following process:

(i) The Agency shall announce the proposed tier changes in a letter to the Department. The letter will describe the Agency's reasons for the proposed change in tier designation(s). The letter and any supporting inspection report(s) or other documentation will be placed in the dockets described in §194.67.

(ii) If the revised designation entails more stringent notification and approval requirements (e.g., from Tier 2 to Tier 1, or from undesignated to Tier 2), the change shall become effective immediately and the site shall operate under the more stringent requirements without delay.

(iii) If the revised designated entails less stringent notification and approval requirements, (e.g., from Tier 1 to Tier 2, or from Tier 2 to undesignated), EPA will solicit comments from the public for a minimum of 30 days. The site will continue to operate under the more stringent approval requirements until the public comment period is closed and EPA notifies DOE in writing of the Agency's final decision.

(6) A waste generator site that EPA approved for characterizing and disposing transuranic waste at the WIPP under this section prior to October 14, 2004, may continue characterizing and disposing such waste at the WIPP under paragraph (c) of this section until EPA has conducted a baseline compliance inspection and provided a Baseline Compliance Decision under paragraph (b)(2) of this section.

(i) Until EPA provides a Baseline Compliance Decision for such a site, EPA may approve additional transuranic waste streams for disposal at WIPP under the provisions of paragraph (c) of this section. Prior to the effective date of EPA's Baseline Compliance Decision for such a site, EPA will continue to conduct inspections of the site in accordance with §194.24(c).

(ii) EPA shall conduct a baseline compliance inspection and issue a Baseline Compliance Decision for such previously approved sites in accordance with the provisions of paragraph (b) of this section, except that the site shall not be required to provide written notification of readiness as described in paragraph (b)(2)(i) of this section.

(c) *Waste characterization programs at waste generator sites with prior approval.* For a waste generator site that EPA approved for characterizing and disposing transuranic waste at the WIPP under this section prior to October 14, 2004, the Agency will determine compliance with the requirements for use of process knowledge and a system of controls at waste generator sites as set in this paragraph (c). Approvals for a site to characterize and dispose of transuranic waste at WIPP will proceed according to this section only until EPA has conducted a baseline compliance inspection and provided a Baseline Compliance Decision for a site under paragraph (b)(2) of this section.

(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 §194.24(c). 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, as amended at 69 FR 42581, July 16, 2004]

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, 5 copies of any compliance application(s), any accompanying materials, and any amendments thereto shall be submitted in a printed form to the Administrator's authorized representative. These paper copies are intended for the official docket in Washington, DC, as well as the four informational dockets in Albuquerque and Santa Fe, New Mexico. In addition, DOE shall submit 10 copies of the complete application in alternative format (e.g., compact disk) or other approved format, as specified by the Administrator's authorized representative.

[69 FR 42582, July 16, 2004]

§194.13 Submission of reference materials.

Information may be included by reference into compliance applications(s), provided that the references are clear specific and that unless, otherwise specified by the Administrator or the Administrator's authorized representative, 5 copies of reference information are submitted to the Administrator's authorized representative. These paper copies are intended for the official docket in Washington, DC, as well as the four informational dockets in Albuquerque and Santa Fe, New Mexico. Reference materials that are widely available in standard text books or reference books need not to be submitted. Whenever possible, DOE shall submit 10 copies of reference materials in alternative format (e.g., compact disk) or other approved format, as specified by the Administrator's authorized representative.

[69 FR 42582, July 16, 2004]

§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 that demonstrates that the use of acceptable knowledge to quantify components in waste for disposal conforms with the

quality assurance requirements of §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.

[61 FR 5235, Feb. 9, 1996, as amended at 69 FR 42583, July 16, 2004]

§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 close filled waste panels in a manner that has been specifically approved by the Agency. DOE must inform EPA of any modification to the approved panel closure design pursuant to §194.4(b)(3)(i), and provide any supporting information required by §194.14, *Content of compliance certification application*. The Administrator or Administrator's authorized representative will determine whether the change differs significantly from the design included in the most recent compliance certification, and whether the planned change would require modification of the compliance criteria. The EPA's approval of a panel closure change request requires that performance assessment calculations adequately represent the waste panel closure design, and that those calculations demonstrate the WIPP's compliance with the release standards set by 40 CFR part 191, Subpart B in accordance with §194.34, *Results of performance assessments*.

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, as amended at 79 FR 60756, Oct. 8, 2014]

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).

PART 197—PUBLIC HEALTH AND ENVIRONMENTAL RADIATION PROTECTION STANDARDS FOR YUCCA MOUNTAIN, NEVADA

Subpart A—Public Health and Environmental Standards for Storage

Sec.

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APPENDIX A TO PART 197—CALCULATION OF ANNUAL COMMITTED EFFECTIVE DOSE EQUIVALENT

AUTHORITY: Sec. 801, Pub. L. 102–486, 106 Stat. 2921, 42 U.S.C. 10141 n.

SOURCE: 66 FR 32132, June 13, 2001, unless otherwise noted.

Subpart A—Public Health and Environmental Standards for Storage

§ 197.1 What does subpart A cover?

This subpart covers the storage of radioactive material by DOE in the Yucca Mountain repository and on the Yucca Mountain site.

§ 197.2 What definitions apply in subpart A?

Annual committed effective dose equivalent means the effective dose equivalent received by an individual in one year from radiation sources external to the individual plus the committed effective dose equivalent.

Committed effective dose equivalent means the effective dose equivalent received over a period of time (e.g., 30 years,), as determined by NRC, by an individual from radionuclides internal to the individual following a one-year intake of those radionuclides.

DOE means the Department of Energy.

Effective dose equivalent means the sum of the products of the dose equivalent received by specified tissues following an exposure of, or an intake of radionuclides into, specified tissues of the body, multiplied by appropriate weighting factors. Annual committed effective dose equivalents shall be calculated using weighting factors in appendix A of this part, unless otherwise directed by NRC in accordance with the introduction to appendix A of this part.

EPA means the Environmental Protection Agency.

General environment means everywhere outside the Yucca Mountain site, the Nellis Air Force Range, and the Nevada Test Site.

High-level radioactive waste means:

(1) The highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and

(2) Other highly radioactive material that the Commission, consistent with existing law, determines by rule requires permanent isolation.

Member of the public means anyone who is not a radiation worker for purposes of worker protection.

NRC means the Nuclear Regulatory Commission.

Radioactive material means matter composed of or containing radionuclides subject to the Atomic Energy Act of 1954, as amended (42 U.S.C. 2014 *et seq.*). Radioactive material includes, but is not limited to, high-level radioactive waste and spent nuclear fuel.

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.

Storage means retention (and any associated activity, operation, or process necessary to carry out successful retention) of radioactive material with the intent or capability to readily access or retrieve such material.

Yucca Mountain repository means the excavated portion of the facility constructed underground within the Yucca Mountain site.

Yucca Mountain site means:

(1) The site recommended by the Secretary of DOE to the President under section 112(b)(1)(B) of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10132(b)(1)(B)) on May 27, 1986; or

(2) The area under the control of DOE for the use of Yucca Mountain activities at the time of licensing, if the site designated under the Nuclear Waste Policy Act is amended by Congress prior to the time of licensing.

[66 FR 32132, June 13, 2001, as amended at 73 FR 61287, Oct. 15, 2008]

§ 197.3 How is subpart A implemented?

The NRC implements this subpart A. The DOE must demonstrate to NRC that normal operations at the Yucca Mountain site will and do occur in compliance with this subpart before NRC may grant or continue a license for DOE to receive and possess radioactive material within the Yucca Mountain site.

§ 197.4 What standard must DOE meet?

The DOE must ensure that no member of the public in the general environment receives more than an annual committed effective dose equivalent of 150 microsieverts (15 millirems) from the combination of:

(a) Management and storage (as defined in 40 CFR 191.2) of radioactive material that:

(1) Is subject to 40 CFR 191.3(a); and

(2) Occurs outside of the Yucca Mountain repository but within the Yucca Mountain site; and

(b) Storage (as defined in §197.2) of radioactive material inside the Yucca Mountain repository.

§ 197.5 When will this part take effect?

The standards in this part take effect on July 13, 2001.

Subpart B—Public Health and Environmental Standards for Disposal

§ 197.11 What does subpart B cover?

This subpart covers the disposal of radioactive material in the Yucca Mountain repository by DOE.

§ 197.12 What definitions apply in subpart B?

All definitions in subpart A of this part and the following:

Accessible environment means any point outside of the controlled area, including:

(1) The atmosphere (including the atmosphere above the surface area of the controlled area);

(2) Land surfaces;

(3) Surface waters;

(4) Oceans; and

(5) The lithosphere.

Aquifer means a water-bearing underground geological formation, group of formations, or part of a formation (excluding perched water bodies) that can yield a significant amount of ground water to a well or spring.

Barrier means any material, structure, or feature that, for a period to be determined by NRC, prevents or substantially reduces the rate of movement of water or radionuclides from the Yucca Mountain repository to the accessible environment, or prevents the release or substantially reduces the release rate of radionuclides from the waste. For example, a barrier may be a geologic feature, an engineered 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 the waste, provided that the material substantially delays movement of water or radionuclides.

Controlled area means:

(1) The surface area, identified by passive institutional controls, that encompasses no more than 300 square kilometers. It must not extend farther:

(a) South than 36°40′13.6661″ north latitude, in the predominant direction of ground water flow; and

(b) Than five kilometers from the repository footprint in any other direction; and

(2) The subsurface underlying the surface area.

Disposal means the emplacement of radioactive material into the Yucca Mountain disposal system with the intent of isolating it for as long as reasonably possible and with no intent of recovery, whether or not the design of the disposal system permits the ready recovery of the material. Disposal of radioactive material in the Yucca Mountain disposal system begins when all of the ramps and other openings into the Yucca Mountain repository are sealed.

Ground water means water that is below the land surface and in a saturated zone.

Human intrusion means breaching of any portion of the Yucca Mountain disposal system, within the repository footprint, by any human activity.

Passive institutional controls means:

(1) Markers, as permanent as practicable, placed on the Earth's surface;

(2) Public records and archives;

(3) Government ownership and regulations regarding land or resource use; and

(4) Other reasonable methods of preserving knowledge about the location, design, and contents of the Yucca Mountain disposal system.

Peak dose means the highest annual committed effective dose equivalent projected to be received by the reasonably maximally exposed individual.

Performance assessment means an analysis that:

(1) Identifies the features, events, processes, (except human intrusion), and sequences of events and processes (except human intrusion) that might affect the Yucca Mountain disposal system and their probabilities of occurring;

(2) Examines the effects of those features, events, processes, and sequences of events and processes upon the performance of the Yucca Mountain disposal system; and

(3) Estimates the annual committed effective dose equivalent incurred by the reasonably maximally exposed individual, including the associated uncertainties, as a result of releases caused by all significant features, events, processes, and sequences of

events and processes, weighted by their probability of occurrence.

Period of geologic stability means the time during which the variability of geologic characteristics and their future behavior in and around the Yucca Mountain site can be bounded, that is, they can be projected within a reasonable range of possibilities. This period is defined to end at 1 million years after disposal.

Plume of contamination means that volume of ground water in the predominant direction of ground water flow that contains radioactive contamination from releases from the Yucca Mountain repository. It does not include releases from any other potential sources on or near the Nevada Test Site.

Repository footprint means the outline of the outermost locations of where the waste is emplaced in the Yucca Mountain repository.

Slice of the plume means a cross-section of the plume of contamination with sufficient thickness parallel to the prevalent direction of flow of the plume that it contains the representative volume.

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

Undisturbed performance means that human intrusion or the occurrence of unlikely natural features, events, and processes do not disturb the disposal system.

Undisturbed Yucca Mountain disposal system means that the Yucca Mountain disposal system is not affected by human intrusion.

Waste means any radioactive material emplaced for disposal into the Yucca Mountain repository.

Well-capture zone means the volume from which a well pumping at a defined rate is withdrawing water from an aquifer. The dimensions of the well-capture zone are determined by the pumping rate in combination with aquifer characteristics assumed for calculations, such as hydraulic conductivity, gradient, and the screened interval.

Yucca Mountain disposal system means the combination of underground engineered and natural barriers within the controlled area that prevents or substantially reduces releases from the waste.

[66 FR 32132, June 13, 2001, as amended at 73 FR 61287, Oct. 15, 2008]

§ 197.13 How is Subpart B implemented?

The NRC implements this subpart B. The DOE must demonstrate to NRC that there is a reasonable expectation of compliance with this subpart before NRC may issue a license.

(a) The NRC will determine compliance, based upon the arithmetic mean of the projected doses from DOE's performance assessments for the period within 1 million years after disposal, with:

(1) Sections 197.20(a)(1) and 197.20(a)(2) of this subpart; and

(2) Sections 197.25(b)(1), 197.25(b)(2), and 197.30 of this subpart, if performance assessment is used to demonstrate compliance with either or both of these sections.

(b) [Reserved]

[73 FR 61287, Oct. 15, 2008]

§ 197.14 What is a reasonable expectation?

Reasonable expectation means that NRC is satisfied that compliance will be achieved based upon the full record before it. Characteristics of reasonable expectation include that it:

(a) Requires less than absolute proof because absolute proof is impossible to attain for disposal due to the uncertainty of projecting long-term performance;

(b) Accounts for the inherently greater uncertainties in making long-term projections of the performance of the Yucca Mountain disposal system;

(c) Does not exclude important parameters from assessments and analyses simply because they are difficult to precisely quantify to a high degree of confidence; and

(d) Focuses performance assessments and analyses upon the full range of defensible and reasonable parameter distributions rather than only upon extreme physical situations and parameter values.

§ 197.15 How must DOE take into account the changes that will occur during the period of geologic stability?

The DOE should not project changes in society, the biosphere (other than climate), human biology, or increases or decreases of human knowledge or technology. In all analyses done to demonstrate compliance with this part, DOE must assume that all of those factors remain constant as they are at the time of license application submission to NRC. However, DOE must vary factors related to the geology, hydrology, and climate based upon cautious, but reasonable assumptions of the changes in these factors that could affect the Yucca Mountain disposal system during the period of geologic stability, consistent with the requirements for performance assessments specified at § 197.36.

[73 FR 61287, Oct. 15, 2008]

INDIVIDUAL-PROTECTION STANDARD

§ 197.20 What standard must DOE meet?

(a) The DOE must demonstrate, using performance assessment, that there is a reasonable expectation that the reasonably maximally exposed individual receives no more than the following annual committed effective dose equivalent from releases from the undisturbed Yucca Mountain disposal system:

(1) 150 microsieverts (15 millirems) for 10,000 years following disposal; and

(2) 1 millisievert (100 millirems) after 10,000 years, but within the period of geologic stability.

(b) The DOE's performance assessment must include all potential pathways of radionuclide transport and exposure.

[73 FR 61287, Oct. 15, 2008]

§ 197.21 Who is the reasonably maximally exposed individual?

The reasonably maximally exposed individual is a hypothetical person who meets the following criteria:

(a) Lives in the accessible environment above the highest concentration of radionuclides in the plume of contamination;

(b) Has a diet and living style representative of the people who now reside in the Town of Amargosa Valley, Nevada. The DOE must use projections based upon surveys of the people residing in the Town of Amargosa Valley, Nevada, to determine their current diets and living styles and use the mean values of these factors in the assessments conducted for §§ 197.20 and 197.25; and

(c) Drinks 2 liters of water per day from wells drilled into the ground water at the location specified in paragraph (a) of this section.

HUMAN-INTRUSION STANDARD

§ 197.25 What standard must DOE meet?

(a) The DOE must determine the earliest time after disposal that the waste package would degrade sufficiently that a human intrusion (see § 197.26) could occur without recognition by the drillers.

(b) The DOE must demonstrate that there is a reasonable expectation that the reasonably maximally exposed individual will receive an annual committed effective dose equivalent, as a result of the human intrusion, of no more than:

(1) 150 microsieverts (15 millirems) for 10,000 years following disposal; and

(2) 1 millisievert (100 millirems) after 10,000 years, but within the period of geologic stability.

(c) The analysis must include all potential environmental pathways of radionuclide transport and exposure.

[73 FR 61288, Oct. 15, 2008]

§ 197.26 What are the circumstances of the human intrusion?

For the purposes of the analysis of human intrusion, DOE must make the following assumptions:

(a) There is a single human intrusion as a result of exploratory drilling for ground water;

(b) The intruders drill a borehole directly through a degraded waste package into the uppermost aquifer underlying the Yucca Mountain repository;

(c) The drillers use the common techniques and practices that are currently employed in exploratory drilling for

ground water in the region surrounding Yucca Mountain;

(d) Careful sealing of the borehole does not occur, instead natural degradation processes gradually modify the borehole;

(e) Only releases of radionuclides that occur as a result of the intrusion and that are transported through the resulting borehole to the saturated zone are projected; and

(f) No releases are included which are caused by unlikely natural processes and events.

GROUND WATER PROTECTION STANDARDS

§ 197.30 What standards must DOE meet?

The DOE must demonstrate that there is a reasonable expectation that, for 10,000 years of undisturbed performance after disposal, releases of radionuclides from waste in the Yucca Mountain disposal system into the accessible environment will not cause the level of radioactivity in the representative volume of ground water to exceed the limits in the following Table 1:

TABLE 1—LIMITS ON RADIONUCLIDES IN THE REPRESENTATIVE VOLUME

Radionuclide or type of radiation emitted	Limit	Is natural background included?
Combined radium-226 and radium-228	5 picocuries per liter	Yes.
Gross alpha activity (including radium-226 but excluding radon and uranium).	15 picocuries per liter	Yes.
Combined beta and photon emitting radionuclides	40 microsieverts (4 millirem) per year to the whole body or any organ, based on drinking 2 liters of water per day from the representative volume.	No.

§ 197.31 What is a representative volume?

(a) It is the volume of ground water that would be withdrawn annually from an aquifer containing less than 10,000 milligrams of total dissolved solids per liter of water to supply a given water demand. The DOE must project the concentration of radionuclides released from the Yucca Mountain disposal system that will be in the representative volume. The DOE must then use the projected concentrations to demonstrate a reasonable expectation to NRC that the Yucca Mountain disposal system complies with § 197.30. The DOE must make the following assumptions concerning the representative volume:

(1) It includes the highest concentration level in the plume of contamination in the accessible environment;

(2) Its position and dimensions in the aquifer are determined using average hydrologic characteristics which have cautious, but reasonable, values representative of the aquifers along the radionuclide migration path from the Yucca Mountain repository to the accessible environment as determined by site characterization; and

(3) It contains 3,000 acre-feet of water (about 3,714,450,000 liters or 977,486,000 gallons).

(b) The DOE must use one of two alternative methods for determining the dimensions of the representative volume. The DOE must propose its chosen method, and any underlying assumptions, to NRC for approval.

(1) The DOE may calculate the dimensions as a well-capture zone. If DOE uses this approach, it must assume that the:

(i) Water supply well(s) has (have) characteristics consistent with public water supply wells in the Town of Amargosa Valley, Nevada, for example, well-bore size and length of the screened intervals;

(ii) Screened interval(s) include(s) the highest concentration in the plume of contamination in the accessible environment; and

(iii) Pumping rates and the placement of the well(s) must be set to produce an annual withdrawal equal to the representative volume and to tap the highest concentration within the plume of contamination.

(2) The DOE may calculate the dimensions as a slice of the plume. If DOE uses this approach, it must:

(i) Propose to NRC, for its approval, where the location of the edge of the plume of contamination occurs. For example, the place where the concentration of radionuclides reaches 0.1% of the level of the highest concentration in the accessible environment;

(ii) Assume that the slice of the plume is perpendicular to the prevalent direction of flow of the aquifer; and

(iii) Assume that the volume of ground water contained within the slice of the plume equals the representative volume.

ADDITIONAL PROVISIONS

§ 197.35 [Reserved]

§ 197.36 Are there limits on what DOE must consider in the performance assessments?

(a) Yes, there are limits on what DOE must consider in the performance assessments.

(1) The DOE's performance assessments conducted to show compliance with §§ 197.20(a)(1), 197.25(b)(1), and 197.30 shall not include consideration of very unlikely features, events, or processes, i.e., those that are estimated to have less than one chance in 100,000,000 per year of occurring. Features, events, and processes with a higher chance of occurring shall be considered for use in performance assessments conducted to show compliance with §§ 197.20(a)(1), 197.25(b)(1), and 197.30, except as stipulated in paragraph (b) of this section. In addition, unless otherwise specified in these standards or NRC regulations, DOE's performance assessments need not evaluate the impacts resulting from features, events, and processes or sequences of events and processes with a higher chance of occurring if the results of the performance assessments would not be changed significantly in the initial 10,000-year period after disposal.

(2) The same features, events, and processes identified in paragraph (a)(1) of this section shall be used in performance assessments conducted to show compliance with §§ 197.20(a)(2) and 197.25(b)(2), with additional considerations as stipulated in paragraph (c) of this section.

(b) For performance assessments conducted to show compliance with §§ 197.25(b) and 197.30, DOE's performance assessments shall exclude unlikely features, events, or processes, or sequences of events and processes. The DOE should use the specific probability of the unlikely features, events, and processes as specified by NRC.

(c) For performance assessments conducted to show compliance with §§ 197.20(a)(2) and 197.25(b)(2), DOE's performance assessments shall project the continued effects of the features, events, and processes included in paragraph (a) of this section beyond the 10,000-year post-disposal period through the period of geologic stability. The DOE must evaluate all of the features, events, or processes included in paragraph (a) of this section, and also:

(1) The DOE must assess the effects of seismic and igneous scenarios, subject to the probability limits in paragraph (a) of this section for very unlikely features, events, and processes. Performance assessments conducted to show compliance with § 197.25(b)(2) are also subject to the probability limits for unlikely features, events, and processes as specified by NRC.

(i) The seismic analysis may be limited to the effects caused by damage to the drifts in the repository, failure of the waste packages, and changes in the elevation of the water table under Yucca Mountain. NRC may determine the magnitude of the water table rise and its significance on the results of the performance assessment, or NRC may require DOE to demonstrate the magnitude of the water table rise and its significance in the license application. If NRC determines that the increased elevation of the water table does not significantly affect the results of the performance assessment, NRC may choose to not require its consideration in the performance assessment.

(ii) The igneous analysis may be limited to the effects of a volcanic event directly intersecting the repository. The igneous event may be limited to that causing damage to the waste packages directly, causing releases of radionuclides to the biosphere, atmosphere, or ground water.

(2) The DOE must assess the effects of climate change. The climate change analysis may be limited to the effects

of increased water flow through the repository as a result of climate change, and the resulting transport and release of radionuclides to the accessible environment. The nature and degree of climate change may be represented by constant climate conditions. The analysis may commence at 10,000 years after disposal and shall extend through the period of geologic stability. The NRC shall specify in regulation the values to be used to represent climate change, such as temperature, precipitation, or infiltration rate of water.

(3) The DOE must assess the effects of general corrosion on engineered barriers. The DOE may use a constant representative corrosion rate throughout the period of geologic stability or a distribution of corrosion rates correlated to other repository parameters.

[73 FR 61288, Oct. 15, 2008]

§ 197.37 Can EPA amend this rule?

Yes. We can amend this rule by conducting another notice-and-comment rulemaking. Such a rulemaking must include a public comment period. Also, we may hold one or more public hearings, if we receive a written request to do so.

§ 197.38 Are the Individual Protection and Ground Water Protection Standards Severable?

Yes. The individual protection and ground water protection standards are severable.

APPENDIX A TO PART 197—CALCULATION OF ANNUAL COMMITTED EFFECTIVE DOSE EQUIVALENT

Unless otherwise directed by NRC, DOE shall use the radiation weighting factors and tissue weighting factors in this Appendix to calculate the internal component of the annual committed effective dose equivalent for compliance with §§197.20 and 197.25 of this part. NRC may allow DOE to use updated factors issued after the effective date of this regulation. Any such factors shall have been issued by consensus scientific organizations and incorporated by EPA into Federal radiation guidance in order to be considered generally accepted and eligible for this use. Further, they must be compatible with the effective dose equivalent dose calculation methodology established in ICRP 26 and 30, and continued in ICRP 60 and 72, and incorporated in this appendix.

I. EQUIVALENT DOSE

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

$$\underline{H}_T = \sum_R \underline{D}_{T,R} \cdot \underline{w}_R$$

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 A.1 below. The unit of equivalent dose is the rem (sievert, in SI units).

TABLE A.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 EQUIVALENT

The next step is the calculation of the *effective dose equivalent*, 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 A.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:

$$E = \sum \underline{w}_T \cdot \underline{H}_T.$$

TABLE A.2—TISSUE WEIGHTING FACTORS, w_T

Tissue or organ	w_T value
Gonads	0.20
Bone marrow (red)	0.12
Colon	0.12
Lung	0.12
Stomach	0.12

TABLE A.2—TISSUE WEIGHTING FACTORS, w_T—Continued

Tissue or organ	w_T value
Bladder	0.05
Breast	0.05
Liver	0.05
Esophagus	0.05
Thyroid	0.05
Skin	0.01
Bone surface	0.01
Remainder	[a] [b] 0.05

[a] Remainder is composed of the following tissues: adrenals, brain, extrathoracic airways, small intestine, kidneys, muscle, pancreas, spleen, thymus, and uterus.

[b] The value 0.05 is applied to the mass-weighted average dose to the Remainder tissues group, except when the following "splitting rule" applies: If a tissue of Remainder receives a dose in excess of that received by any of the 12 tissues for which weighting factors are specified, a weighting factor of 0.025 (half of Remainder) is applied to that tissue or organ and 0.025 to the mass-averaged committed equivalent dose equivalent in the rest of the Remainder tissues.

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*, $H_T(\tau)$ where τ 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:

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

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

IV. INTERNAL COMPONENT OF THE ANNUAL COMMITTED EFFECTIVE DOSE EQUIVALENT

If the annual committed equivalent doses to the individual tissues or organs resulting from an annual intake are multiplied by the appropriate weighting factors, w_T, from table A.2, and then summed, the result will be the internal component of the *annual committed effective dose equivalent* $E(\tau)$:

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

[73 FR 61288, Oct. 15, 2008]

SUBCHAPTER G—NOISE ABATEMENT PROGRAMS

PART 201—NOISE EMISSION STANDARDS FOR TRANSPORTATION EQUIPMENT; INTERSTATE RAIL CARRIERS

Subpart A—General Provisions

Sec.

201.1 Definitions.

APPENDIX A TO SUBPART A OF PART 201—SWITCHER LOCOMOTIVES

Subpart B—Interstate Rail Carrier Operations Standards

201.10 Applicability.
201.11 Standard for locomotive operation under stationary conditions.
201.12 Standard for locomotive operation under moving conditions.
201.13 Standard for rail car operations.
201.14 Standard for retarders.
201.15 Standard for car coupling operations.
201.16 Standard for locomotive load cell test stands.

Subpart C—Measurement Criteria

201.20 Applicability and purpose.
201.21 Quantities measured.
201.22 Measurement instrumentation.
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.
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.
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.
DRS–4410[1]	6–606SC.
DRS–12[1]	6–606A.

[The following locomotives are considered to be "switcher locomotives" under the general definition of this regulation]

Type	Engine
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 must be based on ensuring that Type 1 or 2 performance, as appropriate, is maintained for frequencies below 10,000 Hz.

[1] American National Standards are available from the American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.

§ 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.

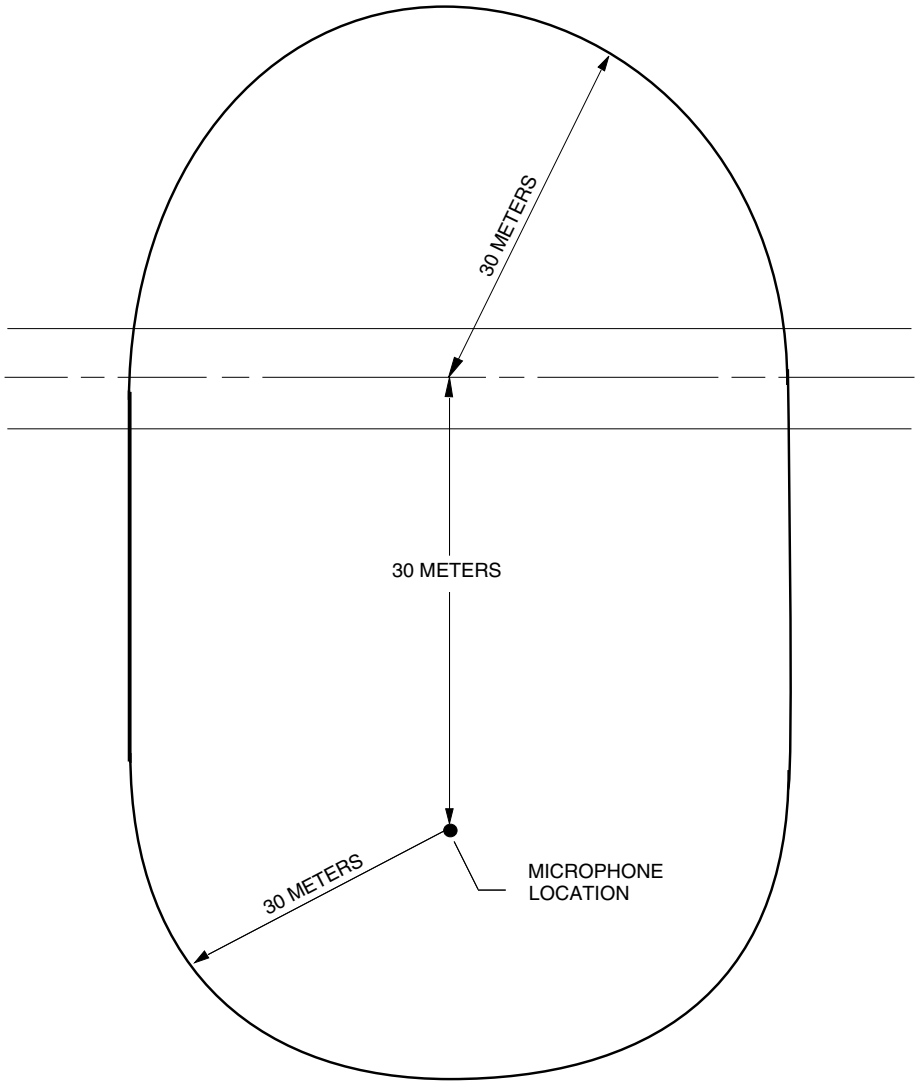

Figure 1. Test Site Clearance Requirement for Stationary Locomotive, Locomotive Pass-by, Rail Car Pass-by, and Locomotive Load Cell Test Stand Tests.

§ 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 grade, 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

Subpart A—General Provisions

Sec.

204.1 General applicability.
204.2 Definitions.
204.3 Number and gender.
204.4 Inspection and monitoring.
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Subpart B—Portable Air Compressors

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204.58 In-use requirements.
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204.58–3 Instructions for maintenance, use, and repair.
204.59 Recall of non-complying compressors.
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[Antilog L_1/10 + Antilog L_2/10 + Antilog L_3/10 + Antilog L_4/10 + 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
	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.: .....

TABLE IV—RECOMMENDED FORMAT FOR PORTABLE AIR COMPRESSOR NOISE DATA SHEET—Continued

Other and Manufacturer: ..... Model No.: ..... Serial No.: .....
Data:

Sound levels (decibels)	Background sound level at location 1 (decibels)	Location					
		1	2	3	4	5	Average sound level (decibels)
A-Weighted							

Tested by: ..... Date: ....
Reported by: ..... Date: ....
Supervisory personnel: ..... Title: ....
Title: ....

PART 205—TRANSPORTATION EQUIPMENT NOISE EMISSION CONTROLS

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APPENDIX I TO SUBPARTS D AND E OF PART 205—MOTORCYCLE NOISE EMISSION TEST PROCEDURES

APPENDIX II TO SUBPART E OF PART 205—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.
(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.

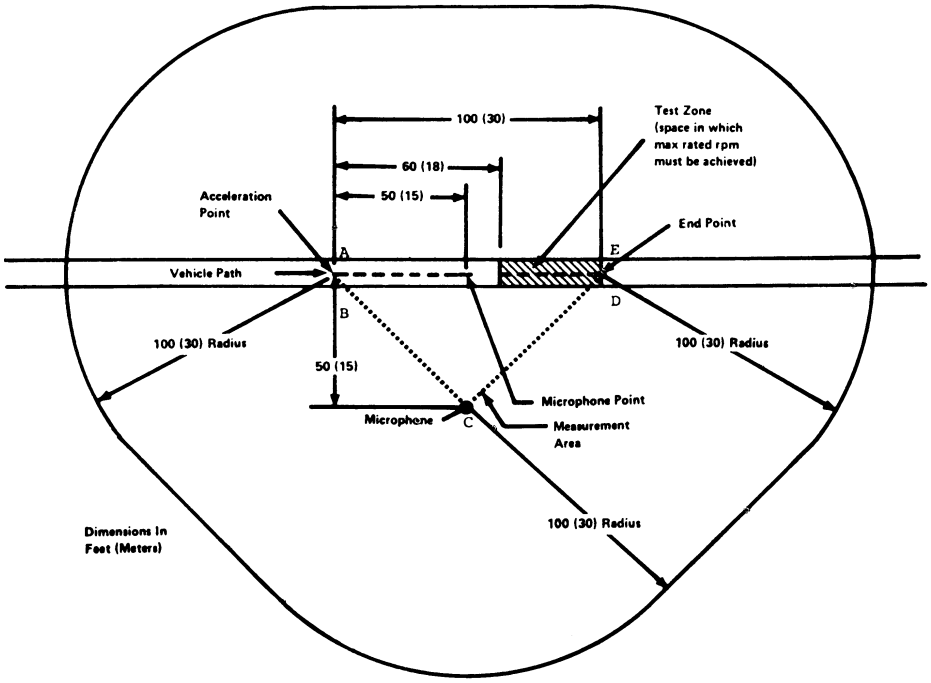


FIGURE 205.1

(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

TABLE 205.1—SYSTEM RESPONSE DATA—Continued

Freq. (hertz)	A-weighted response (Re-1000 Hz, dB)	Tolerance (decibels)	
		Plus—	Minus—
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)).

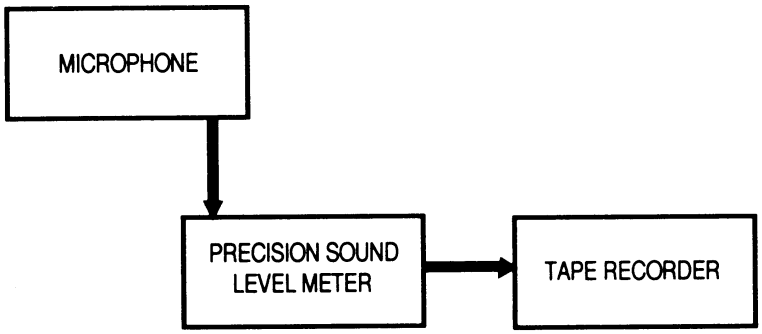


FIGURE 205.2 DATA RECORDING

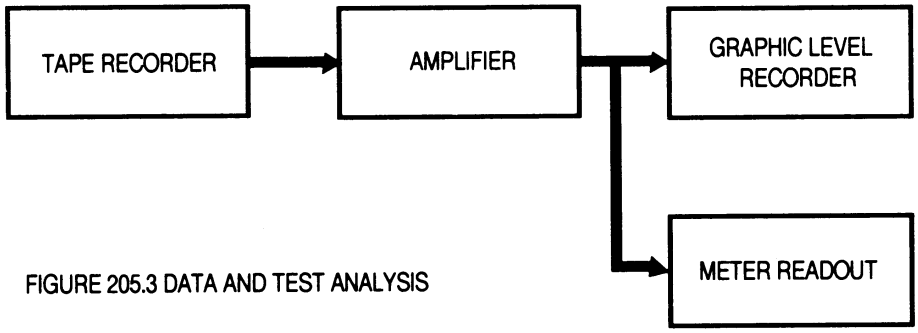


FIGURE 205.3 DATA AND TEST ANALYSIS

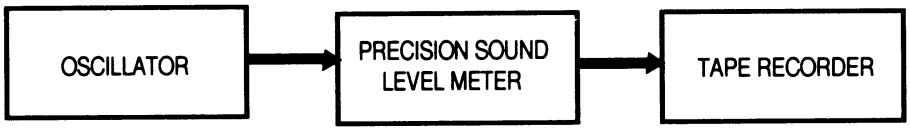


FIGURE 205.4 TEST RECORDING

(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, taperecord 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 OF PART 205

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
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

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.
	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.					

Acceleration Test

	Run No.				
	1	2	3	4	5
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–E—MOTORCYCLE NOISE EMISSION TEST PROCEDURES [NOTE]

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–E OF PART 205—MOTORCYCLE NOISE EMISSION TEST PROCEDURES

APPENDIX 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.

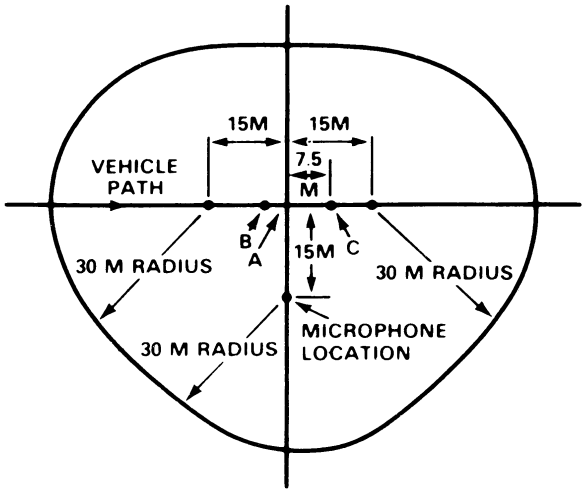
(6) Description of the external acoustic calibrator including type, serial number, and calibration date.

(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.

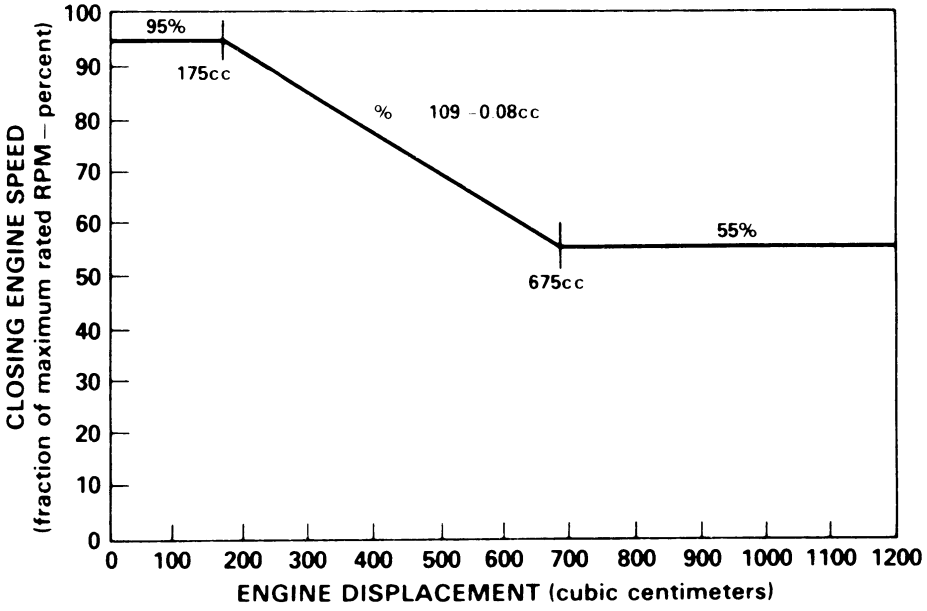
FIGURE 1 – TEST MEASUREMENT AREA



A – MICROPHONE TARGET POINT
B – ACCELERATION POINT (VARIABLE)
C – END POINT

TEST MEASUREMENT AREA

FIGURE 2 – CLOSING RPM



APPENDIX II TO SUBPART E OF PART 205—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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209.3 Definitions.
209.4 Issuance of complaint.
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209.16 Late intervention.
209.17 Amicus curiae.
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209.19 Informal settlement and consent agreement.
209.20 Conferences.
209.21 Primary discovery (exchange of witness lists and documents).
209.22 Other discovery.
209.23 Trade secrets and privileged information.
209.24 Default order.
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209.27 Interlocutory appeal.
209.28 Record.
209.29 Proposed findings, conclusions.
209.30 Decision of the administrative law judge.
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, 1200 Pennsylvania Ave., NW., 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), 1200 Pennsylvania Ave., NW., 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

Subpart A—General Provisions

Sec.

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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.

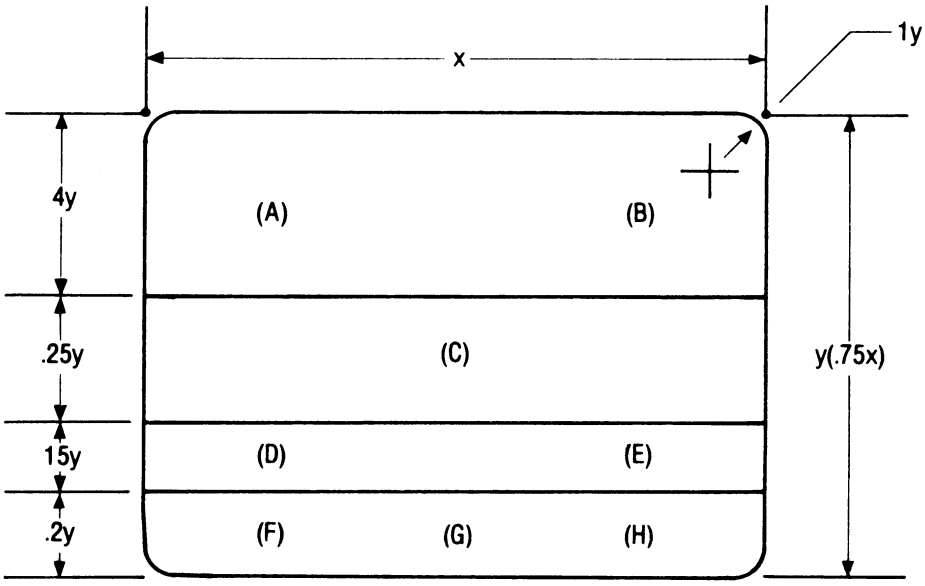

FIGURE - 2

(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.

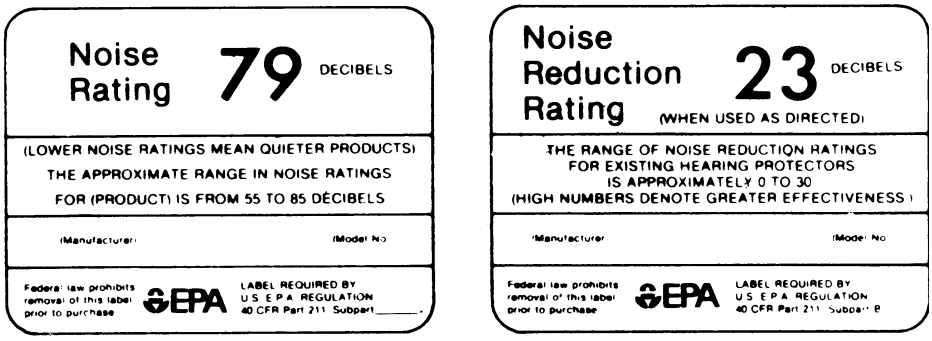

Figure – 3

§ 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 × 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 × 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).

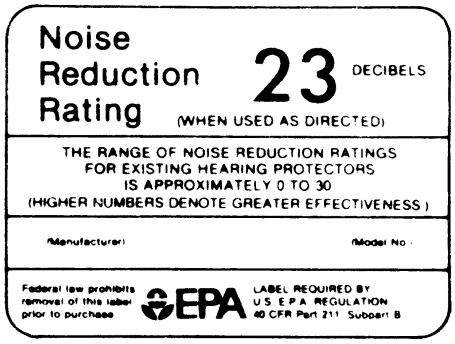

Figure - 1

(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 = 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 #1-step #4) (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 #5-(step #6-step #7) 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 #8 using this sample data = 85.1 dB)									

9 NRR = Step #3—Step #8—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, 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) [Reserved]

(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 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) of this chapter. In all other respects the requirements of parts 220 through 228 apply.

[42 FR 2468, Jan. 11, 1977; 43 FR 1071, Jan. 6, 1978; 73 FR 74986, Dec. 10, 2008]

§ 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, 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 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).

[42 FR 2468, Jan. 11, 1977, as amended at 73 FR 74986, Dec. 10, 2008]

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, 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 of this chapter 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.

[42 FR 2470, Jan. 11, 1977, as amended at 73 FR 74986, Dec. 10, 2008]

§ 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, and research permits under section 102 of the Act will be made by application of the criteria of parts 227 and 228 of this chapter. 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.

[73 FR 74986, Dec. 10, 2008]

§ 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, 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)(1) *Special and research permits.* Notice of every complete application for special 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.

[42 FR 2471, Jan. 11, 1977, as amended at 73 FR 74986, Dec. 10, 2008]

§ 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, 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, emergency, general, and research permits; posting requirements.

(a) All special, 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) [Reserved]

[42 FR 60702, Nov. 28, 1977, as amended at 73 FR 74986, Dec. 10, 2008]

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, 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.

[42 FR 60702, Nov. 28, 1977, as amended at 73 FR 74986, Dec. 10, 2008]

§ 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, 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, as amended at 73 FR 74986, Dec. 10, 2008]

§ 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 [Reserved]

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 or she, as the case may be, will deny the permit application.

[42 FR 2476, Jan. 11, 1977, as amended at 73 FR 74986, Dec. 10, 2008]

§ 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 of this part, the Administrator or the Regional Administrator, as the case may be, will deny the permit application.

[73 FR 74987, Dec. 10, 2008]

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 are mandatory. The availability of acceptable procedures was announced in the FEDERAL REGISTER in 1991 and 1996.

(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) nontoxic 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; 73 FR 74987, Dec. 10, 2008]

§ 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 [Reserved]

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.

(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.

[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; 65 FR 47325, Aug. 2, 2000; 73 FR 74987, Dec. 10, 2008]

§ 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 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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228.15 Dumping sites designated on a final basis.

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 a 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 coordinates of latitude and longitude for each corner, or by 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.

[42 FR 2482, Jan. 11, 1977, as amended at 73 FR 74987, Dec. 10, 2008]

§ 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 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 of this chapter. 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 chapter. 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; 73 FR 74987, Dec. 10, 2008]

§ 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 permits.* Areas where ocean dumping is permitted subject to the

specific conditions of individual special 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.

[42 FR 2482, Jan. 11, 1977, as amended at 73 FR 74987, Dec. 10, 2008]

§ 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) [Reserved]

(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.

[42 FR 2482, Jan. 11, 1977, as amended at 73 FR 74987, Dec. 10, 2008]

§ 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 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.

[73 FR 74987, Dec. 10, 2008]

§ 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 [Reserved]

§ 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.

(3) Rhode Island Sound Disposal Site (RISDS).

(i) *Location:* Corner Coordinates (NAD 1983): 41°14′21″ N, 71°23′29″ W; 41°14′21″ N, 71°22′09″ W; 41°13′21″ N, 71°23′29″ W; 41°13′21″ N, 71°22′09″ W.

(ii) *Size:* One square nautical mile.

(iii) *Depth:* Ranges from 115 to 128 feet (35 to 39 meters).

(iv) *Primary use:* Dredged material disposal.

(v) *Period of use:* Continuing use.

(vi) *Restriction:* Disposal shall be limited to dredged material. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(4) Central Long Island Sound Dredged Material Disposal Site (CLIS).

(i) *Location:* Corner Coordinates (NAD 1983) 41°9.5′ N., 72°54.4′ W.; 41°9.5′ N., 72°51.5′ W.; 41°08.4′ N., 72°54.4′ W.; 41°08.4′ N., 72°51.5′ W.

(ii) *Size:* A 1.1 by 2.2 nautical mile rectangular area, about 2.42 square nautical miles in size.

(iii) *Depth:* Ranges from 56 to 77 feet (17 to 23.5 meters).

(iv) *Primary use:* Dredged material disposal.

(v) *Period of use:* Continuing use, except as provided in paragraph (b)(4)(vi) of this section.

(vi) *Restrictions:* The designation in this paragraph (b)(4) sets forth conditions for the use of Central Long Island Sound (CLIS) and Western Long Island Sound (WLIS) Dredged Material Disposal Sites. These conditions apply to all disposal subject to the MPRSA, namely all federal projects and non-federal projects greater than 25,000 cubic yards. All references to ''permittees'' shall be deemed to include the Army Corps of Engineers (USACE) when it is authorizing its own dredged material disposal from a USACE dredging project. The conditions for this designation are as follows:

(A) Disposal shall be limited to dredged material from Long Island Sound and vicinity.

(B) Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(C) Except as provided in paragraphs (b)(4)(vi)(D) and (E) of this section, the disposal of dredged material at the CLIS and WLIS sites pursuant to this designation shall not be allowed beginning eight (8) years after July 5, 2005 unless a regional dredged material management plan (DMMP) for Long Island Sound has been completed by the North Atlantic Division of the USACE, in consultation with the State of New York, State of Connecticut and EPA,

with a goal of reducing or eliminating the disposal of dredged material in Long Island Sound, and the EPA thereafter amends this site designation to incorporate procedures and standards that are consistent with those recommended in the DMMP.[1] Completion of the DMMP means finishing the items listed in the work plan (except for any ongoing long-term studies), including the identification of alternatives to open-water disposal, and the development of procedures and standards for the use of practicable alternatives to open-water disposal. If the completion of the DMMP does not occur within eight years of July 5, 2005 (plus any extensions under paragraphs (b)(4)(vi)(D) and (E) of this section), use of the sites shall be prohibited. However, if the DMMP is thereafter completed within one year, disposal of dredged material at the sites may resume.

(D) The EPA may extend the eight-year deadline in paragraph (b)(4)(vi)(C) of this section for any reasonable period (on one or more occasions) if it obtains the written agreement of the USACE, the State of Connecticut (Department of Environmental Protection) and the State of New York (Department of State).

(E) The EPA may extend the eight-year deadline in paragraph (b)(4)(vi)(C) of this section by up to one year (on one occasion only) if it determines in writing that the parties participating in the development of the DMMP have attempted in good faith to meet the deadline, but that the deadline has not been met due to factors beyond the parties' control (including funding). Such an extension may be in addition to any extension(s) granted under paragraph (b)(4)(vi)(D) of this section.

(F) The EPA will conduct an annual review of progress in developing the DMMP. If the EPA finds that the DMMP is being unreasonably delayed by one or more parties, the EPA reserves the right to take the following actions as appropriate: (*1*) Suspend use of the sites even prior to the deadlines established in paragraphs (b)(4)(vi)(C) through (E) of this section through an amended rulemaking or (*2*) Exercise through rulemaking its statutory and regulatory authorities regarding designation of ocean disposal sites.

(G) Upon completion of the DMMP, disposal of dredged material at the designated sites pursuant to the designation in this paragraph (b)(4) shall be allowed only from permittees that comply with procedures and standards consistent with the recommendations of the DMMP, and consistent with applicable law, for the use of the sites and for the use of practicable alternatives to open-water disposal, so as to reduce or eliminate the disposal of dredged material in Long Island Sound. Upon the completion of the DMMP, the EPA will within 60 days propose and within 120 days (subject to consideration of public comments) issue a legally binding amendment to the designation in this paragraph (b)(4) describing all such procedures and standards and specifying that they must be complied with as part of this designation.[2] If any

[1] If the EPA has acted in good faith to adopt substantially all procedures and standards for the use of the sites and the use of practicable alternatives to open-water disposal recommended in the DMMP, termination of the use of the sites based on the EPA not adopting all procedures and standards shall not occur unless a party first files a petition with the EPA pursuant to item 7 setting forth in detail each procedure or standard that the party believes the EPA must adopt in order to be consistent with the DMMP, and the EPA has an opportunity to act on the petition. Termination of the use of the sites shall not occur if in response to a petition the EPA determines that it has adopted substantially all procedures and standards for the use of the sites and the use of practicable alternatives to open-water disposal recommended in the DMMP, unless and until otherwise directed by a court. Termination of the use of the sites shall not occur based on not adopting a DMMP provision if the DMMP provision is not consistent with applicable law. Termination of the use of the sites shall not occur based on the EPA not meeting the 60 and 120 day rulemaking deadlines set forth in item 7, but use of the sites shall be suspended if the EPA misses either deadline, until the EPA issues a final rule. Termination of the use of the sites shall not occur based on the EPA adopting procedures and standards which are stricter than the recommendations of the DMMP.

[2] The EPA must preserve its discretion, in response to public comments, not to adopt such an amendment to this designation. The EPA understands that the State of New York has reserved its rights to revive its objection

party (or the EPA on its own initiative) is not satisfied that the final DMMP recommends sufficient procedures and standards to reduce or eliminate disposal of dredged material in Long Island Sound to the greatest extent practicable, or if any party is not satisfied with the EPA's amendment adopting such procedures and standards, the party may petition the EPA to do a rulemaking to amend the designation to establish different or additional standards. The EPA will act on any such petition within 120 days.

(H) Disposal not subject to the restrictions in paragraphs (b)(4)(vi)(C) through (G) or (b)(4)(vi)(I) of this section shall be permitted only for materials resulting from currently authorized or permitted dredging projects at Norwalk, Rye and New Rochelle. Such disposal must meet all applicable statutory and regulatory requirements. All phases of any of these project must be initiated within four (4) years from the date of the designation, or the project will become subject to paragraph (b)(4)(vi)(I) of this section.

(I) Except for the projects covered by paragraph (b)(4)(vi)(H) of this section and until completion of the DMMP, disposal of dredged material at the designated sites pursuant to the designation in this paragraph (b)(4) shall be allowed only if, after full consideration of recommendations provided by an established Regional Dredging Team[3] (RDT), the USACE finds (and the EPA does not object to such finding), based on a fully documented analysis, that for a given dredging project:

(1) There are no practicable alternatives (as defined in 40 CFR 227.16(b)) to open-water disposal in Long Island Sound and that any available practicable alternative to open-water disposal will be fully utilized for the maximum volume of dredged material practicable;

(2) Determinations relating to paragraph (b)(4)(vi)(I)(1) of this section will recognize that any alternative to open-water disposal may add additional costs. Disposal of dredged material at the designated sites pursuant to this paragraph (b)(4) shall not be allowed if a practicable alternative is available. Any project subject to this restriction must be permitted or authorized prior to the completion of the DMMP and completed within two years after the completion of the DMMP.

(J) Disposal shall be limited to dredged sediments that comply with the Ocean Dumping Regulations.

(K) Disposal of dredged material at the designated sites pursuant to the designation in this paragraph (b)(4) shall not be allowed for any materials subject to a waiver under 33 U.S.C. 1413(d) unless, for any project where a waiver is sought, the New England or New York District of the USACE provides notification, by certified mail at least thirty (30) days before making the waiver request, to the Governors of the states of Connecticut and New York and the North Atlantic Division of the USACE that it will be requesting a waiver.

(L) Transportation of dredged material to the sites shall only be allowed when weather and sea conditions will not interfere with safe transportation and will not create risk of spillage, leak or other loss of dredged material in transit. No disposal trips shall be initiated when the National Weather Service has issued a gale warning for local waters during the time period necessary to complete dumping operations.

(M) The parties participating in the DMMP will need to seek additional funding in order to develop the DMMP. Nothing in the designation in this paragraph (b)(4) or elsewhere guarantees that any agency will be able to obtain funding for the DMMP. This designation shall not be interpreted as or constitute a commitment that the United States will obligate or expend funds in contravention of the Anti-Deficiency Act, 31 U.S.C. 1341. Rather, the sole remedy for any failure to meet the conditions specified in this paragraph (b)(4)(vi) shall be the restriction of the authority to dispose of dredged material, as provided in this paragraph (b)(4).

(N) Nothing in the designation in this paragraph (b)(4) or elsewhere precludes

to this designation if the DMMP procedures and standards are not adopted.

[3] A Regional Dredging Team (RDT) comprised of regulatory and coastal policy specialists from state and federal agencies will be formed.

the EPA from exercising its statutory authority to designate other ocean disposal sites, not subject to the restrictions in paragraph (b)(4)(vi), or taking any subsequent action to modify the site designation in paragraph (b)(4), provided that the EPA makes any such designation or takes such subsequent action through a separate rulemaking in accordance with all applicable legal requirements. Nothing in this designation shall be interpreted to restrict the EPA's authorities under the MPRSA or the implementing regulations or to amend the implementing regulations.

(5) Western Long Island Sound Dredged Material Disposal Site (WLIS).

(i) *Location:* Corner Coordinates (NAD 1983) 41°00.1′ N., 73°29.8′ W.; 41°00.1′ N., 73°28.1′ W.; 40°58.9′ N., 73°29.8′ W.; 40°58.9′ N., 73°28.1′ W.

(ii) *Size:* A 1.2 by 1.3 nautical mile rectangular area, about 1.56 square nautical miles in size.

(iii) *Depth:* Ranges from 79 to 118 feet (24 to 36 meters).

(iv) *Primary use:* Dredged material disposal.

(v) *Period of use:* Continuing use except as provided in paragraph (b)(5)(vi) of this section.

(vi) *Restrictions:* See 40 CFR 228.15(b)(4)(vi).

(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.

(E) HARS-specific Polychlorinated Biphenyl (PCB) Tissue Criterion: Total PCB bioaccumulation worm test results for dredged material approved for placement at the HARS as Material for Remediation shall not exceed the HARS-specific PCB tissue criterion of 113 ppb. This HARS-specific PCB tissue criterion will be applied to the arithmetic mean concentration reported for the analyses of the worm tissue replicates exposed to the tested sediments, without the use of statistical confidence limits.

(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 de-designate 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.

(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) *Restriction:* Disposal shall be limited to dredged material.

(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) *Restriction:* Disposal shall be limited to dredged material.

(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) *Restriction:* Disposal shall be limited to dredged material.

(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) *Restriction:* Disposal shall be limited to dredged material.

(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, Ocean 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 must be placed within the box defined by the following four corner coordinates (NAD83): 32.65663° N, 79.75716° W; 32.64257° N, 79.72733° W; 32.61733° N, 79.74381° W; and 32.63142° N, 79.77367° W. Additionally, all disposals shall be in accordance with all provisions of disposal placement as specified by the Site Management Plan, which is periodically updated.

(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° 21.514′ N., 81° 18.555′ W.; 30° 21.514′ N, 81° 17.422′ W.; 30° 20.515′ N., 81° 17.422′ W.; 30° 20.515′ N, 81° 17.012′

W.; 30° 17.829′ N., 81° 17.012′ W.; 30° 17.829′ N, 81° 18.555′ W.

(ii) *Size:* Approximately 3.68 nautical miles long and 1.34 nautical miles wide (4.56 square nautical miles); 3,861 acres (1,562 hectares).

(iii) *Depth:* Ranges from approximately 28 to 61 feet (9 to 19 meters).

(iv) *Primary use:* Dredged material.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* (A) Disposal shall be limited to dredged material from the Jacksonville, Florida, area;

(B) Disposal shall be limited to dredged material determined to be suitable for ocean disposal according to 40 CFR 227.13;

(C) Disposal shall be managed by the restrictions and requirements contained in the currently-approved Site Management and Monitoring Plan (SMMP);

(D) Monitoring, as specified in the SMMP, is required.

(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.

(20) New Wilmington, NC; Ocean Dredged Material Disposal Site.

(i) Location:

33°46′ N	78°02.5′ W.
33°46′ N	78°01′ W.
33°41′ N	78°01′ W.
33°41′ N	78°04′ W.

(ii) Size: Approximately 9.4 square nautical miles.

(iii) Depth: Ranges from 35–52 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 Wilmington, North Carolina vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(21) Palm Beach Harbor, FL Ocean Dredged Material Disposal Site.

(i) Location (NAD83): 26°47′30″ N., 79°57′09″ W.; 26°47′30″ N., 79°56′02″ W.; 26°46′30″ N., 79°57′09″ W.; 26°46′30″ N., 79°56′02″ W. Center coordinates are 26°47′00″ N and 79°56′35″ W.

(ii) Size: Approximately 1 square nautical mile.

(iii) Depth: Ranges from 525 to 625 feet.

(iv) Primary use: Dredged material.

(v) Period of use: Continuing use.

(vi) Restriction: Disposal shall be limited to suitable dredged material. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(22) Port Everglades Harbor, FL Ocean Dredged Material Disposal Site.

(i) Location (NAD83): 26°07′30″ N., 80°02′00″ W.; 26°07′30″ N., 80°01′00″ W.; 26°06′30″ N., 80°02′00″ W.; 26°06′30″ N., 80°01′00″ W. Center coordinates are 26°07′00″ N and 80°01′30″ W.

(ii) Size: Approximately 1 square nautical mile.

(iii) Depth: Ranges from 640 to 705 feet.

(iv) Primary use: Dredged material.

(v) Period of use: Continuing use.

(vi) Restriction: Disposal shall be limited to suitable dredged material. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(23) Port Royal, SC; Ocean Dredged Material Disposal Site.

(i) Location (NAD83): 32°05.00′ N., 80°36.47′ W.; 32°05.00′ N., 80°35.30′ W.; 32°04.00′ N., 80°35.30′ W.; 32°04.00′ N., 80°36.47′ W.

(ii) Size: Approximately 1.0 square nautical miles.

(iii) Depth: Averages 36 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 Port Royal, South Carolina, 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) [Reserved]

(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) [Reserved]

(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′25″ 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°49′23″ 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) *Restrictions:* Disposal shall be limited to suitable dredged material from the greater Houston-Galveston, Texas vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.
(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) *Restrictions:* Disposal shall be limited to suitable dredged material from the greater Freeport, Texas vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.
(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) *Restrictions:* Disposal shall be limited to suitable dredged material from the greater Freeport, Texas vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.
(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) *Restrictions:* Disposal shall be limited to suitable dredged material from the greater Matagorda, Texas vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.
(16) Corpus Christi New Work ODMDS, Corpus Christi, Texas.
(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:* Continuing use.
(vi) *Restrictions:* Disposal shall be limited to suitable dredged material from the greater Corpus Christi, Texas vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(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 suitable dredged material from the greater Corpus Christi, Texas vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(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) *Restrictions:* Disposal shall be limited to suitable dredged material from the greater Port Mansfield, Texas vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(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) *Restrictions:* Disposal shall be limited to suitable dredged material from the greater Brownsville, Texas vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(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 suitable dredged material from the greater Brownsville, Texas vicinity. Disposal shall comply with conditions set forth in the most recent approved Site Management and Monitoring Plan.

(21) Atchafalaya River and Bayous Chene, Boeuf, and Black, LA
(i) *Location (NAD83):* 9E20′59.92″ N, 91E23′33.23″ W, 29E20′43.94″ N, 91E23′09.73″ W, 29E08′15.46″ N, 91E34′51.02″ W, and 29E07′59.43″ N, 91E34′27.51″ W; thence to point of beginning.
(ii) *Size:* 9.14 square miles.
(iii) *Depth:* Average water depth of 16 feet.
(iv) *Primary Use:* Dredge material.
(v) *Period of Use:* Indefinite period of time.
(vi) *Restriction:* Disposal shall be limited to dredged material from the bar channel of the Atchafalaya River and Bayous Chene, Boeuf, and Black, Louisiana.

(22) Sabine-Neches, TX Dredged Material Site A.
(i) *Location (NAD83):* 29°24′47″ N., 93°43′29″ W.; 29°24′47″ N., 93°41′08″ W.; 29°22′48″ N., 93°41′09″ W.; 29°22′49″ N., 93°43′29″ W.; thence to point of beginning.
(ii) *Size:* approximately 5.3 square miles.
(iii) *Depth:* Ranges from 44 to 46 feet.
(iv) *Primary Use:* Dredged material.
(v) *Period of Use:* Continuing use.
(vi) *Restrictions:* Disposal shall be limited to dredged material from the Sabine-Neches 13.2 mile Extension Channel that complies with EPA's Ocean Dumping Regulations. Dredged material that does not meet the criteria set forth in 40 CFR part 227 shall not be placed at the site. Disposal operations shall be conducted in accordance with requirements specified in a Site

Management and Monitoring Plan developed by EPA and USACE, to be reviewed periodically, at least every 10 years.

(23) Sabine-Neches, TX Dredged Material Site B.

(i) *Location (NAD83):* 29°21′59″ N., 93°43′29″ W.; 29°21′59″ N., 93°41′08″ W.; 29°20′00″ N., 93°41′09″ W.; 29°20′00″ N., 93°43′29″ W.; thence to point of beginning.

(ii) *Size:* approximately 5.3 square miles.

(iii) *Depth:* Ranges from 44 to 46 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from the Sabine-Neches 13.2 mile Extension Channel that complies with EPA's Ocean Dumping Regulations. Dredged material that does not meet the criteria set forth in 40 CFR part 227 shall not be placed at the site. Disposal operations shall be conducted in accordance with requirements specified in a Site Management and Monitoring Plan developed by EPA and USACE, to be reviewed periodically, at least every 10 years.

(24) Sabine-Neches, TX Dredged Material Site C.

(i) *Location (NAD83):* 29°19′11″ N., 93°43′29″ W.; 29°19′11″ N, 93°41′09″ W.; 29°17′12″ N., 93°41′09″ W.; 29°17′12″ N., 93°43′29″ W.; thence to point of beginning.

(ii) *Size:* approximately 5.3 square miles.

(iii) *Depth:* Ranges from 44 to 46 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from the Sabine-Neches 13.2 mile Extension Channel that complies with EPA's Ocean Dumping Regulations. Dredged material that does not meet the criteria set forth in 40 CFR part 227 shall not be placed at the site. Disposal operations shall be conducted in accordance with requirements specified in a Site Management and Monitoring Plan developed by EPA and USACE, to be reviewed periodically, at least every 10 years.

(25) Sabine-Neches, TX Dredged Material Site D.

(i) *Location (NAD83):* 29°16′22″ N., 93°43′29″ W.; 29°16′22″ N., 93°41′10″ W.; 29°14′24″ N., 93°41′10″ W.; 29°14′24″ N., 93°43′29″ W.; thence to point of beginning.

(ii) *Size:* approximately 5.3 square miles.

(iii) *Depth:* Ranges from 44 to 46 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from the Sabine-Neches 13.2 mile Extension Channel that complies with EPA's Ocean Dumping Regulations. Dredged material that does not meet the criteria set forth in 40 CFR part 227 shall not be placed at the site. Disposal operations shall be conducted in accordance with requirements specified in a Site Management and Monitoring Plan developed by EPA and USACE, to be reviewed periodically, at least every 10 years.

(26) Atchafalaya River and Bayous Chene, Boeuf, and Black, LA (ODMDS-West)

(i) *Location (NAD83):* 29°22′06″ N, 91°27′38″ W; 29°20′30″ N, 91°25′13″ W; 29°09′16″ N, 91°35′12″ W; 29°10′52″ N, 91°37′33″ W; thence to point of beginning.

(ii) *Size:* 48 square miles.

(iii) *Depth:* Ranges from 4 to 23 feet.

(iv) *Primary Use:* Dredged material.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged material from the Atchafalaya River Bar channel that complies with EPA's Ocean Dumping Regulations. Dredged material that does not meet the criteria set forth in 40 CFR part 227 shall not be placed at the site. Disposal operations shall be conducted in accordance with requirements specified in a Site Management and Monitoring Plan developed by EPA and USACE, to be reviewed periodically, at least every 10 years.

(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. Adherence to the provisions of the most current SMMP Implementation Manual, including mandatory permit conditions, site monitoring activities, and any other condition(s) EPA or the Corps have required as part of the project authorization or permit, is a requirement for use of the SF-DODS. SF-DODS use shall be subject to the following restrictions and provisions:

(vii) *Type and capacity of disposed materials.* Site disposal capacity is 4.8 million cubic yards of suitable dredged material per year for the remaining period of site designation. This limit is based on considerations in the regional Long Term Management Strategy for the placement of dredged material within the San Francisco Bay region, and on monitoring of site use since the SF-DODS was designated in 1994.

(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 trips shall be initiated when the National Weather Service has issued a gale warning for local waters during the time period necessary to complete dumping operations, or when wave heights are 16 feet or greater. The permittee must consult the most current version of the SMMP Implementation Manual for additional restrictions and/or clarifications regarding other sea state parameters, including, but not limited to wave period.

(*2*) All vessels used for dredged material transportation and disposal must be loaded to no more than 80 percent by volume of the vessel. Before any disposal vessel departs for the SF-DODS, an independent quality control inspector must certify in writing that the vessel meets the conditions and requirements of a certification checklist that contains all of the substantive elements found in the example contained in the most current SMMP Implementation Manual. For the purposes of paragraph (l)(3)(viii) of this section, ''independent'' means not an employee of the permittee or dredging contractor; however, the Corps of Engineers may provide inspectors for Corps of Engineers dredged material disposal projects.

(*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 should remain at least three nautical miles from the Farallon Islands whenever possible. Closer approaches should occur only in situations where the designated vessel traffic lane enters the area encompassed by the 3-mile limit, and where safety may be compromised by staying outside of the 3-mile limit. In no case may disposal vessels leave the designated vessel traffic lane.

(*5*) When dredged material is discharged within the SF-DODS, no portion of the vessel from which the materials are to be released (e.g., hopper dredge or towed barge) can be further than 1,900 feet (600 meters) from the center of the target area 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 dredged vessel or towed barge) with a minimum accuracy and precision of 100 feet during all disposal operations. The system must also indicate the opening and closing of the doors of the vessel carrying the dredged material. If the positioning system fails, all disposal operations must cease until the navigational capabilities are restored. The back-up navigation system, with all the capabilities listed in this condition, must be in place on the vessel carrying the dredged material.

(*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 violation. If any anticipated or actual permit violations occur within the Gulf of the Farallones or the Monterey Bay National Marine Sanctuaries, the permittee must also report any such violation to the respective Sanctuary Manager within 24 hours. 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 Mandatory Conditions in paragraphs (l)(3)(viii)(A)(*8*) and (*9*) of this section.

(*12*) Permittees, and the Corps in its Civil Works projects, must make arrangements for independent observers to be present on disposal vessels for the purpose of conducting shipboard surveys of seabirds and marine mammals. Observers shall employ standardized monitoring protocols, as referenced in the most current SMMP Implementation Manual. At a minimum, permittees shall ensure that independent observers are present on at least one disposal trip during each calendar month that disposal occurs, AND on average at least once every 25 vessel trips to the SF-DODS.

(*13*) At the completion of short-term dredging projects, at least annually for ongoing projects, and at any other time or interval requested by the District Engineer or Regional Administrator, permittees shall prepare and submit to the District Engineer and Regional Administrator a report that includes complete records of all dredging, transport and disposal activities, such as navigation logs, disposal coordinates, scow certification checklists, and other information required by permit conditions. Electronic data submittals may be required to conform to a format specified by the agencies. Permittees shall include a report indicating whether any dredged material was dredged outside the areas authorized for dredging or was dredged 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 × 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.

(11) Newport Beach, CA, (LA–3) Ocean Dredged Material Disposal Site—Region IX.

(i) *Location:* Center coordinates of the circle-shaped site are: 33°31′00″ North Latitude by 117°53′30″ West Longitude (North American Datum from 1983), with a radius of 3,000 feet (915 meters).

(ii) *Size:* 0.77 square nautical miles.

(iii) *Depth:* 1,500 to 1,675 feet (460 to 510 meters).

(iv) *Use Restricted to Disposal of:* Dredged materials.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to dredged materials that comply with EPA's Ocean Dumping Regulations.

(12) Guam Deep Ocean Disposal Site (G–DODS)—Region IX.

(i) *Location:* Center coordinates of the circle-shaped site are: 13°35.500′ North Latitude by 144°28.733′ East Longitude (North American Datum from 1983),

with an overall diameter of 3 nautical miles (5.6 kilometers).

(ii) *Size:* 7.1 square nautical miles (24.3 square kilometers) overall site.

(iii) *Depth:* 8,790 feet (2,680 meters).

(iv) *Use Restricted to Disposal of:* Suitable dredged materials.

(v) *Period of Use:* Continuing use.

(vi) *Restrictions:* Disposal shall be limited to a maximum of 1 million cubic yards (764,555 cubic meters) per calendar year of dredged materials that comply with EPA's Ocean Dumping Regulations; disposal operations shall be conducted in accordance with requirements specified in a Site Management and Monitoring Plan developed by EPA and USACE, to be reviewed at least every 10 years.

(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′54.8887″ N., 124°19′28.9905″ W.; 43°21′32.8735″ N., 124°20′37.7373″ W.; 43°22′51.4004″ N., 124°23′32.4318″ W.; 43°23′58.4014″ N., 124°22′35.4308″ W. (NAD 83).

(ii) *Size:* 4.45 kilometers long and 2.45 kilometers wide.

(iii) *Depth:* Ranges from 6 to 51 meters.

(iv) *Primary Use:* Dredged material determined to be suitable for ocean disposal.

(v) *Period of Use:* Continuing Use.

(vi) *Restriction:* Disposal shall be limited to dredged material determined to be suitable for unconfined disposal; Disposal shall be managed by the restrictions and requirements contained in the currently-approved Site Management and Monitoring Plan (SMMP); Monitoring, as specified in the SMMP, is required.

(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) Rogue River, OR—Dredged Material Site

(i) *Location:* 42°24′15.40″ N, 124°26′52.39″ W; 42°24′03.40″ N, 124°26′39.39″ W; 42°23′39.40″ N, 124°27′17.40″ W; 42°23′51.40″ N, 124°27′30.40″ W (NAD 83)

(ii) *Size:* Approximately 1.1 kilometers long and 0.4 kilometers wide

(iii) *Depth:* Ranges from approximately 15 to 27 meters

(iv) *Primary Use:* Dredged material

(v) *Period of Use:* Continuing Use

(vi) *Restrictions:* (A) Disposal shall be limited to dredged material determined to be suitable for ocean disposal according to 40 CFR 227.13, from the Rogue River navigation channel and adjacent areas;

(B) Disposal shall be managed by the restrictions and requirements contained in the currently-approved Site Management and Monitoring Plan (SMMP);

(C) Monitoring, as specified in the SMMP, is required.

(7) Umpqua River, OR—North and South Dredged Material Disposal Sites.

(i) North Umpqua River Site.

(A) *Location:* 43°41′23.09″ N, 124°14′20.28″ W; 43°41′25.86″ N, 124°12′54.61″ W; 43°40′43.62″ N, 124°14′17.85″ W; 43°40′46.37″ N, 124°12′52.74″ W.

(B) *Size:* Approximately 1.92 kilometers long and 1.22 kilometers wide, with a drop zone which is defined as a 500-foot setback inscribed within all sides of the site boundary, reducing the permissible disposal area to a zone 5,300 feet long by 3,000 feet wide.

(C) *Depth:* Ranges from approximately 9 to 37 meters.

(D) *Primary Use:* Dredged material.

(E) *Period of Use:* Continuing Use.

(F) *Restrictions:* (*1*) Disposal shall be limited to dredged material determined to be suitable for ocean disposal according to 40 CFR 227.13, from the Umpqua River navigation channel and adjacent areas;

(*2*) Disposal shall be managed by the restrictions and requirements contained in the currently-approved Site Management and Monitoring Plan (SMMP);

(*3*) Monitoring, as specified in the SMMP, is required.

(ii) South Umpqua River Site.

(A) *Location:* 43°39′32.31″ N, 124°14′35.60″ W; 43°39′35.23″ N, 124°13′11.01″ W; 43°38′53.08″ N, 124°14′32.94″ W; 43°38′55.82″ N, 124°13′08.36″ W.

(B) *Size:* Approximately 1.92 kilometers long and 1.22 kilometers wide, with a drop zone which is defined as a 500-foot setback inscribed within all sides of the site boundary, reducing the permissible disposal area to a zone 5,300 feet long by 3,000 feet wide.

(C) *Depth:* Ranges from approximately 9 to 37 meters.

(D) *Primary Use:* Dredged material.

(E) *Period of Use:* Continuing Use.

(F) *Restrictions:* (*1*) Disposal shall be limited to dredged material determined to be suitable for ocean disposal according to 40 CFR 227.13, from the Umpqua River navigation channel and adjacent areas;

(*2*) Disposal shall be managed by the restrictions and requirements contained in the currently-approved Site Management and Monitoring Plan (SMMP);

(*3*) Monitoring, as specified in the SMMP, is required.

(8) Mouth of the Columbia River, OR/WA Dredged Material Shallow Water site.

(i) *Location:* Overall Site Coordinates: 46°15′31.64″ N, 124°05′09.72″ W; 46°14′17.66″ N, 124°07′14.54″ W; 46°15′02.87″ N, 124°08′11.47″ W; 46°15′52.77″ N, 124°05′42.92″ W. Drop Zone: 46°15′35.36″ N, 124°05′15.55″ W; 46°14′31.07″ N, 124°07′03.25″ W; 46°14′58.83″ N, 124°07′36.89″ W; 46°15′42.38″ N, 124°05′26.65″ W (All NAD 83)

(ii) *Size:* 3.05 kilometers long and 0.32 to 1.10 kilometers wide or 1.4 square nautical mile.

(iii) *Depth:* Ranges from 14 to 23 meters.

(iv) *Primary Use:* Dredged Material determined to be suitable for ocean disposal.

(v) *Period of Use:* Continuing Use.

(vi) *Restriction:* Disposal shall be limited to dredged material determined to be suitable for unconfined disposal; Site use shall be consistent with the ability of the site to disperse disposed material into the littoral zone.

(9) Mouth of the Columbia River, OR/WA Dredged Material Deep Water site.

(i) *Location:* Overall Site Coordinates: 46°11′03.03″ N, 124°10′01.30″ W; 46°13′09.78″ N, 124°12′39.67″ W; 46°10′40.88″ N,

124°16′46.48″ W; 46°08′34.22″ N, 124°14′08.07″ W (which includes a 3,000-foot buffer); Site Placement Area: 46°11′06.00″ N, 124°11′05.99″ W; 46°12′28.01″ N, 124°12′48.48″ W; 46°10′37.96″ N, 124°15′50.91″ W; 46°09′15.99″ N, 124°14′08.40″ W (All NAD, 83).

(ii) *Size:* 7.01 kilometers long by 5.18 kilometers wide or 10.5 square nautical mile.

(iii) *Depth:* Ranges from 58 to 91 meters.

(iv) *Primary Use:* Dredged material determined to be suitable for ocean disposal.

(v) *Period of Use:* Continuing Use or until placed material has mounded to an average height of 40 feet within the placement area (*see* restriction 4 below).

(vi) *Restrictions:* Disposal shall be limited to dredged material determined to be suitable for unconfined disposal; Site use shall be consistent with the ability of the site to retain disposed material on-site; Direct disposal of dredged material into the identified buffer zone is prohibited; and The Corps and/or EPA shall undertake specific re-evaluation of site capacity once the site is used and an average mound height of 30 feet has accumulated throughout the placement area. This evaluation will either confirm the original 40-foot height restriction, or recommend a more technically appropriate one.

(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.

(14) Siuslaw River, OR—North and South Dredged Material Disposal Sites.

(i) North Siuslaw River Site.

(A) *Location:*

44°01′31.03″ N, 124°10′12.92″ W,
44°01′49.39″ N, 124°10′02.85″ W,
44°01′31.97″ N, 124°09′01.86″ W,
44°01′13.45″ N, 124°09′11.41″ W.

(B) *Size:* Approximately 1.5 kilometers long and 0.6 kilometers wide.

(C) *Depth:* Ranges from approximately 9 to 35 meters.

(D) *Primary Use:* Dredged material.

(E) *Period of Use:* Continuing Use.

(F) *Restrictions:* (*1*) Disposal shall be limited to dredged material determined to be suitable for ocean disposal according to 40 CFR 227.13 from the Siuslaw River navigation channel and adjacent areas;

(*2*) Disposal shall be managed by the restrictions and requirements contained in the currently-approved Site Management and Monitoring Plan (SMMP);

(*3*) Monitoring, as specified in the SMMP, is required.

(ii) South Siuslaw River Site.

(A) *Location:*

44°00′46.72″ N, 124°10′26.55″ W,
44°01′06.41″ N, 124°10′24.45″ W,
44°01′04.12″ N, 124°09′43.52″ W,
44°00′44.45″ N, 124°09′45.63″ W.

(B) *Size:* Approximately 0.9 kilometers long and 0.6 kilometers wide.

(C) *Depth:* Ranges from approximately 24 to 38 meters.

(D) *Primary Use:* Dredged material.

(E) *Period of Use:* Continuing Use.

(F) *Restrictions:* (*1*) Disposal shall be limited to dredged material determined to be suitable for ocean disposal according to 40 CFR 227.13, from the Siuslaw River navigation channel and adjacent areas;

(*2*) Disposal shall be managed by the restrictions and requirements contained in the currently-approved Site Management and Monitoring Plan (SMMP);

(*3*) Monitoring, as specified in the SMMP, is required.

(15) Yaquina Bay, OR—North and South Ocean Dredged Material Disposal Sites

(i) North Site.

(A) *Location (NAD 83):* 44°38′17.98″ N, 124°07′25.95″ W; 44°38′12.86″ N, 124°06′31.10″ W; 44°37′14.33″ N, 124°07′37.57″ W; 44°37′09.22″ N, 124°06′42.73″ W.

(B) *Size:* Approximately 1.07 nautical miles long and 0.66 nautical miles wide (0.71 square nautical miles); 597 acres (242 hectares)

(C) *Depth:* Ranges from approximately 112 to 152 feet (34 to 46 meters)

(D) *Primary Use:* Dredged material

(E) *Period of Use:* Continuing use

(F) *Restrictions:* (*1*) Disposal shall be limited to dredged material determined to be suitable for ocean disposal according to 40 CFR 227.13 from the Yaquina Bay and River navigation channel and adjacent areas;

(*2*) Disposal shall be managed by the restrictions and requirements contained in the currently-approved Site Management and Monitoring Plan (SMMP);

(*3*) Monitoring, as specified in the SMMP, is required.

(ii) South Site.

(A) *Location (NAD 83):* 44°36′04.50″ N, 124°07′52.66″ W; 44°35′59.39″ N, 124°06′57.84″ W; 44°35′00.85″ N, 124°08′04.27″ W; 44°34′55.75″ N, 124°07′09.47″ W.

(B) *Size:* Approximately 1.07 nautical miles long and 0.66 nautical miles wide (0.71 square nautical miles); 597 acres (242 hectares)

(C) *Depth:* Ranges from approximately 112 to 152 feet (34 to 46 meters)

(D) *Primary Use:* Dredged material

(E) *Period of Use:* Continuing use

(F) *Restrictions:* (*1*) Disposal shall be limited to dredged material determined to be suitable for ocean disposal according to 40 CFR 227.13, from the Yaquina Bay and River navigation channel and adjacent areas;

(*2*) Disposal shall be managed by the restrictions and requirements contained in the currently-approved Site Management and Monitoring Plan (SMMP);

(*3*) Monitoring, as specified in the SMMP, is required.

(o) Region X Final Other Wastes Sites.

(1) No final sites.

(2) [Reserved]

[59 FR 61130, Nov. 29, 1994]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 228.15, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov*.

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

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AUTHORITY: 33 U.S.C. 1251 *et seq.*

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 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.

(c) The term *carrier of contaminant* means dredged or fill material that contains contaminants.

(d) 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).

(e) The term *discharge point* means the point within the disposal site at

which the dredged or fill material is released.

(f) 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.

(g) The term *extraction site* means the place from which the dredged or fill material proposed for discharge is to be removed.

(h) 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.

(i) 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.

(j) 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).

(k) The term *pollution* means the man-made or man-induced alteration of the chemical, physical, biological or radiological integrity of an aquatic ecosystem.

(l) 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.

(m) *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))

(n) 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.

(o) The term *waters of the United States* means:

(1) For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (o)(2) of this section, the term ''waters of the United States'' means:

(i) All waters which are currently used, 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;

(ii) All interstate waters, including interstate wetlands;

(iii) The territorial seas;

(iv) All impoundments of waters otherwise identified as waters of the United States under this section;

(v) All tributaries, as defined in paragraph (o)(3)(iii) of this section, of waters identified in paragraphs (o)(1)(i) through (iii) of this section;

(vi) All waters adjacent to a water identified in paragraphs (o)(1)(i) through (v) of this section, including

wetlands, ponds, lakes, oxbows, impoundments, and similar waters;

(vii) All waters in paragraphs (o)(1)(vii)(A) through (E) of this section where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (o)(1)(i) through (iii) of this section. The waters identified in each of paragraphs (o)(1)(vii)(A) through (E) of this section are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (o)(1)(i) through (iii) of this section. Waters identified in this paragraph shall not be combined with waters identified in paragraph (o)(1)(vi) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (o)(1)(vi), they are an adjacent water and no case-specific significant nexus analysis is required.

(A) *Prairie potholes.* Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest.

(B) *Carolina bays and Delmarva bays.* Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.

(C) *Pocosins.* Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.

(D) *Western vernal pools.* Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers.

(E) *Texas coastal prairie wetlands.* Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (o)(1)(i) through (iii) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (o)(1)(i) through (v) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (o)(1)(i) through (iii) of this section. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in paragraphs (o)(1)(i) through (iii) of this section or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph (o)(1)(vi) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (o)(1)(vi), they are an adjacent water and no case-specific significant nexus analysis is required.

(2) The following are not ''waters of the United States'' even where they otherwise meet the terms of paragraphs (o)(1)(iv) through (viii) of this section.

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act are not waters of the United States.

(ii) 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.

(iii) The following ditches:

(A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.

(B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.

(C) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (o)(1)(i) through (iii) of this section.

(iv) The following features:

(A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;

(B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for

rice growing, log cleaning ponds, or cooling ponds;

(C) Artificial reflecting pools or swimming pools created in dry land;

(D) Small ornamental waters created in dry land;

(E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;

(F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; and

(G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

(3) In this paragraph (o), the following definitions apply:

(i) *Adjacent.* The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (o)(1)(i) through (v) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like. For purposes of adjacency, an open water such as a pond or lake includes any wetlands within or abutting its ordinary high water mark. Adjacency is not limited to waters located laterally to a water identified in paragraphs (o)(1)(i) through (v) of this section. Adjacent waters also include all waters that connect segments of a water identified in paragraphs (o)(1)(i) through (v) or are located at the head of a water identified in paragraphs (o)(1)(i) through (v) of this section and are bordering, contiguous, or neighboring such water. Waters being used for established normal farming, ranching, and silviculture activities (33 U.S.C. 1344(f)) are not adjacent.

(ii) *Neighboring.* The term *neighboring* means:

(A) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (o)(1)(i) through (v) of this section. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;

(B) All waters located within the 100-year floodplain of a water identified in paragraphs (o)(1)(i) through (v) of this section and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain;

(C) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (o)(1)(i) or (iii) of this section, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes.

(iii) *Tributary* and *tributaries.* The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (o)(1)(iv) of this section), to a water identified in paragraphs (o)(1)(i) through (iii) of this section that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency, and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (o)(2) of this section. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, boulder fields, or a stream

that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a non-jurisdictional water to a water identified in paragraphs (o)(1)(i) through (iii) of this section.

(iv) *Wetlands.* The term *wetlands* means those areas that are inundated or saturated by surface or groundwater 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.

(v) *Significant nexus.* The term *significant nexus* means that a water, including wetlands, either alone or in combination with other similarly situated waters in the region, significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (o)(1)(i) through (iii) of this section. The term ''in the region'' means the watershed that drains to the nearest water identified in paragraphs (o)(1)(i) through (iii) of this section. For an effect to be significant, it must be more than speculative or insubstantial. Waters are similarly situated when they function alike and are sufficiently close to function together in affecting downstream waters. For purposes of determining whether or not a water has a significant nexus, the water's effect on downstream (o)(1)(i) through (iii) waters shall be assessed by evaluating the aquatic functions identified in paragraphs (o)(3)(v)(A) through (I) of this section. A water has a significant nexus when any single function or combination of functions performed by the water, alone or together with similarly situated waters in the region, contributes significantly to the chemical, physical, or biological integrity of the nearest water identified in paragraphs (o)(1)(i) through (iii) of this section. Functions relevant to the significant nexus evaluation are the following:

(A) Sediment trapping,

(B) Nutrient recycling,

(C) Pollutant trapping, transformation, filtering, and transport,

(D) Retention and attenuation of flood waters,

(E) Runoff storage,

(F) Contribution of flow,

(G) Export of organic matter,

(H) Export of food resources, and

(I) Provision of life cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, or use as a nursery area) for species located in a water identified in paragraphs (o)(1) through (3) of this section.

(vi) *Ordinary high water mark.* The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(vii) *High tide line.* The term *high tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

[45 FR 85344, Dec. 24, 1980, as amended at 58 FR 45037, Aug. 25, 1993; 80 FR 37115, June 29, 2015]

§ 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 subparts H and J) 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.

[45 FR 85344, Dec. 24, 1980, as amended at 73 FR 19687, Apr. 10, 2008]

§ 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 depositIon 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 noncomsumptive, 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. Additional criteria for compensation measures are provided in subpart J of this part.

§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. Additional criteria for compensation measures are provided in subpart J of this part. 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.

[45 FR 85344, Dec. 24, 1980, as amended at 73 FR 19687, Apr. 10, 2008]

§ 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.

Subpart J—Compensatory Mitigation for Losses of Aquatic Resources

SOURCE: 73 FR 19687, Apr. 10, 2008, unless otherwise noted.

§ 230.91 Purpose and general considerations.

(a) *Purpose.* (1) The purpose of this subpart is to establish standards and criteria for the use of all types of compensatory mitigation, including on-site and off-site permittee-responsible mitigation, mitigation banks, and in-lieu fee mitigation to offset unavoidable impacts to waters of the United States authorized through the issuance of permits by the U.S. Army Corps of Engineers (Corps) pursuant to section 404 of the Clean Water Act (33 U.S.C. 1344). This subpart implements section 314(b) of the 2004 National Defense Authorization Act (Pub. L. 108–136), which directs that the standards and criteria shall, to the maximum extent practicable, maximize available credits and opportunities for mitigation, provide for regional variations in wetland conditions, functions, and values, and apply equivalent standards and criteria to each type of compensatory mitigation. This subpart is intended to further clarify mitigation requirements established under the Corps and EPA regulations at 33 CFR part 320 and this part, respectively.

(2) This subpart has been jointly developed by the Secretary of the Army, acting through the Chief of Engineers, and the Administrator of the Environmental Protection Agency. From time to time guidance on interpreting and implementing this subpart may be prepared jointly by EPA and the Corps at the national or regional level. No modifications to the basic application, meaning, or intent of this subpart will be made without further joint rulemaking by the Secretary of the Army, acting through the Chief of Engineers and the Administrator of the Environmental Protection Agency, pursuant to the Administrative Procedure Act (5 U.S.C. 551 *et seq.*).

(b) *Applicability.* This subpart does not alter the circumstances under which compensatory mitigation is required or the definition of ''waters of the United States,'' which is provided at § 230.3(s). Use of resources as compensatory mitigation that are not otherwise subject to regulation under section 404 of the Clean Water Act does not in and of itself make them subject to such regulation.

(c) *Sequencing.* (1) Nothing in this section affects the requirement that all DA permits subject to section 404 of the Clean Water Act comply with applicable provisions of this part.

(2) Pursuant to these requirements, the district engineer will issue an individual section 404 permit only upon a determination that the proposed discharge complies with applicable provisions of 40 CFR part 230, including those which require the permit applicant to take all appropriate and practicable steps to avoid and minimize adverse impacts to waters of the United States. Practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. Compensatory mitigation for unavoidable impacts may be

required to ensure that an activity requiring a section 404 permit complies with the Section 404(b)(1) Guidelines.

(3) Compensatory mitigation for unavoidable impacts may be required to ensure that an activity requiring a section 404 permit complies with the Section 404(b)(1) Guidelines. During the 404(b)(1) Guidelines compliance analysis, the district engineer may determine that a DA permit for the proposed activity cannot be issued because of the lack of appropriate and practicable compensatory mitigation options.

(d) *Accounting for regional variations.* Where appropriate, district engineers shall account for regional characteristics of aquatic resource types, functions and services when determining performance standards and monitoring requirements for compensatory mitigation projects.

(e) *Relationship to other guidance documents.* (1) This subpart applies instead of the ''Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks,'' which was issued on November 28, 1995, the ''Federal Guidance on the Use of In-Lieu Fee Arrangements for Compensatory Mitigation Under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act,'' which was issued on November 7, 2000, and Regulatory Guidance Letter 02–02, ''Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899'' which was issued on December 24, 2002. These guidance documents are no longer to be used as compensatory mitigation policy in the Corps Regulatory Program.

(2) In addition, this subpart also applies instead of the provisions relating to the amount, type, and location of compensatory mitigation projects, including the use of preservation, in the February 6, 1990, Memorandum of Agreement (MOA) between the Department of the Army and the Environmental Protection Agency on the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines. All other provisions of this MOA remain in effect.

§ 230.92 Definitions.

For the purposes of this subpart, the following terms are defined:

Adaptive management means the development of a management strategy that anticipates likely challenges associated with compensatory mitigation projects and provides for the implementation of actions to address those challenges, as well as unforeseen changes to those projects. It requires consideration of the risk, uncertainty, and dynamic nature of compensatory mitigation projects and guides modification of those projects to optimize performance. It includes the selection of appropriate measures that will ensure that the aquatic resource functions are provided and involves analysis of monitoring results to identify potential problems of a compensatory mitigation project and the identification and implementation of measures to rectify those problems.

Advance credits means any credits of an approved in-lieu fee program that are available for sale prior to being fulfilled in accordance with an approved mitigation project plan. Advance credit sales require an approved in-lieu fee program instrument that meets all applicable requirements including a specific allocation of advance credits, by service area where applicable. The instrument must also contain a schedule for fulfillment of advance credit sales.

Buffer means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

Compensatory mitigation means the restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Compensatory mitigation project means compensatory mitigation implemented by the permittee as a requirement of a DA permit (i.e., permittee-responsible mitigation), or by a mitigation bank or an in-lieu fee program.

Condition means the relative ability of an aquatic resource to support and maintain a community of organisms having a species composition, diversity, and functional organization comparable to reference aquatic resources in the region.

Credit means a unit of measure (e.g., a functional or areal measure or other suitable metric) representing the accrual or attainment of aquatic functions at a compensatory mitigation site. The measure of aquatic functions is based on the resources restored, established, enhanced, or preserved.

DA means Department of the Army.

Days means calendar days.

Debit means a unit of measure (e.g., a functional or areal measure or other suitable metric) representing the loss of aquatic functions at an impact or project site. The measure of aquatic functions is based on the resources impacted by the authorized activity.

Enhancement means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation) means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions.

Fulfillment of advance credit sales of an in-lieu fee program means application of credits released in accordance with a credit release schedule in an approved mitigation project plan to satisfy the mitigation requirements represented by the advance credits. Only after any advance credit sales within a service area have been fulfilled through the application of released credits from an in-lieu fee project (in accordance with the credit release schedule for an approved mitigation project plan), may additional released credits from that project be sold or transferred to permittees. When advance credits are fulfilled, an equal number of new advance credits is restored to the program sponsor for sale or transfer to permit applicants.

Functional capacity means the degree to which an area of aquatic resource performs a specific function.

Functions means the physical, chemical, and biological processes that occur in ecosystems.

Impact means adverse effect.

In-kind means a resource of a similar structural and functional type to the impacted resource.

In-lieu fee program means a program involving the restoration, establishment, enhancement, and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources management entity to satisfy compensatory mitigation requirements for DA permits. Similar to a mitigation bank, an in-lieu fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu program sponsor. However, the rules governing the operation and use of in-lieu fee programs are somewhat different from the rules governing operation and use of mitigation banks. The operation and use of an in-lieu fee program are governed by an in-lieu fee program instrument.

In-lieu fee program instrument means the legal document for the establishment, operation, and use of an in-lieu fee program.

Instrument means mitigation banking instrument or in-lieu fee program instrument.

Interagency Review Team (IRT) means an interagency group of federal, tribal, state, and/or local regulatory and resource agency representatives that reviews documentation for, and advises the district engineer on, the establishment and management of a mitigation bank or an in-lieu fee program.

Mitigation bank means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for impacts authorized by DA permits. In general, a mitigation bank sells compensatory mitigation credits to permittees whose

obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. The operation and use of a mitigation bank are governed by a mitigation banking instrument.

Mitigation banking instrument means the legal document for the establishment, operation, and use of a mitigation bank.

Off-site means an area that is neither located on the same parcel of land as the impact site, nor on a parcel of land contiguous to the parcel containing the impact site.

On-site means an area located on the same parcel of land as the impact site, or on a parcel of land contiguous to the impact site.

Out-of-kind means a resource of a different structural and functional type from the impacted resource.

Performance standards are observable or measurable physical (including hydrological), chemical and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

Permittee-responsible mitigation means an aquatic resource restoration, establishment, enhancement, and/or preservation activity undertaken by the permittee (or an authorized agent or contractor) to provide compensatory mitigation for which the permittee retains full responsibility.

Preservation means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Reference aquatic resources are a set of aquatic resources that represent the full range of variability exhibited by a regional class of aquatic resources as a result of natural processes and anthropogenic disturbances.

Rehabilitation means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Release of credits means a determination by the district engineer, in consultation with the IRT, that credits associated with an approved mitigation plan are available for sale or transfer, or in the case of an in-lieu fee program, for fulfillment of advance credit sales. A proportion of projected credits for a specific mitigation bank or in-lieu fee project may be released upon approval of the mitigation plan, with additional credits released as milestones specified in the credit release schedule are achieved.

Restoration means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riparian areas are lands adjacent to streams, rivers, lakes, and estuarine-marine shorelines. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality.

Service area means the geographic area within which impacts can be mitigated at a specific mitigation bank or an in-lieu fee program, as designated in its instrument.

Services mean the benefits that human populations receive from functions that occur in ecosystems.

Sponsor means any public or private entity responsible for establishing, and in most circumstances, operating a mitigation bank or in-lieu fee program.

Standard permit means a standard, individual permit issued under the authority of section 404 of the Clean Water Act.

Temporal loss is the time lag between the loss of aquatic resource functions

caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site. Higher compensation ratios may be required to compensate for temporal loss. When the compensatory mitigation project is initiated prior to, or concurrent with, the permitted impacts, the district engineer may determine that compensation for temporal loss is not necessary, unless the resource has a long development time.

Watershed means a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.

Watershed approach means an analytical process for making compensatory mitigation decisions that support the sustainability or improvement of aquatic resources in a watershed. It involves consideration of watershed needs, and how locations and types of compensatory mitigation projects address those needs. A landscape perspective is used to identify the types and locations of compensatory mitigation projects that will benefit the watershed and offset losses of aquatic resource functions and services caused by activities authorized by DA permits. The watershed approach may involve consideration of landscape scale, historic and potential aquatic resource conditions, past and projected aquatic resource impacts in the watershed, and terrestrial connections between aquatic resources when determining compensatory mitigation requirements for DA permits.

Watershed plan means a plan developed by federal, tribal, state, and/or local government agencies or appropriate non-governmental organizations, in consultation with relevant stakeholders, for the specific goal of aquatic resource restoration, establishment, enhancement, and preservation. A watershed plan addresses aquatic resource conditions in the watershed, multiple stakeholder interests, and land uses. Watershed plans may also identify priority sites for aquatic resource restoration and protection. Examples of watershed plans include special area management plans, advance identification programs, and wetland management plans.

§ 230.93 General compensatory mitigation requirements.

(a) *General considerations.* (1) The fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States authorized by DA permits. The district engineer must determine the compensatory mitigation to be required in a DA permit, based on what is practicable and capable of compensating for the aquatic resource functions that will be lost as a result of the permitted activity. When evaluating compensatory mitigation options, the district engineer will consider what would be environmentally preferable. In making this determination, the district engineer must assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project. In many cases, the environmentally preferable compensatory mitigation may be provided through mitigation banks or in-lieu fee programs because they usually involve consolidating compensatory mitigation projects where ecologically appropriate, consolidating resources, providing financial planning and scientific expertise (which often is not practical for permittee-responsible compensatory mitigation projects), reducing temporal losses of functions, and reducing uncertainty over project success. Compensatory mitigation requirements must be commensurate with the amount and type of impact that is associated with a particular DA permit. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts.

(2) Compensatory mitigation may be performed using the methods of restoration, enhancement, establishment, and in certain circumstances preservation. Restoration should generally be the first option considered because the likelihood of success is greater and the impacts to potentially ecologically important uplands are reduced compared to establishment, and the potential gains in terms of aquatic resource

functions are greater, compared to enhancement and preservation.

(3) Compensatory mitigation projects may be sited on public or private lands. Credits for compensatory mitigation projects on public land must be based solely on aquatic resource functions provided by the compensatory mitigation project, over and above those provided by public programs already planned or in place. All compensatory mitigation projects must comply with the standards in this part, if they are to be used to provide compensatory mitigation for activities authorized by DA permits, regardless of whether they are sited on public or private lands and whether the sponsor is a governmental or private entity.

(b) *Type and location of compensatory mitigation.* (1) When considering options for successfully providing the required compensatory mitigation, the district engineer shall consider the type and location options in the order presented in paragraphs (b)(2) through (b)(6) of this section. In general, the required compensatory mitigation should be located within the same watershed as the impact site, and should be located where it is most likely to successfully replace lost functions and services, taking into account such watershed scale features as aquatic habitat diversity, habitat connectivity, relationships to hydrologic sources (including the availability of water rights), trends in land use, ecological benefits, and compatibility with adjacent land uses. When compensating for impacts to marine resources, the location of the compensatory mitigation site should be chosen to replace lost functions and services within the same marine ecological system (e.g., reef complex, littoral drift cell). Compensation for impacts to aquatic resources in coastal watersheds (watersheds that include a tidal water body) should also be located in a coastal watershed where practicable. Compensatory mitigation projects should not be located where they will increase risks to aviation by attracting wildlife to areas where aircraft-wildlife strikes may occur (e.g., near airports).

(2) *Mitigation bank credits.* When permitted impacts are located within the service area of an approved mitigation bank, and the bank has the appropriate number and resource type of credits available, the permittee's compensatory mitigation requirements may be met by securing those credits from the sponsor. Since an approved instrument (including an approved mitigation plan and appropriate real estate and financial assurances) for a mitigation bank is required to be in place before its credits can begin to be used to compensate for authorized impacts, use of a mitigation bank can help reduce risk and uncertainty, as well as temporal loss of resource functions and services. Mitigation bank credits are not released for debiting until specific milestones associated with the mitigation bank site's protection and development are achieved, thus use of mitigation bank credits can also help reduce risk that mitigation will not be fully successful. Mitigation banks typically involve larger, more ecologically valuable parcels, and more rigorous scientific and technical analysis, planning and implementation than permittee-responsible mitigation. Also, development of a mitigation bank requires site identification in advance, project-specific planning, and significant investment of financial resources that is often not practicable for many in-lieu fee programs. For these reasons, the district engineer should give preference to the use of mitigation bank credits when these considerations are applicable. However, these same considerations may also be used to override this preference, where appropriate, as, for example, where an in-lieu fee program has released credits available from a specific approved in-lieu fee project, or a permittee-responsible project will restore an outstanding resource based on rigorous scientific and technical analysis.

(3) *In-lieu fee program credits.* Where permitted impacts are located within the service area of an approved in-lieu fee program, and the sponsor has the appropriate number and resource type of credits available, the permittee's compensatory mitigation requirements may be met by securing those credits from the sponsor. Where permitted impacts are not located in the service area of an approved mitigation bank, or the approved mitigation bank does not have the appropriate number and

resource type of credits available to offset those impacts, in-lieu fee mitigation, if available, is generally preferable to permittee-responsible mitigation. In-lieu fee projects typically involve larger, more ecologically valuable parcels, and more rigorous scientific and technical analysis, planning and implementation than permittee-responsible mitigation. They also devote significant resources to identifying and addressing high-priority resource needs on a watershed scale, as reflected in their compensation planning framework. For these reasons, the district engineer should give preference to in-lieu fee program credits over permittee-responsible mitigation, where these considerations are applicable. However, as with the preference for mitigation bank credits, these same considerations may be used to override this preference where appropriate. Additionally, in cases where permittee-responsible mitigation is likely to successfully meet performance standards before advance credits secured from an in-lieu fee program are fulfilled, the district engineer should also give consideration to this factor in deciding between in-lieu fee mitigation and permittee-responsible mitigation.

(4) *Permittee-responsible mitigation under a watershed approach.* Where permitted impacts are not in the service area of an approved mitigation bank or in-lieu fee program that has the appropriate number and resource type of credits available, permittee-responsible mitigation is the only option. Where practicable and likely to be successful and sustainable, the resource type and location for the required permittee-responsible compensatory mitigation should be determined using the principles of a watershed approach as outlined in paragraph (c) of this section.

(5) *Permittee-responsible mitigation through on-site and in-kind mitigation.* In cases where a watershed approach is not practicable, the district engineer should consider opportunities to offset anticipated aquatic resource impacts by requiring on-site and in-kind compensatory mitigation. The district engineer must also consider the practicability of on-site compensatory mitigation and its compatibility with the proposed project.

(6) *Permittee-responsible mitigation through off-site and/or out-of-kind mitigation.* If, after considering opportunities for on-site, in-kind compensatory mitigation as provided in paragraph (b)(5) of this section, the district engineer determines that these compensatory mitigation opportunities are not practicable, are unlikely to compensate for the permitted impacts, or will be incompatible with the proposed project, and an alternative, practicable off-site and/or out-of-kind mitigation opportunity is identified that has a greater likelihood of offsetting the permitted impacts or is environmentally preferable to on-site or in-kind mitigation, the district engineer should require that this alternative compensatory mitigation be provided.

(c) *Watershed approach to compensatory mitigation.* (1) The district engineer must use a watershed approach to establish compensatory mitigation requirements in DA permits to the extent appropriate and practicable. Where a watershed plan is available, the district engineer will determine whether the plan is appropriate for use in the watershed approach for compensatory mitigation. In cases where the district engineer determines that an appropriate watershed plan is available, the watershed approach should be based on that plan. Where no such plan is available, the watershed approach should be based on information provided by the project sponsor or available from other sources. The ultimate goal of a watershed approach is to maintain and improve the quality and quantity of aquatic resources within watersheds through strategic selection of compensatory mitigation sites.

(2) *Considerations.* (i) A watershed approach to compensatory mitigation considers the importance of landscape position and resource type of compensatory mitigation projects for the sustainability of aquatic resource functions within the watershed. Such an approach considers how the types and locations of compensatory mitigation projects will provide the desired aquatic resource functions, and will continue to function over time in a changing landscape. It also considers the habitat requirements of important species, habitat loss or conversion trends,

sources of watershed impairment, and current development trends, as well as the requirements of other regulatory and non-regulatory programs that affect the watershed, such as storm water management or habitat conservation programs. It includes the protection and maintenance of terrestrial resources, such as non-wetland riparian areas and uplands, when those resources contribute to or improve the overall ecological functioning of aquatic resources in the watershed. Compensatory mitigation requirements determined through the watershed approach should not focus exclusively on specific functions (e.g., water quality or habitat for certain species), but should provide, where practicable, the suite of functions typically provided by the affected aquatic resource.

(ii) Locational factors (e.g., hydrology, surrounding land use) are important to the success of compensatory mitigation for impacted habitat functions and may lead to siting of such mitigation away from the project area. However, consideration should also be given to functions and services (e.g., water quality, flood control, shoreline protection) that will likely need to be addressed at or near the areas impacted by the permitted impacts.

(iii) A watershed approach may include on-site compensatory mitigation, off-site compensatory mitigation (including mitigation banks or in-lieu fee programs), or a combination of on-site and off-site compensatory mitigation.

(iv) A watershed approach to compensatory mitigation should include, to the extent practicable, inventories of historic and existing aquatic resources, including identification of degraded aquatic resources, and identification of immediate and long-term aquatic resource needs within watersheds that can be met through permittee-responsible mitigation projects, mitigation banks, or in-lieu fee programs. Planning efforts should identify and prioritize aquatic resource restoration, establishment, and enhancement activities, and preservation of existing aquatic resources that are important for maintaining or improving ecological functions of the watershed. The identification and prioritization of resource needs should be as specific as possible, to enhance the usefulness of the approach in determining compensatory mitigation requirements.

(v) A watershed approach is not appropriate in areas where watershed boundaries do not exist, such as marine areas. In such cases, an appropriate spatial scale should be used to replace lost functions and services within the same ecological system (e.g., reef complex, littoral drift cell).

(3) *Information Needs.* (i) In the absence of a watershed plan determined by the district engineer under paragraph (c)(1) of this section to be appropriate for use in the watershed approach, the district engineer will use a watershed approach based on analysis of information regarding watershed conditions and needs, including potential sites for aquatic resource restoration activities and priorities for aquatic resource restoration and preservation. Such information includes: Current trends in habitat loss or conversion; cumulative impacts of past development activities, current development trends, the presence and needs of sensitive species; site conditions that favor or hinder the success of compensatory mitigation projects; and chronic environmental problems such as flooding or poor water quality.

(ii) This information may be available from sources such as wetland maps; soil surveys; U.S. Geological Survey topographic and hydrologic maps; aerial photographs; information on rare, endangered and threatened species and critical habitat; local ecological reports or studies; and other information sources that could be used to identify locations for suitable compensatory mitigation projects in the watershed.

(iii) The level of information and analysis needed to support a watershed approach must be commensurate with the scope and scale of the proposed impacts requiring a DA permit, as well as the functions lost as a result of those impacts.

(4) *Watershed Scale.* The size of watershed addressed using a watershed approach should not be larger than is appropriate to ensure that the aquatic resources provided through compensation activities will effectively compensate

for adverse environmental impacts resulting from activities authorized by DA permits. The district engineer should consider relevant environmental factors and appropriate locally-developed standards and criteria when determining the appropriate watershed scale in guiding compensation activities.

(d) *Site selection.* (1) The compensatory mitigation project site must be ecologically suitable for providing the desired aquatic resource functions. In determining the ecological suitability of the compensatory mitigation project site, the district engineer must consider, to the extent practicable, the following factors:

(i) Hydrological conditions, soil characteristics, and other physical and chemical characteristics;

(ii) Watershed-scale features, such as aquatic habitat diversity, habitat connectivity, and other landscape scale functions;

(iii) The size and location of the compensatory mitigation site relative to hydrologic sources (including the availability of water rights) and other ecological features;

(iv) Compatibility with adjacent land uses and watershed management plans;

(v) Reasonably foreseeable effects the compensatory mitigation project will have on ecologically important aquatic or terrestrial resources (e.g., shallow sub-tidal habitat, mature forests), cultural sites, or habitat for federally- or state-listed threatened and endangered species; and

(vi) Other relevant factors including, but not limited to, development trends, anticipated land use changes, habitat status and trends, the relative locations of the impact and mitigation sites in the stream network, local or regional goals for the restoration or protection of particular habitat types or functions (e.g., re-establishment of habitat corridors or habitat for species of concern), water quality goals, floodplain management goals, and the relative potential for chemical contamination of the aquatic resources.

(2) District engineers may require on-site, off-site, or a combination of on-site and off-site compensatory mitigation to replace permitted losses of aquatic resource functions and services.

(3) Applicants should propose compensation sites adjacent to existing aquatic resources or where aquatic resources previously existed.

(e) *Mitigation type.* (1) In general, in-kind mitigation is preferable to out-of-kind mitigation because it is most likely to compensate for the functions and services lost at the impact site. For example, tidal wetland compensatory mitigation projects are most likely to compensate for unavoidable impacts to tidal wetlands, while perennial stream compensatory mitigation projects are most likely to compensate for unavoidable impacts to perennial streams. Thus, except as provided in paragraph (e)(2) of this section, the required compensatory mitigation shall be of a similar type to the affected aquatic resource.

(2) If the district engineer determines, using the watershed approach in accordance with paragraph (c) of this section that out-of-kind compensatory mitigation will serve the aquatic resource needs of the watershed, the district engineer may authorize the use of such out-of-kind compensatory mitigation. The basis for authorization of out-of-kind compensatory mitigation must be documented in the administrative record for the permit action.

(3) For difficult-to-replace resources (e.g., bogs, fens, springs, streams, Atlantic white cedar swamps) if further avoidance and minimization is not practicable, the required compensation should be provided, if practicable, through in-kind rehabilitation, enhancement, or preservation since there is greater certainty that these methods of compensation will successfully offset permitted impacts.

(f) *Amount of compensatory mitigation.* (1) If the district engineer determines that compensatory mitigation is necessary to offset unavoidable impacts to aquatic resources, the amount of required compensatory mitigation must be, to the extent practicable, sufficient to replace lost aquatic resource functions. In cases where appropriate functional or condition assessment methods or other suitable metrics are available, these methods should be used where practicable to determine how

much compensatory mitigation is required. If a functional or condition assessment or other suitable metric is not used, a minimum one-to-one acreage or linear foot compensation ratio must be used.

(2) The district engineer must require a mitigation ratio greater than one-to-one where necessary to account for the method of compensatory mitigation (e.g., preservation), the likelihood of success, differences between the functions lost at the impact site and the functions expected to be produced by the compensatory mitigation project, temporal losses of aquatic resource functions, the difficulty of restoring or establishing the desired aquatic resource type and functions, and/or the distance between the affected aquatic resource and the compensation site. The rationale for the required replacement ratio must be documented in the administrative record for the permit action.

(3) If an in-lieu fee program will be used to provide the required compensatory mitigation, and the appropriate number and resource type of released credits are not available, the district engineer must require sufficient compensation to account for the risk and uncertainty associated with in-lieu fee projects that have not been implemented before the permitted impacts have occurred.

(g) *Use of mitigation banks and in-lieu fee programs.* Mitigation banks and in-lieu fee programs may be used to compensate for impacts to aquatic resources authorized by general permits and individual permits, including after-the-fact permits, in accordance with the preference hierarchy in paragraph (b) of this section. Mitigation banks and in-lieu fee programs may also be used to satisfy requirements arising out of an enforcement action, such as supplemental environmental projects.

(h) *Preservation.* (1) Preservation may be used to provide compensatory mitigation for activities authorized by DA permits when all the following criteria are met:

(i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed;

(ii) The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available;

(iii) Preservation is determined by the district engineer to be appropriate and practicable;

(iv) The resources are under threat of destruction or adverse modifications; and

(v) The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust).

(2) Where preservation is used to provide compensatory mitigation, to the extent appropriate and practicable the preservation shall be done in conjunction with aquatic resource restoration, establishment, and/or enhancement activities. This requirement may be waived by the district engineer where preservation has been identified as a high priority using a watershed approach described in paragraph (c) of this section, but compensation ratios shall be higher.

(i) *Buffers.* District engineers may require the restoration, establishment, enhancement, and preservation, as well as the maintenance, of riparian areas and/or buffers around aquatic resources where necessary to ensure the long-term viability of those resources. Buffers may also provide habitat or corridors necessary for the ecological functioning of aquatic resources. If buffers are required by the district engineer as part of the compensatory mitigation project, compensatory mitigation credit will be provided for those buffers.

(j) *Relationship to other federal, tribal, state, and local programs.* (1) Compensatory mitigation projects for DA permits may also be used to satisfy the environmental requirements of other programs, such as tribal, state, or local wetlands regulatory programs, other federal programs such as the Surface Mining Control and Reclamation Act, Corps civil works projects, and Department of Defense military construction projects, consistent with the terms and

requirements of these programs and subject to the following considerations:

(i) The compensatory mitigation project must include appropriate compensation required by the DA permit for unavoidable impacts to aquatic resources authorized by that permit.

(ii) Under no circumstances may the same credits be used to provide mitigation for more than one permitted activity. However, where appropriate, compensatory mitigation projects, including mitigation banks and in-lieu fee projects, may be designed to holistically address requirements under multiple programs and authorities for the same activity.

(2) Except for projects undertaken by federal agencies, or where federal funding is specifically authorized to provide compensatory mitigation, federally-funded aquatic resource restoration or conservation projects undertaken for purposes other than compensatory mitigation, such as the Wetlands Reserve Program, Conservation Reserve Program, and Partners for Wildlife Program activities, cannot be used for the purpose of generating compensatory mitigation credits for activities authorized by DA permits. However, compensatory mitigation credits may be generated by activities undertaken in conjunction with, but supplemental to, such programs in order to maximize the overall ecological benefits of the restoration or conservation project.

(3) Compensatory mitigation projects may also be used to provide compensatory mitigation under the Endangered Species Act or for Habitat Conservation Plans, as long as they comply with the requirements of paragraph (j)(1) of this section.

(k) *Permit conditions.* (1) The compensatory mitigation requirements for a DA permit, including the amount and type of compensatory mitigation, must be clearly stated in the special conditions of the individual permit or general permit verification (see 33 CFR 325.4 and 330.6(a)). The special conditions must be enforceable.

(2) For an individual permit that requires permittee-responsible mitigation, the special conditions must:

(i) Identify the party responsible for providing the compensatory mitigation;

(ii) Incorporate, by reference, the final mitigation plan approved by the district engineer;

(iii) State the objectives, performance standards, and monitoring required for the compensatory mitigation project, unless they are provided in the approved final mitigation plan; and

(iv) Describe any required financial assurances or long-term management provisions for the compensatory mitigation project, unless they are specified in the approved final mitigation plan.

(3) For a general permit activity that requires permittee-responsible compensatory mitigation, the special conditions must describe the compensatory mitigation proposal, which may be either conceptual or detailed. The general permit verification must also include a special condition that states that the permittee cannot commence work in waters of the United States until the district engineer approves the final mitigation plan, unless the district engineer determines that such a special condition is not practicable and not necessary to ensure timely completion of the required compensatory mitigation. To the extent appropriate and practicable, special conditions of the general permit verification should also address the requirements of paragraph (k)(2) of this section.

(4) If a mitigation bank or in-lieu fee program is used to provide the required compensatory mitigation, the special conditions must indicate whether a mitigation bank or in-lieu fee program will be used, and specify the number and resource type of credits the permittee is required to secure. In the case of an individual permit, the special condition must also identify the specific mitigation bank or in-lieu fee program that will be used. For general permit verifications, the special conditions may either identify the specific mitigation bank or in-lieu fee program, or state that the specific mitigation bank or in-lieu fee program used to provide the required compensatory mitigation must be approved by the district engineer before the credits are secured.

(l) *Party responsible for compensatory mitigation.* (1) For permittee-responsible mitigation, the special conditions of the DA permit must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project.

(2) For mitigation banks and in-lieu fee programs, the instrument must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project(s). The instrument must also contain a provision expressing the sponsor's agreement to assume responsibility for a permittee's compensatory mitigation requirements, once that permittee has secured the appropriate number and resource type of credits from the sponsor and the district engineer has received the documentation described in paragraph (l)(3) of this section.

(3) If use of a mitigation bank or in-lieu fee program is approved by the district engineer to provide part or all of the required compensatory mitigation for a DA permit, the permittee retains responsibility for providing the compensatory mitigation until the appropriate number and resource type of credits have been secured from a sponsor and the district engineer has received documentation that confirms that the sponsor has accepted the responsibility for providing the required compensatory mitigation. This documentation may consist of a letter or form signed by the sponsor, with the permit number and a statement indicating the number and resource type of credits that have been secured from the sponsor. Copies of this documentation will be retained in the administrative records for both the permit and the instrument. If the sponsor fails to provide the required compensatory mitigation, the district engineer may pursue measures against the sponsor to ensure compliance.

(m) *Timing.* Implementation of the compensatory mitigation project shall be, to the maximum extent practicable, in advance of or concurrent with the activity causing the authorized impacts. The district engineer shall require, to the extent appropriate and practicable, additional compensatory mitigation to offset temporal losses of aquatic functions that will result from the permitted activity.

(n) *Financial assurances.* (1) The district engineer shall require sufficient financial assurances to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with applicable performance standards. In cases where an alternate mechanism is available to ensure a high level of confidence that the compensatory mitigation will be provided and maintained (e.g., a formal, documented commitment from a government agency or public authority) the district engineer may determine that financial assurances are not necessary for that compensatory mitigation project.

(2) The amount of the required financial assurances must be determined by the district engineer, in consultation with the project sponsor, and must be based on the size and complexity of the compensatory mitigation project, the degree of completion of the project at the time of project approval, the likelihood of success, the past performance of the project sponsor, and any other factors the district engineer deems appropriate. Financial assurances may be in the form of performance bonds, escrow accounts, casualty insurance, letters of credit, legislative appropriations for government sponsored projects, or other appropriate instruments, subject to the approval of the district engineer. The rationale for determining the amount of the required financial assurances must be documented in the administrative record for either the DA permit or the instrument. In determining the assurance amount, the district engineer shall consider the cost of providing replacement mitigation, including costs for land acquisition, planning and engineering, legal fees, mobilization, construction, and monitoring.

(3) If financial assurances are required, the DA permit must include a special condition requiring the financial assurances to be in place prior to commencing the permitted activity.

(4) Financial assurances shall be phased out once the compensatory mitigation project has been determined

by the district engineer to be successful in accordance with its performance standards. The DA permit or instrument must clearly specify the conditions under which the financial assurances are to be released to the permittee, sponsor, and/or other financial assurance provider, including, as appropriate, linkage to achievement of performance standards, adaptive management, or compliance with special conditions.

(5) A financial assurance must be in a form that ensures that the district engineer will receive notification at least 120 days in advance of any termination or revocation. For third-party assurance providers, this may take the form of a contractual requirement for the assurance provider to notify the district engineer at least 120 days before the assurance is revoked or terminated.

(6) Financial assurances shall be payable at the direction of the district engineer to his designee or to a standby trust agreement. When a standby trust is used (e.g., with performance bonds or letters of credit) all amounts paid by the financial assurance provider shall be deposited directly into the standby trust fund for distribution by the trustee in accordance with the district engineer's instructions.

(o) *Compliance with applicable law.* The compensatory mitigation project must comply with all applicable federal, state, and local laws. The DA permit, mitigation banking instrument, or in-lieu fee program instrument must not require participation by the Corps or any other federal agency in project management, including receipt or management of financial assurances or long-term financing mechanisms, except as determined by the Corps or other agency to be consistent with its statutory authority, mission, and priorities.

§ 230.94 Planning and documentation.

(a) *Pre-application consultations.* Potential applicants for standard permits are encouraged to participate in pre-application meetings with the Corps and appropriate agencies to discuss potential mitigation requirements and information needs.

(b) *Public review and comment.* (1) For an activity that requires a standard DA permit pursuant to section 404 of the Clean Water Act, the public notice for the proposed activity must contain a statement explaining how impacts associated with the proposed activity are to be avoided, minimized, and compensated for. This explanation shall address, to the extent that such information is provided in the mitigation statement required by 33 CFR 325.1(d)(7), the proposed avoidance and minimization and the amount, type, and location of any proposed compensatory mitigation, including any out-of-kind compensation, or indicate an intention to use an approved mitigation bank or in-lieu fee program. The level of detail provided in the public notice must be commensurate with the scope and scale of the impacts. The notice shall not include information that the district engineer and the permittee believe should be kept confidential for business purposes, such as the exact location of a proposed mitigation site that has not yet been secured. The permittee must clearly identify any information being claimed as confidential in the mitigation statement when submitted. In such cases, the notice must still provide enough information to enable the public to provide meaningful comment on the proposed mitigation.

(2) For individual permits, district engineers must consider any timely comments and recommendations from other federal agencies; tribal, state, or local governments; and the public.

(3) For activities authorized by letters of permission or general permits, the review and approval process for compensatory mitigation proposals and plans must be conducted in accordance with the terms and conditions of those permits and applicable regulations including the applicable provisions of this part.

(c) *Mitigation plan.* (1) *Preparation and Approval.* (i) For individual permits, the permittee must prepare a draft mitigation plan and submit it to the district engineer for review. After addressing any comments provided by the district engineer, the permittee must prepare a final mitigation plan, which

must be approved by the district engineer prior to issuing the individual permit. The approved final mitigation plan must be incorporated into the individual permit by reference. The final mitigation plan must include the items described in paragraphs (c)(2) through (c)(14) of this section, but the level of detail of the mitigation plan should be commensurate with the scale and scope of the impacts. As an alternative, the district engineer may determine that it would be more appropriate to address any of the items described in paragraphs (c)(2) through (c)(14) of this section as permit conditions, instead of components of a compensatory mitigation plan. For permittees who intend to fulfill their compensatory mitigation obligations by securing credits from approved mitigation banks or in-lieu fee programs, their mitigation plans need include only the items described in paragraphs (c)(5) and (c)(6) of this section, and the name of the specific mitigation bank or in-lieu fee program to be used.

(ii) For general permits, if compensatory mitigation is required, the district engineer may approve a conceptual or detailed compensatory mitigation plan to meet required time frames for general permit verifications, but a final mitigation plan incorporating the elements in paragraphs (c)(2) through (c)(14) of this section, at a level of detail commensurate with the scale and scope of the impacts, must be approved by the district engineer before the permittee commences work in waters of the United States. As an alternative, the district engineer may determine that it would be more appropriate to address any of the items described in paragraphs (c)(2) through (c)(14) of this section as permit conditions, instead of components of a compensatory mitigation plan. For permittees who intend to fulfill their compensatory mitigation obligations by securing credits from approved mitigation banks or in-lieu fee programs, their mitigation plans need include only the items described in paragraphs (c)(5) and (c)(6) of this section, and either the name of the specific mitigation bank or in-lieu fee program to be used or a statement indicating that a mitigation bank or in-lieu fee program will be used (contingent upon approval by the district engineer).

(iii) Mitigation banks and in-lieu fee programs must prepare a mitigation plan including the items in paragraphs (c)(2) through (c)(14) of this section for each separate compensatory mitigation project site. For mitigation banks and in-lieu fee programs, the preparation and approval process for mitigation plans is described in § 230.98.

(2) *Objectives.* A description of the resource type(s) and amount(s) that will be provided, the method of compensation (i.e., restoration, establishment, enhancement, and/or preservation), and the manner in which the resource functions of the compensatory mitigation project will address the needs of the watershed, ecoregion, physiographic province, or other geographic area of interest.

(3) *Site selection.* A description of the factors considered during the site selection process. This should include consideration of watershed needs, on-site alternatives where applicable, and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation project site. (See § 230.93(d).)

(4) *Site protection instrument.* A description of the legal arrangements and instrument, including site ownership, that will be used to ensure the long-term protection of the compensatory mitigation project site (see § 230.97(a)).

(5) *Baseline information.* A description of the ecological characteristics of the proposed compensatory mitigation project site and, in the case of an application for a DA permit, the impact site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and mitigation site(s) or the geographic coordinates for those site(s), and other site characteristics appropriate to the type of resource proposed as compensation. The baseline information should also include a delineation of waters of the United States on the proposed compensatory mitigation project site. A prospective permittee planning to secure credits from an approved mitigation

bank or in-lieu fee program only needs to provide baseline information about the impact site, not the mitigation bank or in-lieu fee project site.

(6) *Determination of credits.* A description of the number of credits to be provided, including a brief explanation of the rationale for this determination. (See § 230.93(f).)

(i) For permittee-responsible mitigation, this should include an explanation of how the compensatory mitigation project will provide the required compensation for unavoidable impacts to aquatic resources resulting from the permitted activity.

(ii) For permittees intending to secure credits from an approved mitigation bank or in-lieu fee program, it should include the number and resource type of credits to be secured and how these were determined.

(7) *Mitigation work plan.* Detailed written specifications and work descriptions for the compensatory mitigation project, including, but not limited to, the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water, including connections to existing waters and uplands; methods for establishing the desired plant community; plans to control invasive plant species; the proposed grading plan, including elevations and slopes of the substrate; soil management; and erosion control measures. For stream compensatory mitigation projects, the mitigation work plan may also include other relevant information, such as planform geometry, channel form (e.g., typical channel cross-sections), watershed size, design discharge, and riparian area plantings.

(8) *Maintenance plan.* A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed.

(9) *Performance standards.* Ecologically-based standards that will be used to determine whether the compensatory mitigation project is achieving its objectives. (See § 230.95.)

(10) *Monitoring requirements.* A description of parameters to be monitored in order to determine if the compensatory mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting on monitoring results to the district engineer must be included. (See § 230.96.)

(11) *Long-term management plan.* A description of how the compensatory mitigation project will be managed after performance standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for long-term management. (See § 230.97(d).)

(12) *Adaptive management plan.* A management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation project, including the party or parties responsible for implementing adaptive management measures. The adaptive management plan will guide decisions for revising compensatory mitigation plans and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect compensatory mitigation success. (See § 230.97(c).)

(13) *Financial assurances.* A description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with its performance standards (see § 230.93(n)).

(14) *Other information.* The district engineer may require additional information as necessary to determine the appropriateness, feasibility, and practicability of the compensatory mitigation project.

§ 230.95 Ecological performance standards.

(a) The approved mitigation plan must contain performance standards that will be used to assess whether the project is achieving its objectives. Performance standards should relate to the objectives of the compensatory mitigation project, so that the project can be objectively evaluated to determine if it is developing into the desired resource type, providing the expected functions, and attaining any other applicable metrics (e.g., acres).

(b) Performance standards must be based on attributes that are objective

and verifiable. Ecological performance standards must be based on the best available science that can be measured or assessed in a practicable manner. Performance standards may be based on variables or measures of functional capacity described in functional assessment methodologies, measurements of hydrology or other aquatic resource characteristics, and/or comparisons to reference aquatic resources of similar type and landscape position. The use of reference aquatic resources to establish performance standards will help ensure that those performance standards are reasonably achievable, by reflecting the range of variability exhibited by the regional class of aquatic resources as a result of natural processes and anthropogenic disturbances. Performance standards based on measurements of hydrology should take into consideration the hydrologic variability exhibited by reference aquatic resources, especially wetlands. Where practicable, performance standards should take into account the expected stages of the aquatic resource development process, in order to allow early identification of potential problems and appropriate adaptive management.

§ 230.96 Monitoring.

(a) *General.* (1) Monitoring the compensatory mitigation project site is necessary to determine if the project is meeting its performance standards, and to determine if measures are necessary to ensure that the compensatory mitigation project is accomplishing its objectives. The submission of monitoring reports to assess the development and condition of the compensatory mitigation project is required, but the content and level of detail for those monitoring reports must be commensurate with the scale and scope of the compensatory mitigation project, as well as the compensatory mitigation project type. The mitigation plan must address the monitoring requirements for the compensatory mitigation project, including the parameters to be monitored, the length of the monitoring period, the party responsible for conducting the monitoring, the frequency for submitting monitoring reports to the district engineer, and the party responsible for submitting those monitoring reports to the district engineer.

(2) The district engineer may conduct site inspections on a regular basis (e.g., annually) during the monitoring period to evaluate mitigation site performance.

(b) *Monitoring period.* The mitigation plan must provide for a monitoring period that is sufficient to demonstrate that the compensatory mitigation project has met performance standards, but not less than five years. A longer monitoring period must be required for aquatic resources with slow development rates (e.g., forested wetlands, bogs). Following project implementation, the district engineer may reduce or waive the remaining monitoring requirements upon a determination that the compensatory mitigation project has achieved its performance standards. Conversely the district engineer may extend the original monitoring period upon a determination that performance standards have not been met or the compensatory mitigation project is not on track to meet them. The district engineer may also revise monitoring requirements when remediation and/or adaptive management is required.

(c) *Monitoring reports.* (1) The district engineer must determine the information to be included in monitoring reports. This information must be sufficient for the district engineer to determine how the compensatory mitigation project is progressing towards meeting its performance standards, and may include plans (such as as-built plans), maps, and photographs to illustrate site conditions. Monitoring reports may also include the results of functional, condition, or other assessments used to provide quantitative or qualitative measures of the functions provided by the compensatory mitigation project site.

(2) The permittee or sponsor is responsible for submitting monitoring reports in accordance with the special conditions of the DA permit or the terms of the instrument. Failure to submit monitoring reports in a timely manner may result in compliance action by the district engineer.

(3) Monitoring reports must be provided by the district engineer to interested federal, tribal, state, and local resource agencies, and the public, upon request.

§ 230.97 Management.

(a) *Site protection*. (1) The aquatic habitats, riparian areas, buffers, and uplands that comprise the overall compensatory mitigation project must be provided long-term protection through real estate instruments or other available mechanisms, as appropriate. Long-term protection may be provided through real estate instruments such as conservation easements held by entities such as federal, tribal, state, or local resource agencies, non-profit conservation organizations, or private land managers; the transfer of title to such entities; or by restrictive covenants. For government property, long-term protection may be provided through federal facility management plans or integrated natural resources management plans. When approving a method for long-term protection of non-government property other than transfer of title, the district engineer shall consider relevant legal constraints on the use of conservation easements and/or restrictive covenants in determining whether such mechanisms provide sufficient site protection. To provide sufficient site protection, a conservation easement or restrictive covenant should, where practicable, establish in an appropriate third party (e.g., governmental or non-profit resource management agency) the right to enforce site protections and provide the third party the resources necessary to monitor and enforce these site protections.

(2) The real estate instrument, management plan, or other mechanism providing long-term protection of the compensatory mitigation site must, to the extent appropriate and practicable, prohibit incompatible uses (e.g., clear cutting or mineral extraction) that might otherwise jeopardize the objectives of the compensatory mitigation project. Where appropriate, multiple instruments recognizing compatible uses (e.g., fishing or grazing rights) may be used.

(3) The real estate instrument, management plan, or other long-term protection mechanism must contain a provision requiring 60-day advance notification to the district engineer before any action is taken to void or modify the instrument, management plan, or long-term protection mechanism, including transfer of title to, or establishment of any other legal claims over, the compensatory mitigation site.

(4) For compensatory mitigation projects on public lands, where Federal facility management plans or integrated natural resources management plans are used to provide long-term protection, and changes in statute, regulation, or agency needs or mission results in an incompatible use on public lands originally set aside for compensatory mitigation, the public agency authorizing the incompatible use is responsible for providing alternative compensatory mitigation that is acceptable to the district engineer for any loss in functions resulting from the incompatible use.

(5) A real estate instrument, management plan, or other long-term protection mechanism used for site protection of permittee-responsible mitigation must be approved by the district engineer in advance of, or concurrent with, the activity causing the authorized impacts.

(b) *Sustainability*. Compensatory mitigation projects shall be designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved. This includes minimization of active engineering features (e.g., pumps) and appropriate siting to ensure that natural hydrology and landscape context will support long-term sustainability. Where active long-term management and maintenance are necessary to ensure long-term sustainability (e.g., prescribed burning, invasive species control, maintenance of water control structures, easement enforcement), the responsible party must provide for such management and maintenance. This includes the provision of long-term financing mechanisms where necessary. Where needed, the acquisition and protection of water rights must be secured

and documented in the permit conditions or instrument.

(c) *Adaptive management.* (1) If the compensatory mitigation project cannot be constructed in accordance with the approved mitigation plans, the permittee or sponsor must notify the district engineer. A significant modification of the compensatory mitigation project requires approval from the district engineer.

(2) If monitoring or other information indicates that the compensatory mitigation project is not progressing towards meeting its performance standards as anticipated, the responsible party must notify the district engineer as soon as possible. The district engineer will evaluate and pursue measures to address deficiencies in the compensatory mitigation project. The district engineer will consider whether the compensatory mitigation project is providing ecological benefits comparable to the original objectives of the compensatory mitigation project.

(3) The district engineer, in consultation with the responsible party (and other federal, tribal, state, and local agencies, as appropriate), will determine the appropriate measures. The measures may include site modifications, design changes, revisions to maintenance requirements, and revised monitoring requirements. The measures must be designed to ensure that the modified compensatory mitigation project provides aquatic resource functions comparable to those described in the mitigation plan objectives.

(4) Performance standards may be revised in accordance with adaptive management to account for measures taken to address deficiencies in the compensatory mitigation project. Performance standards may also be revised to reflect changes in management strategies and objectives if the new standards provide for ecological benefits that are comparable or superior to the approved compensatory mitigation project. No other revisions to performance standards will be allowed except in the case of natural disasters.

(d) *Long-term management.* (1) The permit conditions or instrument must identify the party responsible for ownership and all long-term management of the compensatory mitigation project. The permit conditions or instrument may contain provisions allowing the permittee or sponsor to transfer the long-term management responsibilities of the compensatory mitigation project site to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager, after review and approval by the district engineer. The land stewardship entity need not be identified in the original permit or instrument, as long as the future transfer of long-term management responsibility is approved by the district engineer.

(2) A long-term management plan should include a description of long-term management needs, annual cost estimates for these needs, and identify the funding mechanism that will be used to meet those needs.

(3) Any provisions necessary for long-term financing must be addressed in the original permit or instrument. The district engineer may require provisions to address inflationary adjustments and other contingencies, as appropriate. Appropriate long-term financing mechanisms include non-wasting endowments, trusts, contractual arrangements with future responsible parties, and other appropriate financial instruments. In cases where the long-term management entity is a public authority or government agency, that entity must provide a plan for the long-term financing of the site.

(4) For permittee-responsible mitigation, any long-term financing mechanisms must be approved in advance of the activity causing the authorized impacts.

§ 230.98 Mitigation banks and in-lieu fee programs.

(a) *General considerations.* (1) All mitigation banks and in-lieu fee programs must have an approved instrument signed by the sponsor and the district engineer prior to being used to provide compensatory mitigation for DA permits.

(2) To the maximum extent practicable, mitigation banks and in-lieu fee project sites must be planned and designed to be self-sustaining over time, but some active management and maintenance may be required to ensure

their long-term viability and sustainability. Examples of acceptable management activities include maintaining fire dependent habitat communities in the absence of natural fire and controlling invasive exotic plant species.

(3) All mitigation banks and in-lieu fee programs must comply with the standards in this part, if they are to be used to provide compensatory mitigation for activities authorized by DA permits, regardless of whether they are sited on public or private lands and whether the sponsor is a governmental or private entity.

(b) *Interagency Review Team.* (1) The district engineer will establish an Interagency Review Team (IRT) to review documentation for the establishment and management of mitigation banks and in-lieu fee programs. The district engineer or his designated representative serves as Chair of the IRT. In cases where a mitigation bank or in-lieu fee program is proposed to satisfy the requirements of another federal, tribal, state, or local program, in addition to compensatory mitigation requirements of DA permits, it may be appropriate for the administering agency to serve as co-Chair of the IRT.

(2) In addition to the Corps, representatives from the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, NOAA Fisheries, the Natural Resources Conservation Service, and other federal agencies, as appropriate, may participate in the IRT. The IRT may also include representatives from tribal, state, and local regulatory and resource agencies, where such agencies have authorities and/or mandates directly affecting, or affected by, the establishment, operation, or use of the mitigation bank or in-lieu fee program. The district engineer will seek to include all public agencies with a substantive interest in the establishment of the mitigation bank or in-lieu fee program on the IRT, but retains final authority over its composition.

(3) The primary role of the IRT is to facilitate the establishment of mitigation banks or in-lieu fee programs through the development of mitigation banking or in-lieu fee program instruments. The IRT will review the prospectus, instrument, and other appropriate documents and provide comments to the district engineer. The district engineer and the IRT should use a watershed approach to the extent practicable in reviewing proposed mitigation banks and in-lieu fee programs. Members of the IRT may also sign the instrument, if they so choose. By signing the instrument, the IRT members indicate their agreement with the terms of the instrument. As an alternative, a member of the IRT may submit a letter expressing concurrence with the instrument. The IRT will also advise the district engineer in assessing monitoring reports, recommending remedial or adaptive management measures, approving credit releases, and approving modifications to an instrument. In order to ensure timely processing of instruments and other documentation, comments from IRT members must be received by the district engineer within the time limits specified in this section. Comments received after these deadlines will only be considered at the discretion of the district engineer to the extent that doing so does not jeopardize the deadlines for district engineer action.

(4) The district engineer will give full consideration to any timely comments and advice of the IRT. The district engineer alone retains final authority for approval of the instrument in cases where the mitigation bank or in-lieu fee program is used to satisfy compensatory mitigation requirements of DA permits.

(5) *MOAs with other agencies.* The district engineer and members of the IRT may enter into a memorandum of agreement (MOA) with any other federal, state or local government agency to perform all or some of the IRT review functions described in this section. Such MOAs must include provisions for appropriate federal oversight of the review process. The district engineer retains sole authority for final approval of instruments and other documentation required under this section.

(c) *Compensation planning framework for in-lieu fee programs.* (1) The approved instrument for an in-lieu fee program must include a compensation planning framework that will be used to select,

secure, and implement aquatic resource restoration, establishment, enhancement, and/or preservation activities. The compensation planning framework must support a watershed approach to compensatory mitigation. All specific projects used to provide compensation for DA permits must be consistent with the approved compensation planning framework. Modifications to the framework must be approved as a significant modification to the instrument by the district engineer, after consultation with the IRT.

(2) The compensation planning framework must contain the following elements:

(i) The geographic service area(s), including a watershed-based rationale for the delineation of each service area;

(ii) A description of the threats to aquatic resources in the service area(s), including how the in-lieu fee program will help offset impacts resulting from those threats;

(iii) An analysis of historic aquatic resource loss in the service area(s);

(iv) An analysis of current aquatic resource conditions in the service area(s), supported by an appropriate level of field documentation;

(v) A statement of aquatic resource goals and objectives for each service area, including a description of the general amounts, types and locations of aquatic resources the program will seek to provide;

(vi) A prioritization strategy for selecting and implementing compensatory mitigation activities;

(vii) An explanation of how any preservation objectives identified in paragraph (c)(2)(v) of this section and addressed in the prioritization strategy in paragraph (c)(2)(vi) satisfy the criteria for use of preservation in §230.93(h);

(viii) A description of any public and private stakeholder involvement in plan development and implementation, including, where appropriate, coordination with federal, state, tribal and local aquatic resource management and regulatory authorities;

(ix) A description of the long-term protection and management strategies for activities conducted by the in-lieu fee program sponsor;

(x) A strategy for periodic evaluation and reporting on the progress of the program in achieving the goals and objectives in paragraph (c)(2)(v) of this section, including a process for revising the planning framework as necessary; and

(xi) Any other information deemed necessary for effective compensation planning by the district engineer.

(3) The level of detail necessary for the compensation planning framework is at the discretion of the district engineer, and will take into account the characteristics of the service area(s) and the scope of the program. As part of the in-lieu fee program instrument, the compensation planning framework will be reviewed by the IRT, and will be a major factor in the district engineer's decision on whether to approve the instrument.

(d) *Review process.* (1) The sponsor is responsible for preparing all documentation associated with establishment of the mitigation bank or in-lieu fee program, including the prospectus, instrument, and other appropriate documents, such as mitigation plans for a mitigation bank. The prospectus provides an overview of the proposed mitigation bank or in-lieu fee program and serves as the basis for public and initial IRT comment. For a mitigation bank, the mitigation plan, as described in §230.94(c), provides detailed plans and specifications for the mitigation bank site. For in-lieu fee programs, mitigation plans will be prepared as in-lieu fee project sites are identified after the instrument has been approved and the in-lieu fee program becomes operational. The instrument provides the authorization for the mitigation bank or in-lieu fee program to provide credits to be used as compensatory mitigation for DA permits.

(2) *Prospectus.* The prospectus must provide a summary of the information regarding the proposed mitigation bank or in-lieu fee program, at a sufficient level of detail to support informed public and IRT comment. The review process begins when the sponsor submits a complete prospectus to the district engineer. For modifications of approved instruments, submittal of a new prospectus is not required; instead,

the sponsor must submit a written request for an instrument modification accompanied by appropriate documentation. The district engineer must notify the sponsor within 30 days whether or not a submitted prospectus is complete. A complete prospectus includes the following information:

(i) The objectives of the proposed mitigation bank or in-lieu fee program.

(ii) How the mitigation bank or in-lieu fee program will be established and operated.

(iii) The proposed service area.

(iv) The general need for and technical feasibility of the proposed mitigation bank or in-lieu fee program.

(v) The proposed ownership arrangements and long-term management strategy for the mitigation bank or in-lieu fee project sites.

(vi) The qualifications of the sponsor to successfully complete the type(s) of mitigation project(s) proposed, including information describing any past such activities by the sponsor.

(vii) For a proposed mitigation bank, the prospectus must also address:

(A) The ecological suitability of the site to achieve the objectives of the proposed mitigation bank, including the physical, chemical, and biological characteristics of the bank site and how that site will support the planned types of aquatic resources and functions; and

(B) Assurance of sufficient water rights to support the long-term sustainability of the mitigation bank.

(viii) For a proposed in-lieu fee program, the prospectus must also include:

(A) The compensation planning framework (see paragraph (c) of this section); and

(B) A description of the in-lieu fee program account required by paragraph (i) of this section.

(3) *Preliminary review of prospectus.* Prior to submitting a prospectus, the sponsor may elect to submit a draft prospectus to the district engineer for comment and consultation. The district engineer will provide copies of the draft prospectus to the IRT and will provide comments back to the sponsor within 30 days. Any comments from IRT members will also be forwarded to the sponsor. This preliminary review is optional but is strongly recommended. It is intended to identify potential issues early so that the sponsor may attempt to address those issues prior to the start of the formal review process.

(4) *Public review and comment.* Within 30 days of receipt of a complete prospectus or an instrument modification request that will be processed in accordance with paragraph (g)(1) of this section, the district engineer will provide public notice of the proposed mitigation bank or in-lieu fee program, in accordance with the public notice procedures at 33 CFR 325.3. The public notice must, at a minimum, include a summary of the prospectus and indicate that the full prospectus is available to the public for review upon request. For modifications of approved instruments, the public notice must instead summarize, and make available to the public upon request, whatever documentation is appropriate for the modification (e.g., a new or revised mitigation plan). The comment period for public notice will be 30 days, unless the district engineer determines that a longer comment period is appropriate. The district engineer will notify the sponsor if the comment period is extended beyond 30 days, including an explanation of why the longer comment period is necessary. Copies of all comments received in response to the public notice must be distributed to the other IRT members and to the sponsor within 15 days of the close of the public comment period. The district engineer and IRT members may also provide comments to the sponsor at this time, and copies of any such comments will also be distributed to all IRT members. If the construction of a mitigation bank or an in-lieu fee program project requires a DA permit, the public notice requirement may be satisfied through the public notice provisions of the permit processing procedures, provided all of the relevant information is provided.

(5) *Initial evaluation.* (i) After the end of the comment period, the district engineer will review the comments received in response to the public notice, and make a written initial evaluation as to the potential of the proposed mitigation bank or in-lieu fee program to provide compensatory mitigation

for activities authorized by DA permits. This initial evaluation letter must be provided to the sponsor within 30 days of the end of the public notice comment period.

(ii) If the district engineer determines that the proposed mitigation bank or in-lieu fee program has potential for providing appropriate compensatory mitigation for activities authorized by DA permits, the initial evaluation letter will inform the sponsor that he/she may proceed with preparation of the draft instrument (see paragraph (d)(6) of this section).

(iii) If the district engineer determines that the proposed mitigation bank or in-lieu fee program does not have potential for providing appropriate compensatory mitigation for DA permits, the initial evaluation letter must discuss the reasons for that determination. The sponsor may revise the prospectus to address the district engineer's concerns, and submit the revised prospectus to the district engineer. If the sponsor submits a revised prospectus, a revised public notice will be issued in accordance with paragraph (d)(4) of this section.

(iv) This initial evaluation procedure does not apply to proposed modifications of approved instruments.

(6) *Draft instrument.* (i) After considering comments from the district engineer, the IRT, and the public, if the sponsor chooses to proceed with establishment of the mitigation bank or in-lieu fee program, he must prepare a draft instrument and submit it to the district engineer. In the case of an instrument modification, the sponsor must prepare a draft amendment (e.g., a specific instrument provision, a new or modified mitigation plan), and submit it to the district engineer. The district engineer must notify the sponsor within 30 days of receipt, whether the draft instrument or amendment is complete. If the draft instrument or amendment is incomplete, the district engineer will request from the sponsor the information necessary to make the draft instrument or amendment complete. Once any additional information is submitted, the district engineer must notify the sponsor as soon as he determines that the draft instrument or amendment is complete. The draft instrument must be based on the prospectus and must describe in detail the physical and legal characteristics of the mitigation bank or in-lieu fee program and how it will be established and operated.

(ii) For mitigation banks and in-lieu fee programs, the draft instrument must include the following information:

(A) A description of the proposed geographic service area of the mitigation bank or in-lieu fee program. The service area is the watershed, ecoregion, physiographic province, and/or other geographic area within which the mitigation bank or in-lieu fee program is authorized to provide compensatory mitigation required by DA permits. The service area must be appropriately sized to ensure that the aquatic resources provided will effectively compensate for adverse environmental impacts across the entire service area. For example, in urban areas, a U.S. Geological Survey 8-digit hydrologic unit code (HUC) watershed or a smaller watershed may be an appropriate service area. In rural areas, several contiguous 8-digit HUCs or a 6-digit HUC watershed may be an appropriate service area. Delineation of the service area must also consider any locally-developed standards and criteria that may be applicable. The economic viability of the mitigation bank or in-lieu fee program may also be considered in determining the size of the service area. The basis for the proposed service area must be documented in the instrument. An in-lieu fee program or umbrella mitigation banking instrument may have multiple service areas governed by its instrument (e.g., each watershed within a State or Corps district may be a separate service area under the instrument); however, all impacts and compensatory mitigation must be accounted for by service area;

(B) Accounting procedures;

(C) A provision stating that legal responsibility for providing the compensatory mitigation lies with the sponsor once a permittee secures credits from the sponsor;

(D) Default and closure provisions;

(E) Reporting protocols; and

(F) Any other information deemed necessary by the district engineer.

(iii) For a mitigation bank, a complete draft instrument must include the following additional information:

(A) Mitigation plans that include all applicable items listed in § 230.94(c)(2) through (14); and

(B) A credit release schedule, which is tied to achievement of specific milestones. All credit releases must be approved by the district engineer, in consultation with the IRT, based on a determination that required milestones have been achieved. The district engineer, in consultation with the IRT, may modify the credit release schedule, including reducing the number of available credits or suspending credit sales or transfers altogether, where necessary to ensure that all credits sales or transfers remain tied to compensatory mitigation projects with a high likelihood of meeting performance standards;

(iv) For an in-lieu fee program, a complete draft instrument must include the following additional information:

(A) The compensation planning framework (see paragraph (c) of this section);

(B) Specification of the initial allocation of advance credits (see paragraph (n) of this section) and a draft fee schedule for these credits, by service area, including an explanation of the basis for the allocation and draft fee schedule;

(C) A methodology for determining future project-specific credits and fees; and

(D) A description of the in-lieu fee program account required by paragraph (i) of this section.

(7) *IRT review*. Upon receipt of notification by the district engineer that the draft instrument or amendment is complete, the sponsor must provide the district engineer with a sufficient number of copies of the draft instrument or amendment to distribute to the IRT members. The district engineer will promptly distribute copies of the draft instrument or amendment to the IRT members for a 30 day comment period. The 30-day comment period begins 5 days after the district engineer distributes the copies of the draft instrument or amendment to the IRT. Following the comment period, the district engineer will discuss any comments with the appropriate agencies and with the sponsor. The district engineer will seek to resolve issues using a consensus based approach, to the extent practicable, while still meeting the decision-making time frames specified in this section. Within 90 days of receipt of the complete draft instrument or amendment by the IRT members, the district engineer must notify the sponsor of the status of the IRT review. Specifically, the district engineer must indicate to the sponsor if the draft instrument or amendment is generally acceptable and what changes, if any, are needed. If there are significant unresolved concerns that may lead to a formal objection from one or more IRT members to the final instrument or amendment, the district engineer will indicate the nature of those concerns.

(8) *Final instrument*. The sponsor must submit a final instrument to the district engineer for approval, with supporting documentation that explains how the final instrument addresses the comments provided by the IRT. For modifications of approved instruments, the sponsor must submit a final amendment to the district engineer for approval, with supporting documentation that explains how the final amendment addresses the comments provided by the IRT. The final instrument or amendment must be provided directly by the sponsor to all members of the IRT. Within 30 days of receipt of the final instrument or amendment, the district engineer will notify the IRT members whether or not he intends to approve the instrument or amendment. If no IRT member objects, by initiating the dispute resolution process in paragraph (e) of this section within 45 days of receipt of the final instrument or amendment, the district engineer will notify the sponsor of his final decision and, if the instrument or amendment is approved, arrange for it to be signed by the appropriate parties. If any IRT member initiates the dispute resolution process, the district engineer will notify the sponsor. Following conclusion of the dispute resolution process, the district engineer will notify the sponsor of his final decision, and if the instrument or amendment is approved,

arrange for it to be signed by the appropriate parties. For mitigation banks, the final instrument must contain the information items listed in paragraphs (d)(6)(ii), and (iii) of this section. For in-lieu fee programs, the final instrument must contain the information items listed in paragraphs (d)(6)(ii) and (iv) of this section. For the modification of an approved instrument, the amendment must contain appropriate information, as determined by the district engineer. The final instrument or amendment must be made available to the public upon request.

(e) *Dispute resolution process.* (1) Within 15 days of receipt of the district engineer's notification of intent to approve an instrument or amendment, the Regional Administrator of the U.S. EPA, the Regional Director of the U.S. Fish and Wildlife Service, the Regional Director of the National Marine Fisheries Service, and/or other senior officials of agencies represented on the IRT may notify the district engineer and other IRT members by letter if they object to the approval of the proposed final instrument or amendment. This letter must include an explanation of the basis for the objection and, where feasible, offer recommendations for resolving the objections. If the district engineer does not receive any objections within this time period, he may proceed to final action on the instrument or amendment.

(2) The district engineer must respond to the objection within 30 days of receipt of the letter. The district engineer's response may indicate an intent to disapprove the instrument or amendment as a result of the objection, an intent to approve the instrument or amendment despite the objection, or may provide a modified instrument or amendment that attempts to address the objection. The district engineer's response must be provided to all IRT members.

(3) Within 15 days of receipt of the district engineer's response, if the Regional Administrator or Regional Director is not satisfied with the response he may forward the issue to the Assistant Administrator for Water of the U.S. EPA, the Assistant Secretary for Fish and Wildlife and Parks of the U.S. FWS, or the Undersecretary for Oceans and Atmosphere of NOAA, as appropriate, for review and must notify the district engineer by letter via electronic mail or facsimile machine (with copies to all IRT members) that the issue has been forwarded for Headquarters review. This step is available only to the IRT members representing these three federal agencies, however, other IRT members who do not agree with the district engineer's final decision do not have to sign the instrument or amendment or recognize the mitigation bank or in-lieu fee program for purposes of their own programs and authorities. If an IRT member other than the one filing the original objection has a new objection based on the district engineer's response, he may use the first step in this procedure (paragraph (e)(1) of this section) to provide that objection to the district engineer.

(4) If the issue has not been forwarded to the objecting agency's Headquarters, then the district engineer may proceed with final action on the instrument or amendment. If the issue has been forwarded to the objecting agency's Headquarters, the district engineer must hold in abeyance the final action on the instrument or amendment, pending Headquarters level review described below.

(5) Within 20 days from the date of the letter requesting Headquarters level review, the Assistant Administrator for Water, the Assistant Secretary for Fish and Wildlife and Parks, or the Undersecretary for Oceans and Atmosphere must either notify the Assistant Secretary of the Army (Civil Works) (ASA(CW)) that further review will not be requested, or request that the ASA(CW) review the final instrument or amendment.

(6) Within 30 days of receipt of the letter from the objecting agency's Headquarters request for ASA(CW)'s review of the final instrument, the ASA(CW), through the Director of Civil Works, must review the draft instrument or amendment and advise the district engineer on how to proceed with final action on that instrument or amendment. The ASA(CW) must immediately notify the Assistant Administrator for Water, the Assistant Secretary for Fish and Wildlife and Parks,

and/or the Undersecretary for Oceans and Atmosphere of the final decision.

(7) In cases where the dispute resolution procedure is used, the district engineer must notify the sponsor of his final decision within 150 days of receipt of the final instrument or amendment.

(f) *Extension of deadlines.* (1) The deadlines in paragraphs (d) and (e) of this section may be extended by the district engineer at his sole discretion in cases where:

(i) Compliance with other applicable laws, such as consultation under section 7 of the Endangered Species Act or section 106 of the National Historic Preservation Act, is required;

(ii) It is necessary to conduct government-to-government consultation with Indian tribes;

(iii) Timely submittal of information necessary for the review of the proposed mitigation bank or in-lieu fee program or the proposed modification of an approved instrument is not accomplished by the sponsor; or

(iv) Information that is essential to the district engineer's decision cannot be reasonably obtained within the specified time frame.

(2) In such cases, the district engineer must promptly notify the sponsor in writing of the extension and the reason for it. Such extensions shall be for the minimum time necessary to resolve the issue necessitating the extension.

(g) *Modification of instruments.* (1) *Approval of an amendment to an approved instrument.* Modification of an approved instrument, including the addition and approval of umbrella mitigation bank sites or in-lieu fee project sites or expansions of previously approved mitigation bank or in-lieu fee project sites, must follow the appropriate procedures in paragraph (d) of this section, unless the district engineer determines that the streamlined review process described in paragraph (g)(2) of this section is warranted.

(2) *Streamlined review process.* The streamlined modification review process may be used for the following modifications of instruments: changes reflecting adaptive management of the mitigation bank or in-lieu fee program, credit releases, changes in credit releases and credit release schedules, and changes that the district engineer determines are not significant. If the district engineer determines that the streamlined review process is warranted, he must notify the IRT members and the sponsor of this determination and provide them with copies of the proposed modification. IRT members and the sponsor have 30 days to notify the district engineer if they have concerns with the proposed modification. If IRT members or the sponsor notify the district engineer of such concerns, the district engineer shall attempt to resolve those concerns. Within 60 days of providing the proposed modification to the IRT, the district engineer must notify the IRT members of his intent to approve or disapprove the proposed modification. If no IRT member objects, by initiating the dispute resolution process in paragraph (e) of this section, within 15 days of receipt of this notification, the district engineer will notify the sponsor of his final decision and, if the modification is approved, arrange for it to be signed by the appropriate parties. If any IRT member initiates the dispute resolution process, the district engineer will so notify the sponsor. Following conclusion of the dispute resolution process, the district engineer will notify the sponsor of his final decision, and if the modification is approved, arrange for it to be signed by the appropriate parties.

(h) *Umbrella mitigation banking instruments.* A single mitigation banking instrument may provide for future authorization of additional mitigation bank sites. As additional sites are selected, they must be included in the mitigation banking instrument as modifications, using the procedures in paragraph (g)(1) of this section. Credit withdrawal from the additional bank sites shall be consistent with paragraph (m) of this section.

(i) *In-lieu fee program account.* (1) The in-lieu fee program sponsor must establish a program account after the instrument is approved by the district engineer, prior to accepting any fees from permittees. If the sponsor accepts funds from entities other than permittees, those funds must be kept in separate accounts. The program account

must be established at a financial institution that is a member of the Federal Deposit Insurance Corporation. All interests and earnings accruing to the program account must remain in that account for use by the in-lieu fee program for the purposes of providing compensatory mitigation for DA permits. The program account may only be used for the selection, design, acquisition, implementation, and management of in-lieu fee compensatory mitigation projects, except for a small percentage (as determined by the district engineer in consultation with the IRT and specified in the instrument) that can be used for administrative costs.

(2) The sponsor must submit proposed in-lieu fee projects to the district engineer for funding approval. Disbursements from the program account may only be made upon receipt of written authorization from the district engineer, after the district engineer has consulted with the IRT. The terms of the program account must specify that the district engineer has the authority to direct those funds to alternative compensatory mitigation projects in cases where the sponsor does not provide compensatory mitigation in accordance with the time frame specified in paragraph (n)(4) of this section.

(3) The sponsor must provide annual reports to the district engineer and the IRT. The annual reports must include the following information:

(i) All income received, disbursements, and interest earned by the program account;

(ii) A list of all permits for which in-lieu fee program funds were accepted. This list shall include: the Corps permit number (or the state permit number if there is no corresponding Corps permit number, in cases of state programmatic general permits or other regional general permits), the service area in which the authorized impacts are located, the amount of authorized impacts, the amount of required compensatory mitigation, the amount paid to the in-lieu fee program, and the date the funds were received from the permittee;

(iii) A description of in-lieu fee program expenditures from the account, such as the costs of land acquisition, planning, construction, monitoring, maintenance, contingencies, adaptive management, and administration;

(iv) The balance of advance credits and released credits at the end of the report period for each service area; and

(v) Any other information required by the district engineer.

(4) The district engineer may audit the records pertaining to the program account. All books, accounts, reports, files, and other records relating to the in-lieu fee program account shall be available at reasonable times for inspection and audit by the district engineer.

(j) *In-lieu fee project approval.* (1) As in-lieu fee project sites are identified and secured, the sponsor must submit mitigation plans to the district engineer that include all applicable items listed in § 230.94(c)(2) through (14). The mitigation plan must also include a credit release schedule consistent with paragraph (o)(8) of this section that is tied to achievement of specific performance standards. The review and approval of in-lieu fee projects will be conducted in accordance with the procedures in paragraph (g)(1) of this section, as modifications of the in-lieu fee program instrument. This includes compensatory mitigation projects conducted by another party on behalf of the sponsor through requests for proposals and awarding of contracts.

(2) If a DA permit is required for an in-lieu fee project, the permit should not be issued until all relevant provisions of the mitigation plan have been substantively determined, to ensure that the DA permit accurately reflects all relevant provisions of the approved mitigation plan, such as performance standards.

(k) *Coordination of mitigation banking instruments and DA permit issuance.* In cases where initial establishment of the mitigation bank, or the development of a new project site under an umbrella banking instrument, involves activities requiring DA authorization, the permit should not be issued until all relevant provisions of the mitigation plan have been substantively determined. This is to ensure that the DA permit accurately reflects all relevant provisions of the final instrument, such as performance standards.

(l) *Project implementation.* (1) The sponsor must have an approved instrument prior to collecting funds from permittees to satisfy compensatory mitigation requirements for DA permits.

(2) Authorization to sell credits to satisfy compensatory mitigation requirements in DA permits is contingent on compliance with all of the terms of the instrument. This includes constructing a mitigation bank or in-lieu fee project in accordance with the mitigation plan approved by the district engineer and incorporated by reference in the instrument. If the aquatic resource restoration, establishment, enhancement, and/or preservation activities cannot be implemented in accordance with the approved mitigation plan, the district engineer must consult with the sponsor and the IRT to consider modifications to the instrument, including adaptive management, revisions to the credit release schedule, and alternatives for providing compensatory mitigation to satisfy any credits that have already been sold.

(3) An in-lieu fee program sponsor is responsible for the implementation, long-term management, and any required remediation of the restoration, establishment, enhancement, and/or preservation activities, even though those activities may be conducted by other parties through requests for proposals or other contracting mechanisms.

(m) *Credit withdrawal from mitigation banks.* The mitigation banking instrument may allow for an initial debiting of a percentage of the total credits projected at mitigation bank maturity, provided the following conditions are satisfied: the mitigation banking instrument and mitigation plan have been approved, the mitigation bank site has been secured, appropriate financial assurances have been established, and any other requirements determined to be necessary by the district engineer have been fulfilled. The mitigation banking instrument must provide a schedule for additional credit releases as appropriate milestones are achieved (see paragraph (o)(8) of this section). Implementation of the approved mitigation plan shall be initiated no later than the first full growing season after the date of the first credit transaction.

(n) *Advance credits for in-lieu fee programs.* (1) The in-lieu fee program instrument may make a limited number of advance credits available to permittees when the instrument is approved. The number of advance credits will be determined by the district engineer, in consultation with the IRT, and will be specified for each service area in the instrument. The number of advance credits will be based on the following considerations:

(i) The compensation planning framework;

(ii) The sponsor's past performance for implementing aquatic resource restoration, establishment, enhancement, and/or preservation activities in the proposed service area or other areas; and

(iii) The projected financing necessary to begin planning and implementation of in-lieu fee projects.

(2) To determine the appropriate number of advance credits for a particular service area, the district engineer may require the sponsor to provide confidential supporting information that will not be made available to the general public. Examples of confidential supporting information may include prospective in-lieu fee project sites.

(3) As released credits are produced by in-lieu fee projects, they must be used to fulfill any advance credits that have already been provided within the project service area before any remaining released credits can be sold or transferred to permittees. Once previously provided advance credits have been fulfilled, an equal number of advance credits is re-allocated to the sponsor for sale or transfer to fulfill new mitigation requirements, consistent with the terms of the instrument. The number of advance credits available to the sponsor at any given time to sell or transfer to permittees in a given service area is equal to the number of advance credits specified in the instrument, minus any that have already been provided but not yet fulfilled.

(4) Land acquisition and initial physical and biological improvements must be completed by the third full growing

season after the first advance credit in that service area is secured by a permittee, unless the district engineer determines that more or less time is needed to plan and implement an in-lieu fee project. If the district engineer determines that there is a compensatory mitigation deficit in a specific service area by the third growing season after the first advance credit in that service area is sold, and determines that it would not be in the public interest to allow the sponsor additional time to plan and implement an in-lieu fee project, the district engineer must direct the sponsor to disburse funds from the in-lieu fee program account to provide alternative compensatory mitigation to fulfill those compensation obligations.

(5) The sponsor is responsible for complying with the terms of the in-lieu fee program instrument. If the district engineer determines, as a result of review of annual reports on the operation of the in-lieu fee program (see paragraphs (p)(2) and (q)(1) of this section), that it is not performing in compliance with its instrument, the district engineer will take appropriate action, which may include suspension of credit sales, to ensure compliance with the in-lieu fee program instrument (see paragraph (o)(10) of this section). Permittees that secured credits from the in-lieu fee program are not responsible for in-lieu fee program compliance.

(o) *Determining credits.* (1) *Units of measure.* The principal units for credits and debits are acres, linear feet, functional assessment units, or other suitable metrics of particular resource types. Functional assessment units or other suitable metrics may be linked to acres or linear feet.

(2) *Assessment.* Where practicable, an appropriate assessment method (e.g., hydrogeomorphic approach to wetlands functional assessment, index of biological integrity) or other suitable metric must be used to assess and describe the aquatic resource types that will be restored, established, enhanced and/or preserved by the mitigation bank or in-lieu fee project.

(3) *Credit production.* The number of credits must reflect the difference between pre- and post-compensatory mitigation project site conditions, as determined by a functional or condition assessment or other suitable metric.

(4) *Credit value.* Once a credit is debited (sold or transferred to a permittee), its value cannot change.

(5) *Credit costs.* (i) The cost of compensatory mitigation credits provided by a mitigation bank or in-lieu fee program is determined by the sponsor.

(ii) For in-lieu fee programs, the cost per unit of credit must include the expected costs associated with the restoration, establishment, enhancement, and/or preservation of aquatic resources in that service area. These costs must be based on full cost accounting, and include, as appropriate, expenses such as land acquisition, project planning and design, construction, plant materials, labor, legal fees, monitoring, and remediation or adaptive management activities, as well as administration of the in-lieu fee program. The cost per unit credit must also take into account contingency costs appropriate to the stage of project planning, including uncertainties in construction and real estate expenses. The cost per unit of credit must also take into account the resources necessary for the long-term management and protection of the in-lieu fee project. In addition, the cost per unit credit must include financial assurances that are necessary to ensure successful completion of in-lieu fee projects.

(6) *Credits provided by preservation.* These credits should be specified as acres, linear feet, or other suitable metrics of preservation of a particular resource type. In determining the compensatory mitigation requirements for DA permits using mitigation banks or in-lieu fee programs, the district engineer should apply a higher mitigation ratio if the requirements are to be met through the use of preservation credits. In determining this higher ratio, the district engineer must consider the relative importance of both the impacted and the preserved aquatic resources in sustaining watershed functions.

(7) *Credits provided by riparian areas, buffers, and uplands.* These credits should be specified as acres, linear feet, or other suitable metrics of riparian area, buffer, and uplands respectively.

Non-aquatic resources can only be used as compensatory mitigation for impacts to aquatic resources authorized by DA permits when those resources are essential to maintaining the ecological viability of adjoining aquatic resources. In determining the compensatory mitigation requirements for DA permits using mitigation banks and in-lieu fee programs, the district engineer may authorize the use of riparian area, buffer, and/or upland credits if he determines that these areas are essential to sustaining aquatic resource functions in the watershed and are the most appropriate compensation for the authorized impacts.

(8) *Credit release schedule.* (i) *General considerations.* Release of credits must be tied to performance based milestones (e.g., construction, planting, establishment of specified plant and animal communities). The credit release schedule should reserve a significant share of the total credits for release only after full achievement of ecological performance standards. When determining the credit release schedule, factors to be considered may include, but are not limited to: The method of providing compensatory mitigation credits (e.g., restoration), the likelihood of success, the nature and amount of work needed to generate the credits, and the aquatic resource type(s) and function(s) to be provided by the mitigation bank or in-lieu fee project. The district engineer will determine the credit release schedule, including the share to be released only after full achievement of performance standards, after consulting with the IRT. Once released, credits may only be used to satisfy compensatory mitigation requirements of a DA permit if the use of credits for a specific permit has been approved by the district engineer.

(ii) For single-site mitigation banks, the terms of the credit release schedule must be specified in the mitigation banking instrument. The credit release schedule may provide for an initial debiting of a limited number of credits once the instrument is approved and other appropriate milestones are achieved (see paragraph (m) of this section).

(iii) For in-lieu fee projects and umbrella mitigation bank sites, the terms of the credit release schedule must be specified in the approved mitigation plan. When an in-lieu fee project or umbrella mitigation bank site is implemented and is achieving the performance-based milestones specified in the credit release schedule, credits are generated in accordance with the credit release schedule for the approved mitigation plan. If the in-lieu fee project or umbrella mitigation bank site does not achieve those performance-based milestones, the district engineer may modify the credit release schedule, including reducing the number of credits.

(9) *Credit release approval.* Credit releases for mitigation banks and in-lieu fee projects must be approved by the district engineer. In order for credits to be released, the sponsor must submit documentation to the district engineer demonstrating that the appropriate milestones for credit release have been achieved and requesting the release. The district engineer will provide copies of this documentation to the IRT members for review. IRT members must provide any comments to the district engineer within 15 days of receiving this documentation. However, if the district engineer determines that a site visit is necessary, IRT members must provide any comments to the district engineer within 15 days of the site visit. The district engineer must schedule the site visit so that it occurs as soon as it is practicable, but the site visit may be delayed by seasonal considerations that affect the ability of the district engineer and the IRT to assess whether the applicable credit release milestones have been achieved. After full consideration of any comments received, the district engineer will determine whether the milestones have been achieved and the credits can be released. The district engineer shall make a decision within 30 days of the end of that comment period, and notify the sponsor and the IRT.

(10) *Suspension and termination.* If the district engineer determines that the mitigation bank or in-lieu fee program is not meeting performance standards or complying with the terms of the instrument, appropriate action will be taken. Such actions may include, but are not limited to, suspending credit

sales, adaptive management, decreasing available credits, utilizing financial assurances, and terminating the instrument.

(p) *Accounting procedures.* (1) For mitigation banks, the instrument must contain a provision requiring the sponsor to establish and maintain a ledger to account for all credit transactions. Each time an approved credit transaction occurs, the sponsor must notify the district engineer.

(2) For in-lieu fee programs, the instrument must contain a provision requiring the sponsor to establish and maintain an annual report ledger in accordance with paragraph (i)(3) of this section, as well as individual ledgers that track the production of released credits for each in-lieu fee project.

(q) *Reporting.* (1) *Ledger account.* The sponsor must compile an annual ledger report showing the beginning and ending balance of available credits and permitted impacts for each resource type, all additions and subtractions of credits, and any other changes in credit availability (e.g., additional credits released, credit sales suspended). The ledger report must be submitted to the district engineer, who will distribute copies to the IRT members. The ledger report is part of the administrative record for the mitigation bank or in-lieu fee program. The district engineer will make the ledger report available to the public upon request.

(2) *Monitoring reports.* The sponsor is responsible for monitoring the mitigation bank site or the in-lieu fee project site in accordance with the approved monitoring requirements to determine the level of success and identify problems requiring remedial action or adaptive management measures. Monitoring must be conducted in accordance with the requirements in § 230.96, and at time intervals appropriate for the particular project type and until such time that the district engineer, in consultation with the IRT, has determined that the performance standards have been attained. The instrument must include requirements for periodic monitoring reports to be submitted to the district engineer, who will provide copies to other IRT members.

(3) *Financial assurance and long-term management funding report.* The district engineer may require the sponsor to provide an annual report showing beginning and ending balances, including deposits into and any withdrawals from, the accounts providing funds for financial assurances and long-term management activities. The report should also include information on the amount of required financial assurances and the status of those assurances, including their potential expiration.

(r) *Use of credits.* Except as provided below, all activities authorized by DA permits are eligible, at the discretion of the district engineer, to use mitigation banks or in-lieu fee programs to fulfill compensatory mitigation requirements for DA permits. The district engineer will determine the number and type(s) of credits required to compensate for the authorized impacts. Permit applicants may propose to use a particular mitigation bank or in-lieu fee program to provide the required compensatory mitigation. In such cases, the sponsor must provide the permit applicant with a statement of credit availability. The district engineer must review the permit applicant's compensatory mitigation proposal, and notify the applicant of his determination regarding the acceptability of using that mitigation bank or in-lieu fee program.

(s) *IRT concerns with use of credits.* If, in the view of a member of the IRT, an issued permit or series of issued permits raises concerns about how credits from a particular mitigation bank or in-lieu fee program are being used to satisfy compensatory mitigation requirements (including concerns about whether credit use is consistent with the terms of the instrument), the IRT member may notify the district engineer in writing of the concern. The district engineer shall promptly consult with the IRT to address the concern. Resolution of the concern is at the discretion of the district engineer, consistent with applicable statutes, regulations, and policies regarding compensatory mitigation requirements for DA permits. Nothing in this section limits the authorities designated to IRT agencies under existing statutes or regulations.

(t) *Site protection.* (1) For mitigation bank sites, real estate instruments, management plans, or other long-term mechanisms used for site protection must be finalized before any credits can be released.

(2) For in-lieu fee project sites, real estate instruments, management plans, or other long-term protection mechanisms used for site protection must be finalized before advance credits can become released credits.

(u) *Long-term management.* (1) The legal mechanisms and the party responsible for the long-term management and the protection of the mitigation bank site must be documented in the instrument or, in the case of umbrella mitigation banking instruments and in-lieu fee programs, the approved mitigation plans. The responsible party should make adequate provisions for the operation, maintenance, and long-term management of the compensatory mitigation project site. The long-term management plan should include a description of long-term management needs and identify the funding mechanism that will be used to meet those needs.

(2) The instrument may contain provisions for the sponsor to transfer long-term management responsibilities to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager.

(3) The instrument or approved mitigation plan must address the financial arrangements and timing of any necessary transfer of long-term management funds to the steward.

(4) Where needed, the acquisition and protection of water rights should be secured and documented in the instrument or, in the case of umbrella mitigation banking instruments and in-lieu fee programs, the approved mitigation site plan.

(v) *Grandfathering of existing instruments.* (1) *Mitigation banking instruments.* All mitigation banking instruments approved on or after July 9, 2008 must meet the requirements of this part. Mitigation banks approved prior to July 9, 2008 may continue to operate under the terms of their existing instruments. However, any modification to such a mitigation banking instrument on or after July 9, 2008, including authorization of additional sites under an umbrella mitigation banking instrument, expansion of an existing site, or addition of a different type of resource credits (e.g., stream credits to a wetland bank) must be consistent with the terms of this part.

(2) *In-lieu fee program instruments.* All in-lieu fee program instruments approved on or after July 9, 2008 must meet the requirements of this part. In-lieu fee programs operating under instruments approved prior to July 9, 2008 may continue to operate under those instruments for two years after the effective date of this rule, after which time they must meet the requirements of this part, unless the district engineer determines that circumstances warrant an extension of up to three additional years. The district engineer must consult with the IRT before approving such extensions. Any revisions made to the in-lieu-fee program instrument on or after July 9, 2008 must be consistent with the terms of this part. Any approved project for which construction was completed under the terms of a previously approved instrument may continue to operate indefinitely under those terms if the district engineer determines that the project is providing appropriate mitigation substantially consistent with the terms of this part.

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.
231.5 Recommended determination.
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. 1251 *et seq.*

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 redeposit of dredged material other than incidental fallback 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 redeposit other than incidental fallback, 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.

(iii) Incidental fallback.

(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) 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 or infrastructure in a water of the United States; the building of any structure, infrastructure, or

impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, or 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; placement of fill material for construction or maintenance of any liner, berm, or other infrastructure associated with solid waste landfills; placement of overburden, slurry, or tailings or similar mining-related materials;'' after the words ''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. (1) Except as specified in paragraph (3) of this definition, the term fill material means material placed in waters of the United States where the material has the effect of:

(i) Replacing any portion of a water of the United States with dry land; or

(ii) Changing the bottom elevation of any portion of a water of the United States.

(2) Examples of such fill material include, but are not limited to: rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in the waters of the United States.

(3) The term fill material does not include trash or garbage.

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 means:

(1) For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (2) of this definition, the term ''waters of the United States'' means:

(i) All waters which are currently used, 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;

(ii) All interstate waters, including interstate wetlands;

(iii) The territorial seas;

(iv) All impoundments of waters otherwise identified as waters of the United States under this section;

(v) All tributaries, as defined in paragraph (3)(iii) of this definition, of waters identified in paragraphs (1)(i) through (iii) of this definition;

(vi) All waters adjacent to a water identified in paragraphs (1)(i) through (v) of this definition, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;

(vii) All waters in paragraphs (1)(vii)(A) through (E) of this definition where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (1)(i) through (iii) of this definition. The waters identified in each of paragraphs (1)(vii)(A) through (E) of this definition are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (1)(i) through (iii) of this definition. Waters identified in this paragraph shall not be combined with waters identified in paragraph (1)(vi) of this definition when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (1)(vi), they are an adjacent water and no case-specific significant nexus analysis is required.

(A) Prairie potholes. Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest.

(B) Carolina bays and Delmarva bays. Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.

(C) Pocosins. Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.

(D) Western vernal pools. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers.

(E) Texas coastal prairie wetlands. Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (1)(i) through (iii) of this definition and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (1)(i) through (v) of this definition where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (1)(i) through (iii) of this definition. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in paragraphs (1)(i) through (iii) of this definition or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph (1)(vi) of this definition when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (1)(vi) of this definition, they are an adjacent water and no case-specific significant nexus analysis is required.

(2) The following are not ''waters of the United States'' even where they otherwise meet the terms of paragraphs (1)(iv) through (viii) of this definition.

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act are not waters of the United States.

(ii) 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.

(iii) The following ditches:

(A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.

(B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.

(C) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (1)(i) through (iii) of this definition.

(iv) The following features:

(A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;

(B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;

(C) Artificial reflecting pools or swimming pools created in dry land;

(D) Small ornamental waters created in dry land;

(E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;

(F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; and

(G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

(3) In this definition, the following terms apply:

(i) *Adjacent*. The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (1)(i) through (v) of this definition, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like. For purposes of adjacency, an open water such as a pond or lake includes any wetlands within or abutting its ordinary high water mark. Adjacency is not limited to waters located laterally to a water identified in paragraphs (1)(i) through (v) of this definition. Adjacent waters also include all waters that connect segments of a water identified in paragraphs (1)(i) through (v) or are located at the head of a water identified in paragraphs (1)(i) through (v) of this definition and are bordering, contiguous, or neighboring such water. Waters being used for established normal farming, ranching, and silviculture activities (33 U.S.C. 1344(f)) are not adjacent.

(ii) *Neighboring*. The term *neighboring* means:

(A) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (1)(i) through (v) of this definition. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;

(B) All waters located within the 100-year floodplain of a water identified in paragraphs (1)(i) through (v) of this definition and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain;

(C) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (1)(i) or (1)(iii) of this definition, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes.

(iii) *Tributary* and *tributaries*. The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (1)(iv) of this definition), to a water identified in paragraphs (1)(i) through (iii) of this definition that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency, and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (2) of this definition. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more constructed breaks (such as

bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a non-jurisdictional water to a water identified in paragraphs (1)(i) through (iii) of this definition.

(iv) *Wetlands.* The term *wetlands* means those areas that are inundated or saturated by surface or groundwater 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.

(v) *Significant nexus.* The term *significant nexus* means that a water, including wetlands, either alone or in combination with other similarly situated waters in the region, significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (1)(i) through (iii) of this definition. The term ''in the region'' means the watershed that drains to the nearest water identified in paragraphs (1)(i) through (iii) of this definition. For an effect to be significant, it must be more than speculative or insubstantial. Waters are similarly situated when they function alike and are sufficiently close to function together in affecting downstream waters. For purposes of determining whether or not a water has a significant nexus, the water's effect on downstream (1)(i) through (iii) waters shall be assessed by evaluating the aquatic functions identified in paragraphs (3)(v)(A) through (I) of this definition. A water has a significant nexus when any single function or combination of functions performed by the water, alone or together with similarly situated waters in the region, contributes significantly to the chemical, physical, or biological integrity of the nearest water identified in paragraphs (1)(i) through (iii) of this definition. Functions relevant to the significant nexus evaluation are the following:

(A) Sediment trapping,

(B) Nutrient recycling,

(C) Pollutant trapping, transformation, filtering, and transport,

(D) Retention and attenuation of flood waters,

(E) Runoff storage,

(F) Contribution of flow,

(G) Export of organic matter,

(H) Export of food resources, and

(I) Provision of life cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, or use as a nursery area) for species located in a water identified in paragraphs (1)(i) through (iii) of this definition.

(vi) *Ordinary high water mark.* The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(vii) *High tide line.* The term *high tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

[53 FR 20773, June 6, 1988, as amended at 58 FR 8182, Feb. 11, 1993; 58 FR 45037, Aug. 25, 1993; 64 FR 25123, May 10, 1999; 66 FR 4575, Jan. 17, 2001; 67 FR 31142, May 9, 2002; 73 FR 79645, Dec. 30, 2008; 80 FR 37117, June 29, 2015]

§ 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.

§ 233.39 Electronic reporting.

States that choose to receive electronic documents must satisfy the requirements of 40 CFR Part 3—(Electronic reporting) in their state program.

[70 FR 59888, Oct. 13, 2005]

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, 1200 Pennsylvania Ave., NW., 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 National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal__register/code__of__federal__regulations/ibr__locations.html*. Copies of materials incorporated by reference may be obtained or inspected at the EPA UST Docket, located at 1235 Jefferson Davis Highway, First Floor , Arlington, VA 22202 (telephone number: 703–603–9231), or send mail to Mail Code 5305G, 1200 Pennsylvania Ave., NW., 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, as amended at 65 FR 47325, Aug. 2, 2000; 69 FR 18801, Apr. 9, 2004]

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, 1200 Pennsylvania Ave., NW., Washington, DC 20460 or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal__register/code__of__federal__regulations/ibr__locations.html*. 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.

[59 FR 9870, Mar. 1, 1994, as amended at 65 FR 47325, Aug. 2, 2000; 69 FR 18803, Apr. 9, 2004]

SUBCHAPTER I—SOLID WASTES

PART 239—REQUIREMENTS FOR STATE PERMIT PROGRAM DETERMINATION OF ADEQUACY

Subpart A—General

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239.13 Criteria and procedures for withdrawal of determination of adequacy.

AUTHORITY: 42 U.S.C. 6912, 6945.

SOURCE: 63 FR 57040, Oct. 23, 1998, unless otherwise noted.

Subpart A—General

§ 239.1 Purpose.

This part specifies the requirements that state permit programs must meet to be determined adequate by the EPA under section 4005(c)(1)(C) of the Resource Conservation and Recovery Act (RCRA or the Act) and the procedures EPA will follow in determining the adequacy of state Subtitle D permit programs or other systems of prior approval and conditions required to be adopted and implemented by states under RCRA section 4005(c)(1)(B).

§ 239.2 Scope and definitions.

(a) *Scope.* (1) Nothing in this part precludes a state from adopting or enforcing requirements that are more stringent or more extensive than those required under this part or from operating a permit program or other system of prior approval and conditions with more stringent requirements or a broader scope of coverage than that required under this part.

(2) All states which develop and implement a Subtitle D permit program must submit an application for an adequacy determination for purposes of this part. Except as provided in § 239.12, state Subtitle D permit programs which received full approval prior to November 23, 1998 need not submit new applications for approval under this part. Similarly, except as provided in § 239.12, states that received partial approval of their Subtitle D permit programs prior to November 23, 1998 need not reapply under this part for approval for those program elements EPA has already determined to be adequate.

(3) If EPA determines that a state Subtitle D permit program is inadequate, EPA will have the authority to enforce the Subtitle D federal revised criteria on the RCRA section 4010(c) regulated facilities under the state's jurisdiction.

(b) *Definitions.* (1) For purposes of this part:

Administrator means the Administrator of the U.S. Environmental Protection Agency or any authorized representative.

Approved permit program or *approved program* means a state Subtitle D permit program or other system of prior approval and conditions required under section 4005(c)(1)(B) of RCRA that has been determined to be adequate by EPA under this part.

Approved state means a state whose Subtitle D permit program or other system of prior approval and conditions required under section 4005(c)(1)(B) of RCRA has been determined to be adequate by EPA under this part.

Guidance means policy memorandum, an application for approval under this Part, or other technical or policy documents that supplement state laws and regulations. These documents provide direction with regard to how state agencies should interpret their permit program requirements and must be consistent with state laws and regulations.

Implementing agency means the state and/or local agency(ies) responsible for carrying out an approved state permit program.

Lead state agency means the state agency which has the legal authority and oversight responsibilities to implement the permit program or other system of prior approval and conditions to ensure that facilities regulated under section 4010(c) of Subtitle D of RCRA comply with the requirements of the approved state permit program and/or has been designated as lead agency.

Permit or *prior approval and conditions* means any authorization, license, or equivalent control document issued under the authority of the state regulating the location, design, operation, ground-water monitoring, closure, post-closure care, corrective action, and financial assurance of Subtitle D regulated facilities.

Permit documents means permit applications, draft and final permits, or other documents that include applicable design and management conditions in accordance with the Subtitle D federal revised criteria, found at 40 CFR part 257, subpart B and 40 CFR part 258, and the technical and administrative information used to explain the basis of permit conditions.

Regional Administrator means any one of the ten Regional Administrators of the U.S. Environmental Protection Agency or any authorized representative.

State Director means the chief administrative officer of the lead state agency responsible for implementing the state permit program for Subtitle D regulated facilities.

State program or *permit program* means all the authorities, activities, and procedures that comprise the state's system of prior approval and conditions for regulating the location, design, operation, ground-water monitoring, closure, post-closure care, corrective action, and financial assurance of Subtitle D regulated facilities.

Subtitle D regulated facilities means all solid waste disposal facilities subject to the revised criteria promulgated by EPA under the authority of RCRA Section 4010(c).

(c) The definitions in 40 CFR part 257, subpart B and 40 CFR part 258 apply to all subparts of this part.

Subpart B—State Program Application

§ 239.3 Components of program application.

Any state that seeks a determination of adequacy under this part must submit an application to the Regional Administrator in the appropriate EPA Region. The application must identify the scope of the program for which the state is seeking approval (i.e., which class of Subtitle D regulated facilities are covered by the application). The application also must demonstrate that the state's authorities and procedures are adequate to ensure compliance with the relevant Subtitle D federal revised criteria and that its permit program is uniformly applicable to all the relevant Subtitle D regulated facilities within the state's jurisdiction. The application must contain the following parts:

(a) A transmittal letter, signed by the State Director, requesting program approval. If more than one state agency has implementation responsibilities, the transmittal letter must designate a lead agency and be jointly signed by all state agencies with implementation responsibilities or by the State Governor;

(b) A narrative description of the state permit program in accordance with § 239.4;

(c) A legal certification in accordance with § 239.5;

(d) Copies of all applicable state statutes, regulations, and guidance.

§ 239.4 Narrative description of state permit program.

The description of a state's program must include:

(a) An explanation of the jurisdiction and responsibilities of all state agencies and local agencies implementing

the permit program and description of the coordination and communication responsibilities of the lead state agency to facilitate communications between EPA and the state if more than one state agency has implementation responsibilities;

(b) An explanation of how the state will ensure that existing and new facilities are permitted or otherwise approved and in compliance with the relevant Subtitle D federal revised criteria;

(c) A demonstration that the state meets the requirements in §§ 239.6, 239.7, 239.8, and 239.9;

(d) The number of facilities within the state's jurisdiction that received waste on or after the following dates:

(1) For municipal solid waste landfill units, October 9, 1991.

(2) For non-municipal, non-hazardous waste disposal units that receive CESQG hazardous waste, January 1, 1998.

(e) A discussion of staff resources available to carry out and enforce the relevant state permit program.

(f) A description of the state's public participation procedures as specified in § 239.6(a) through (c).

§ 239.5 State legal certification.

(a) A state must submit a written certification from the state Attorney General that the laws, regulations, and any applicable guidance cited in the application are enacted at the time the certification is signed and are fully effective when the state permit program is approved. This certification may be signed by the independent legal counsel for the state rather than the Attorney General, provided that such counsel has full authority to independently represent the lead state agency in court on all matters pertaining to the state program.

(b) If guidance is to be used to supplement statutes and regulations, the state legal certification must discuss that the state has the authority to use guidance to develop enforceable permits which will ensure compliance with relevant standards issued pursuant to RCRA section 4010(c) and that the guidance was duly issued in accordance with state law.

(c) If any laws, regulations, or guidance are not enacted or fully effective when the legal certification is signed, the certification should specify what portion(s) of laws, regulations, or guidance are not yet enacted or fully effective and when they are expected to be enacted or fully effective.

The Agency may make a tentative determination of adequacy using this legal certification. The state must submit a revised legal certification meeting the requirements of paragraph (a) of this section and, if appropriate, paragraph (b) of this section along with all the applicable fully enacted and effective statutes, regulations, or guidance, prior to the Agency making a final determination of adequacy. If the statutes, regulations or guidance originally submitted under § 239.3(d) and certified to under this section are modified in a significant way, the Regional Administrator will publish a new tentative determination to ensure adequate public participation.

Subpart C—Requirements for Adequate Permit Programs

§ 239.6 Permitting requirements.

(a) State law must require that:

(1) Documents for permit determinations are made available for public review and comment; and

(2) Final determinations on permit applications are made known to the public.

(b) The state shall have procedures that ensure that public comments on permit determinations are considered.

(c) The state must fully describe its public participation procedures for permit issuance and post-permit actions in the narrative description required under § 239.4 and include a copy of these procedures in its permit program application.

(d) The state shall have the authority to collect all information necessary to issue permits that are adequate to ensure compliance with the relevant 40 CFR part 257, subpart B or 40 CFR part 258 federal revised criteria.

(e) For municipal solid waste landfill units, state law must require that:

(1) Prior to construction and operation, all new municipal solid waste

landfill units shall have a permit incorporating the conditions identified in paragraph (e)(3) of this section;

(2) All existing municipal solid waste landfill units shall have a permit incorporating the conditions identified in paragraph (e)(3) of this section by the deadlines identified in 40 CFR 258.1;

(3) The state shall have the authority to impose requirements for municipal solid waste landfill units adequate to ensure compliance with 40 CFR part 258. These requirements shall include:

(i) General standards which achieve compliance with 40 CFR part 258, subpart A;

(ii) Location restrictions for municipal solid waste landfill units which achieve compliance with 40 CFR part 258, subpart B;

(iii) Operating criteria for municipal solid waste landfill units which achieve compliance with 40 CFR part 258, subpart C;

(iv) Design criteria for municipal solid waste landfill units which achieve compliance with 40 CFR part 258, subpart D;

(v) Ground-water monitoring and corrective action standards for municipal solid waste landfill units which achieve compliance with 40 CFR part 258, subpart E;

(vi) Closure and post-closure care standards for municipal solid waste landfill units which achieve compliance with 40 CFR part 258, subpart F; and

(vii) Financial assurance standards for municipal solid waste landfill units which achieve compliance with 40 CFR part 258, subpart G.

(f) For non-municipal, non-hazardous waste disposal units that receive CESQG waste, state law must require that:

(1) Prior to construction and operation, all new non-municipal, non-hazardous waste disposal units that receive CESQG hazardous waste shall have a permit incorporating the conditions identified in paragraph (f)(3) of this section;

(2) All existing non-municipal, non-hazardous waste disposal units that receive CESQG hazardous waste shall have a permit incorporating the conditions identified in paragraph (f)(3) of this section by the deadlines identified in 40 CFR 257.5;

(3) The state shall have the authority to impose requirements for non-municipal, non-hazardous waste disposal units that receive CESQG hazardous waste adequate to ensure compliance with 40 CFR part 257, subpart B. These requirements shall include:

(i) General standards which achieve compliance with 40 CFR part 257, subpart B (§ 257.5);

(ii) Location restrictions for non-municipal, non-hazardous waste disposal units which achieve compliance with 40 CFR 257.7 through 257.13;

(iii) Ground-water monitoring and corrective action standards for non-municipal, non-hazardous waste disposal units which achieve compliance with 40 CFR 257.21 through 257.28; and,

(iv) Recordkeeping for non-municipal, non-hazardous waste disposal units which achieves compliance with 40 CFR 257.30.

§ 239.7 Requirements for compliance monitoring authority.

(a) The state must have the authority to:

(1) Obtain any and all information necessary, including records and reports, from an owner or operator of a Subtitle D regulated facility, to determine whether the owner or operator is in compliance with the state requirements;

(2) Conduct monitoring or testing to ensure that owners and operators are in compliance with the state requirements; and

(3) Enter any site or premise subject to the permit program or in which records relevant to the operation of Subtitle D regulated facilities or activities are kept.

(b) A state must demonstrate that its compliance monitoring program provides for inspections adequate to determine compliance with the approved state permit program.

(c) A state must demonstrate that its compliance monitoring program provides mechanisms or processes to:

(1) Verify the accuracy of information submitted by owners or operators of Subtitle D regulated facilities;

(2) Verify the adequacy of methods (including sampling) used by owners or

operators in developing that information;

(3) Produce evidence admissible in an enforcement proceeding; and

(4) Receive and ensure proper consideration of information submitted by the public.

§ 239.8 Requirements for enforcement authority.

Any state seeking approval must have the authority to impose the following remedies for violation of state program requirements:

(a) To restrain immediately and effectively any person by administrative or court order or by suit in a court of competent jurisdiction from engaging in any activity which may endanger or cause damage to human health or the environment.

(b) To sue in a court of competent jurisdiction to enjoin any threatened or continuing activity which violates any statute, regulation, order, or permit which is part of or issued pursuant to the state program.

(c) To sue in a court of competent jurisdiction to recover civil penalties for violations of a statute or regulation which is part of the state program or of an order or permit which is issued pursuant to the state program.

§ 239.9 Intervention in civil enforcement proceedings.

Any state seeking approval must provide for intervention in the state civil enforcement process by providing either:

(a) Authority that allows intervention, as a right, in any civil action to obtain remedies specified in § 239.8 by any citizen having an interest that is or may be adversely affected; or,

(b) Assurance by the appropriate state agency that:

(1) It will provide notice and opportunity for public involvement in all proposed settlements of civil enforcement actions (except where immediate action is necessary to adequately protect human health and the environment); and,

(2) It will investigate and provide responses to citizen complaints about violations; and,

(3) It will not oppose citizen intervention when permissive intervention is allowed by statute, rule, or regulation.

Subpart D—Adequacy Determination Procedures

§ 239.10 Criteria and procedures for making adequacy determinations.

(a) The State Director seeking an adequacy determination must submit to the appropriate Regional Administrator an application in accordance with § 239.3.

(b) Within 30 days of receipt of a state program application, the Regional Administrator will review the application and notify the state whether its application is administratively complete in accordance with the application components required in § 239.3. The 180-day review period for final determination of adequacy, described in paragraph (d) of this section, begins when the Regional Administrator deems a state application to be administratively complete.

(c) After receipt and review of a complete application, the Regional Administrator will make a tentative determination on the adequacy of the state program. The Regional Administrator shall publish the tentative determination on the adequacy of the state program in the FEDERAL REGISTER. Notice of the tentative determination must:

(1) Specify the Regional Administrator's tentative determination;

(2) Afford the public at least 30 days after the notice to comment on the state application and the Regional Administrator's tentative determination;

(3) Include a specific statement of the areas of concern, if the Regional Administrator indicates the state program may not be adequate;

(4) Note the availability for inspection by the public of the state permit program application; and

(5) Indicate that a public hearing will be held by EPA if sufficient public interest is expressed during the comment period. The Regional Administrator may determine when such a hearing is necessary to clarify issues involved in the tentative adequacy determination. If held, the public hearing will be scheduled at least 45 days from public

notice of such hearing. The public comment period may be continued after the hearing at the discretion of the Regional Administrator.

(d) Within 180 days of determining that a state program application is administratively complete, the Regional Administrator will make a final determination of adequacy after review and consideration of all public comments, unless the Regional Administrator, after consultation with the State Director, agrees to extend the review period. The Regional Administrator will give notice of the final determination in the FEDERAL REGISTER. The document must include a statement of the reasons for the determination and a response to significant comments received.

(e) For all states that do not submit an application, the Administrator or Regional Administrator may issue a final determination of inadequacy in the FEDERAL REGISTER declaring those state permit programs inadequate to ensure compliance with the relevant Subtitle D federal revised criteria. Such states may apply later for a determination of adequacy.

§ 239.11 Approval procedures for partial approval.

(a) EPA may partially approve state permit programs that do not meet all of the requirements in § 239.6(e)(3) (i.e., do not incorporate all of the relevant Subtitle D federal revised criteria). Such permit programs may be partially approved if:

(1) The appropriate Regional Administrator determines that the state's permit program largely meets the technical requirements of § 239.6 and meets all other requirements of this part;

(2) Changes to a specific part(s) of the state permit program are required in order for the state program to fully meet the requirements of § 239.6; and

(3) Provisions not included in the partially approved portions of the state permit program are clearly identifiable and separable subsets of the relevant Subtitle D federal revised criteria.

(b) A state applying for partial approval must include in its application a schedule to revise the necessary laws, regulations, and/or guidance to obtain full approval within two years of final approval of the partial permit program. The Regional Administrator and the State Director must agree to the schedule.

(c) The application for partial approval must fully meet the requirements of subparts B and C of this part.

(d) States with partially approved permit programs are only approved for those relevant provisions of the Subtitle D criteria included in the partial approval.

(e) Any partial approval adequacy determination made by the Regional Administrator pursuant to this section and § 239.10 shall expire two years from the effective date of the final partial program adequacy determination unless the Regional Administrator grants an extension. States seeking an extension must submit a request to the appropriate Regional Administrator, must provide good cause for missing the deadline, and must supply a new schedule to revise necessary laws, regulations, and/or guidance to obtain full approval. The appropriate Regional Administrator will decide if there is good cause and if the new schedule is realistic. If the Regional Administrator extends the expiration date, the Region will publish a document in the FEDERAL REGISTER along with the new expiration date. A state with partial approval shall submit an amended application meeting all of the requirements of this part and have that application approved by the two-year deadline or the amended date set by the Regional Administrator.

(f) The Regional Administrator will follow the adequacy determination procedures in § 239.10 for all initial applications for partial program approval and follow the adequacy determination procedures in § 239.12(f) for any amendments for approval for unapproved sections of the relevant Subtitle D federal revised criteria.

§ 239.12 Modifications of state programs.

(a) Approved state permit programs may be modified for various reasons, such as changes in federal or state statutory or regulatory authority.

(b) If the federal statutory or regulatory authorities that have significant

implications for state permit programs change, approved states may be required to revise their permit programs. These changes may necessitate submission of a revised application. Such a change at the federal level and resultant state requirements would be made known to the states either in a FEDERAL REGISTER document containing the change or through the appropriate EPA Regional Office.

(c) States that modify their programs must notify the Regional Administrator of the modifications. Program modifications include changes in state statutory or regulatory authority or relevant guidance or shifting of responsibility for the state program within the lead agency or to a new or different state agency or agencies. Changes to the state's permit program, as described in its application which may result in the program becoming inadequate, must be reported to the Regional Administrator. In addition, changes to a state's basic statutory or regulatory authority or guidance which were not part of the state's initial application, but may have a significant impact on the adequacy of the state's permit program, also must be reported to the Regional Administrator.

(d) States must notify the appropriate Regional Administrator of all permit program modifications required in paragraphs (b) and (c) of this section within a time-frame agreed to by the State Director and the Regional Administrator.

(e) The Regional Administrator will review the modifications and determine whether the State Director must submit a revised application. If a revised application is necessary, the Regional Administrator will inform the State Director in writing that a revised application is necessary, specifying the required revisions and establishing a schedule for submission of the revised application.

(f) For all revised municipal solid waste landfill permit program applications, and for all amended applications in the case of partially approved programs, the state must submit to the appropriate Regional Administrator an amended application that addresses those portions of its program that have changed or are being amended. For such revised programs, as well as for those from states seeking EPA approval of permit programs for state regulation of non-municipal, non-hazardous waste disposal units which receive conditionally exempt small quantity generator hazardous waste, the Regional Administrator will make an adequacy determination using the criteria found in § 239.10.

(g) For revised applications that do not incorporate permit programs for additional classifications of Subtitle D regulated facilities and for all amended applications in the case of partially approved programs, the appropriate Regional Administrator shall provide for public participation using the procedures outlined in § 239.10 or, at the Regional Administrator's discretion, using the following procedures.

(1) The Regional Administrator will publish an adequacy determination in the FEDERAL REGISTER summarizing the Agency's decision and the portion(s) of the state permit program affected and providing an opportunity to comment for a period of at least 60 days.

(2) The adequacy determination will become effective 60 days following publication, if no adverse comments are received. If EPA receives comments opposing its adequacy determination, the Regional Administrator will review these comments and publish another FEDERAL REGISTER document responding to public comments and either affirming or revising the initial decision.

§ 239.13 Criteria and procedures for withdrawal of determination of adequacy.

(a) The Regional Administrator may initiate withdrawal of a determination of adequacy when the Regional Administrator has reason to believe that:

(1) A state no longer has an adequate permit program; or

(2) The state no longer has adequate authority to administer and enforce an approved program in accordance with this part.

(b) Upon receipt of substantive information sufficient to indicate that a state program may no longer be adequate, the Regional Administrator

shall inform the state in writing of the information.

(c) If, within 45 days of the state's receipt of the information in paragraph (b) of this section, the state demonstrates to the satisfaction of the Regional Administrator that the state program is adequate (i.e., in compliance with this part), the Regional Administrator shall take no further action toward withdrawal of the determination of adequacy and shall so notify the state and any person(s) who submitted information regarding the adequacy of the state's program and authorities.

(d) If the State Director does not demonstrate the state's compliance with this part to the satisfaction of the Regional Administrator, the Regional Administrator shall list the deficiencies in the program and negotiate with the state a reasonable time for the state to complete such action to correct deficiencies as the Regional Administrator determines necessary. If these negotiations reach an impasse, the Regional Administrator shall establish a time period within which the state must correct any program deficiencies and inform the State Director of the time period in writing.

(e) Within the schedule negotiated by the Regional Administrator and the State Director, or set by the Regional Administrator, the state shall take appropriate action to correct deficiencies and shall file with the Regional Administrator a statement certified by the State Director describing the steps taken to correct the deficiencies.

(f) If the state takes appropriate action to correct deficiencies, the Regional Administrator shall take no further action toward withdrawal of determination of adequacy and shall so notify the state and any person(s) who submitted information regarding the adequacy of the state's permit program. If the state has not demonstrated its compliance with this part to the satisfaction of the Regional Administrator, the Regional Administrator shall inform the State Director and may initiate withdrawal of all or part of the determination of state program adequacy.

(g) The Regional Administrator shall initiate withdrawal of determination of adequacy by publishing the tentative withdrawal of determination of adequacy of the state program in the FEDERAL REGISTER. Notice of the tentative determination must:

(1) Afford the public at least 60 days after the notice to comment on the Regional Administrator's tentative determination;

(2) Include a specific statement of the Regional Administrator's areas of concern and reason to believe the state program may no longer be adequate; and

(3) Indicate that a public hearing will be held by EPA if sufficient public interest is expressed during the comment period or when the Regional Administrator determines that such a hearing might clarify issues involved in the tentative withdrawal determination.

(h) If the Regional Administrator finds, after the public hearing (if any) and review and consideration of all public comments, that the state is in compliance with this part, the withdrawal proceedings shall be terminated and the decision shall be published in the FEDERAL REGISTER. The document must include a statement of the reasons for this determination and a response to significant comments received. If the Regional Administrator finds that the state program is not in compliance with this Part by the date prescribed by the Regional Administrator or any extension approved by the Regional Administrator, a final notice of inadequacy shall be published in the FEDERAL REGISTER declaring the state permit program inadequate to ensure compliance with the relevant Subtitle D federal revised criteria. The document will include a statement of the reasons for this determination and response to significant comments received.

(i) States may seek a determination of adequacy at any time after a determination of inadequacy.

[63 FR 57040, Oct. 23, 1999, as amended at 64 FR 4315, Jan. 28, 1999]

PART 240—GUIDELINES FOR THE THERMAL PROCESSING OF SOLID WASTES

Subpart A—General Provisions

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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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7. Achinger, W. C., and J. J. Giar, Testing manual for solid waste incinerators. [Cincinnati], U.S. Environmental Protection Agency, 1973. [372 p., loose-leaf.] [Open-file report, restricted distribution.]

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PART 241—SOLID WASTES USED AS FUELS OR INGREDIENTS IN COMBUSTION UNITS

Subpart A—General

Sec.

241.1 Purpose.
241.2 Definitions.

Subpart B—Identification of Non-Hazardous Secondary Materials That Are Solid Wastes When Used as Fuels or Ingredients in Combustion Units

241.3 Standards and procedures for identification of non-hazardous secondary materials that are solid wastes when used as fuels or ingredients in combustion units.
241.4 Non-Waste Determinations for Specific Non-Hazardous Secondary Materials When Used as a Fuel.

AUTHORITY: 42 U.S.C. 6903, 6912, 7429.

SOURCE: 76 FR 15549, Mar. 21, 2011, unless otherwise noted.

Subpart A—General

§ 241.1 Purpose.

This part identifies the requirements and procedures for the identification of solid wastes used as fuels or ingredients in combustion units under section 1004 of the Resource Conservation and Recovery Act and section 129 of the Clean Air Act.

§ 241.2 Definitions.

For the purposes of this subpart:

Clean cellulosic biomass means those residuals that are akin to traditional cellulosic biomass, including, but not limited to: Agricultural and forest-derived biomass (e.g., green wood, forest thinnings, clean and unadulterated bark, sawdust, trim, tree harvesting residuals from logging and sawmill materials, hogged fuel, wood pellets, untreated wood pallets); urban wood (e.g., tree trimmings, stumps, and related forest-derived biomass from urban settings); corn stover and other biomass crops used specifically for the production of cellulosic biofuels (e.g., energy cane, other fast growing grasses, byproducts of ethanol natural fermentation processes); bagasse and other crop residues (e.g., peanut shells, vines, orchard trees, hulls, seeds, spent grains, cotton byproducts, corn and peanut production residues, rice milling and grain elevator operation residues); wood collected from forest fire clearance activities, trees and clean wood found in disaster debris, clean biomass from land clearing operations, and clean construction and demolition wood. These fuels are not secondary

materials or solid wastes unless discarded. Clean biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials.

Construction and demolition (C&D) wood means wood that is generated from the processing of debris from construction and demolition activities for the purposes of recovering wood. C&D wood from construction activities results from wood generated during any installation activity or from purchasing more wood than a project ultimately requires. C&D wood from demolition activities results from dismantling buildings and other structures, removing materials during renovation, or from natural disasters.

Contaminants means all pollutants listed in Clean Air Act sections 112(b) or 129(a)(4), with the following three modifications:

(1) The definition includes the elements chlorine, fluorine, nitrogen, and sulfur in cases where non-hazardous secondary materials are burned as a fuel and combustion will result in the formation of hydrogen chloride (HCl), hydrogen fluoride (HF), nitrogen oxides (NO_X), or sulfur dioxide (SO_2). Chlorine, fluorine, nitrogen, and sulfur are not included in the definition in cases where non-hazardous secondary materials are used as an ingredient and not as a fuel.

(2) The definition does not include the following pollutants that are either unlikely to be found in non-hazardous secondary materials and products made from such materials or are adequately measured by other parts of this definition: hydrogen chloride (HCl), chlorine gas (Cl_2), hydrogen fluoride (HF), nitrogen oxides (NO_X), sulfur dioxide (SO_2), fine mineral fibers, particulate matter, coke oven emissions, opacity, diazomethane, white phosphorus, and titanium tetrachloride.

(3) The definition does not include m-cresol, o-cresol, p-cresol, m-xylene, o-xylene, and p-xylene as individual contaminants distinct from the grouped pollutants total cresols and total xylenes.

Contained means the non-hazardous secondary material is stored in a manner that adequately prevents releases or other hazards to human health and the environment considering the nature and toxicity of the non-hazardous secondary material.

Control means the power to direct the policies of the facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate facilities on behalf of a different person as defined in this section shall not be deemed to ''control'' such facilities.

Creosote treated railroad ties means railway support ties treated with a wood preservative containing creosols and phenols and made from coal tar oil.

Established tire collection program means a comprehensive collection system or contractual arrangement that ensures scrap tires are not discarded and are handled as valuable commodities through arrival at the combustion facility. This can include tires that were not abandoned and were received from the general public at collection program events.

Generating facility means all contiguous property owned, leased, or otherwise controlled by the non-hazardous secondary material generator.

Ingredient means a non-hazardous secondary material that is a component in a compound, process or product.

Non-hazardous secondary material means a secondary material that, when discarded, would not be identified as a hazardous waste under Part 261 of this chapter.

Paper recycling residuals means the secondary material generated from the recycling of paper, paperboard and corrugated containers composed primarily of wet strength and short wood fibers that cannot be used to make new paper and paperboard products. Paper recycling residuals that contain more than small amounts of non-fiber materials including polystyrene foam, polyethylene film, other plastics, waxes and adhesives, dyes and inks, clays, starches and other coating and filler material are not paper recycling residuals for purposes of this definition.

Person is defined as an individual, trust, firm, joint stock company, Federal agency, corporation (including government corporation), partnership,

association, State, municipality, commission, political subdivision of a state, or any interstate body.

Power producer means a boiler unit producing electricity for sale to the grid. The term does not include units meeting the definition of electricity generating unit under 40 CFR 63.10042.

Processing means any operations that transform discarded non-hazardous secondary material into a non-waste fuel or non-waste ingredient product. Processing includes, but is not limited to, operations necessary to: Remove or destroy contaminants; significantly improve the fuel characteristics of the material, *e.g.*, sizing or drying the material in combination with other operations; chemically improve the as-fired energy content; or improve the ingredient characteristics. Minimal operations that result only in modifying the size of the material by shredding do not constitute processing for purposes of this definition.

Resinated wood means wood products (containing binders and adhesives) produced by primary and secondary wood products manufacturing. Resinated wood includes residues from the manufacture and use of resinated wood, including materials such as board trim, sander dust, panel trim, and off-specification resinated wood products that do not meet a manufacturing quality or standard.

Secondary material means any material that is not the primary product of a manufacturing or commercial process, and can include post-consumer material, off-specification commercial chemical products or manufacturing chemical intermediates, post-industrial material, and scrap.

Solid waste means the term solid waste as defined in 40 CFR 258.2.

Traditional fuels means materials that are produced as fuels and are unused products that have not been discarded and therefore, are not solid wastes, including: (1) Fuels that have been historically managed as valuable fuel products rather than being managed as waste materials, including fossil fuels (*e.g.*, coal, oil and natural gas), their derivatives (*e.g.*, petroleum coke, bituminous coke, coal tar oil, refinery gas, synthetic fuel, heavy recycle, asphalts, blast furnace gas, recovered gaseous butane, and coke oven gas) and cellulosic biomass (virgin wood); and (2) alternative fuels developed from virgin materials that can now be used as fuel products, including used oil which meets the specifications outlined in 40 CFR 279.11, currently mined coal refuse that previously had not been usable as coal, and clean cellulosic biomass. These fuels are not secondary materials or solid wastes unless discarded.

Within control of the generator means that the non-hazardous secondary material is generated and burned in combustion units at the generating facility; or that such material is generated and burned in combustion units at different facilities, provided the facility combusting the non-hazardous secondary material is controlled by the generator; or both the generating facility and the facility combusting the non-hazardous secondary material are under the control of the same person as defined in this section.

[76 FR 15549, Mar. 21, 2011, as amended at 78 FR 9211, Feb. 7, 2013; 81 FR 6742, Feb. 8, 2016]

Subpart B—Identification of Non-Hazardous Secondary Materials That Are Solid Wastes When Used as Fuels or Ingredients in Combustion Units

§ 241.3 Standards and procedures for identification of non-hazardous secondary materials that are solid wastes when used as fuels or ingredients in combustion units.

(a) Except as provided in paragraph (b) of this section or in § 241.4(a) of this subpart, non-hazardous secondary materials that are combusted are solid wastes, unless a petition is submitted to, and a determination granted by, the EPA pursuant to paragraph (c) of this section. The criteria to be addressed in the petition, as well as the process for making the non-waste determination, are specified in paragraph (c) of this section.

(b) The following non-hazardous secondary materials are not solid wastes when combusted:

(1) Non-hazardous secondary materials used as a fuel in a combustion unit that remain within the control of

the generator and that meet the legitimacy criteria specified in paragraph (d)(1) of this section.

(2) The following non-hazardous secondary materials that have not been discarded and meet the legitimacy criteria specified in paragraph (d)(1) of this section when used in a combustion unit (by the generator or outside the control of the generator):

(i) [Reserved]

(ii) [Reserved]

(3) Non-hazardous secondary materials used as an ingredient in a combustion unit that meet the legitimacy criteria specified in paragraph (d)(2) of this section.

(4) Fuel or ingredient products that are used in a combustion unit, and are produced from the processing of discarded non-hazardous secondary materials and that meet the legitimacy criteria specified in paragraph (d)(1) of this section, with respect to fuels, and paragraph (d)(2) of this section, with respect to ingredients. The legitimacy criteria apply after the non-hazardous secondary material is processed to produce a fuel or ingredient product. Until the discarded non-hazardous secondary material is processed to produce a non-waste fuel or ingredient, the discarded non-hazardous secondary material is considered a solid waste and would be subject to all appropriate federal, state, and local requirements.

(c) The Regional Administrator may grant a non-waste determination that a non-hazardous secondary material that is used as a fuel, which is not managed within the control of the generator, is not discarded and is not a solid waste when combusted. This responsibility may be retained by the Assistant Administrator for the Office of Land and Emergency Management if combustors are located in multiple EPA Regions and the petitioner requests that the Assistant Administrator process the non-waste determination petition. If multiple combustion units are located in one EPA Region, the application must be submitted to the Regional Administrator for that Region. The criteria and process for making such non-waste determinations includes the following:

(1) Submittal of an application to the Regional Administrator for the EPA Region where the facility or facilities are located or the Assistant Administrator for the Office of Land and Emergency Management for a determination that the non-hazardous secondary material, even though it has been transferred to a third party, has not been discarded and is indistinguishable in all relevant aspects from a fuel product. The determination will be based on whether the non-hazardous secondary material that has not been discarded is a legitimate fuel as specified in paragraph (d)(1) of this section and on the following criteria:

(i) Whether market participants treat the non-hazardous secondary material as a product rather than as a solid waste;

(ii) Whether the chemical and physical identity of the non-hazardous secondary material is comparable to commercial fuels;

(iii) Whether the non-hazardous secondary material will be used in a reasonable time frame given the state of the market;

(iv) Whether the constituents in the non-hazardous secondary material are released to the air, water or land from the point of generation to the point just prior to combustion of the secondary material at levels comparable to what would otherwise be released from traditional fuels; and

(v) Other relevant factors.

(2) The Regional Administrator or Assistant Administrator for the Office of Land and Emergency Management will evaluate the application pursuant to the following procedures:

(i) The applicant must submit an application for the non-waste determination addressing the legitimacy criteria in paragraph (d)(1) of this section and the relevant criteria in paragraphs (c)(1)(i) through (v) of this section. In addition, the applicant must also show that the non-hazardous secondary material has not been discarded in the first instance.

(ii) The Regional Administrator or Assistant Administrator for the Office of Land and Emergency Management will evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision will be published in a newspaper advertisement or

radio broadcast in the locality where the facility combusting the non-hazardous secondary material is located, and be made available on the EPA's Web site.

(iii) The Regional Administrator or the Assistant Administrator for the Office of Land and Emergency Management will accept public comments on the tentative decision for 30 days, and may also hold a public hearing upon request or at his/her discretion. The Regional Administrator or the Assistant Administrator for the Office of Land and Emergency Management will issue a final decision after receipt of comments and after a hearing (if any). If a determination is made that the non-hazardous secondary material is a non-waste fuel, it will be retroactive and apply on the date the petition was submitted.

(iv) If a change occurs that affects how a non-hazardous secondary material meets the relevant criteria contained in this paragraph (c) after a formal non-waste determination has been granted, the applicant must re-apply to the Regional Administrator or the Assistant Administrator for the Office of Land and Emergency Management for a formal determination that the non-hazardous secondary material continues to meet the relevant criteria and, thus, is not a solid waste.

(d) Legitimacy criteria for non-hazardous secondary materials.

(1) Legitimacy criteria for non-hazardous secondary materials used as a fuel in combustion units include the following:

(i) The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:

(A) The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;

(B) Where there is an analogous fuel, the non-hazardous secondary material must be managed in a manner consistent with the analogous fuel or otherwise be adequately contained to prevent releases to the environment;

(C) If there is no analogous fuel, the non-hazardous secondary material must be adequately contained so as to prevent releases to the environment;

(ii) The non-hazardous secondary material must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy.

(iii) The non-hazardous secondary material must contain contaminants or groups of contaminants at levels comparable in concentration to or lower than those in traditional fuel(s) that the combustion unit is designed to burn. In determining which traditional fuel(s) a unit is designed to burn, persons may choose a traditional fuel that can be or is burned in the particular type of combustion unit, whether or not the unit is permitted to burn that traditional fuel. In comparing contaminants between traditional fuel(s) and a non-hazardous secondary material, persons can use data for traditional fuel contaminant levels compiled from national surveys, as well as contaminant level data from the specific traditional fuel being replaced. To account for natural variability in contaminant levels, persons can use the full range of traditional fuel contaminant levels, provided such comparisons also consider variability in non-hazardous secondary material contaminant levels. Such comparisons are to be based on a direct comparison of the contaminant levels in both the non-hazardous secondary material and traditional fuel(s) prior to combustion.

(2) Legitimacy criteria for non-hazardous secondary materials used as an ingredient in combustion units include the following:

(i) The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:

(A) The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;

(B) Where there is an analogous ingredient, the non-hazardous secondary material must be managed in a manner consistent with the analogous ingredient or otherwise be adequately contained to prevent releases to the environment;

(C) If there is no analogous ingredient, the non-hazardous secondary material must be adequately contained to prevent releases to the environment;

(ii) The non-hazardous secondary material must provide a useful contribution to the production or manufacturing process. The non-hazardous secondary material provides a useful contribution if it contributes a valuable ingredient to the product or intermediate or is an effective substitute for a commercial product.

(iii) The non-hazardous secondary material must be used to produce a valuable product or intermediate. The product or intermediate is valuable if:

(A) The non-hazardous secondary material is sold to a third party, or

(B) The non-hazardous secondary material is used as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process.

(iv) The non-hazardous secondary material must result in products that contain contaminants at levels that are comparable in concentration to or lower than those found in traditional products that are manufactured without the non-hazardous secondary material.

[76 FR 15549, Mar. 21, 2011, as amended at 78 FR 9212, Feb. 7, 2013; 80 FR 77578, Dec. 15, 2015; 81 FR 6742, Feb. 8, 2016]

§ 241.4 Non-Waste Determinations for Specific Non-Hazardous Secondary Materials When Used as a Fuel.

(a) The following non-hazardous secondary materials are not solid wastes when used as a fuel in a combustion unit:

(1) Scrap tires that are not discarded and are managed under the oversight of established tire collection programs, including tires removed from vehicles and off-specification tires.

(2) Resinated wood.

(3) Coal refuse that has been recovered from legacy piles and processed in the same manner as currently-generated coal refuse.

(4) Dewatered pulp and paper sludges that are not discarded and are generated and burned on-site by pulp and paper mills that burn a significant portion of such materials where such dewatered residuals are managed in a manner that preserves the meaningful heating value of the materials.

(5) Construction and demolition (C&D) wood processed from C&D debris according to best management practices. Combustors of C&D wood must obtain a written certification from C&D processing facilities that the C&D wood has been processed by trained operators in accordance with best management practices. Best management practices for purposes of this categorical listing must include sorting by trained operators that excludes or removes the following materials from the final product fuel: non-wood materials (*e.g.*, polyvinyl chloride and other plastics, drywall, concrete, aggregates, dirt, and asbestos), and wood treated with creosote, pentachlorophenol, chromated copper arsenate, or other copper, chromium, or arsenical preservatives. In addition:

(i) *Positive sorting.* C&D processing facilities that use positive sorting—where operators pick out desirable wood from co-mingled debris—or that receive and process positive sorted C&D wood must either:

(A) Exclude all painted wood (to the extent that only de minimis quantities inherent to processing limitations may remain) from the final product fuel,

(B) Use X-ray Fluorescence to ensure that painted wood included in the final product fuel does not contain lead-based paint, or

(C) Require documentation that a building has been tested for and does not include lead-based paint before accepting demolition debris from that building.

(ii) *Negative sorting.* C&D processing facilities that use negative sorting—where operators remove contaminated or otherwise undesirable materials from co-mingled debris—must remove fines (*i.e.*, small-sized particles that may contain relatively high concentrations of lead and other contaminants) and either:

(A) Remove all painted wood (to the extent that only de minimis quantities inherent to processing limitations may remain),

(B) Use X-ray Fluorescence to detect and remove lead-painted wood, or

(C) Require documentation that a building has been tested for and does not include lead-based paint before accepting demolition debris from that building.

(iii) *Training*. Processors must train operators to exclude or remove the materials as listed in paragraph (a)(5) of this section from the final product fuel. Records of training must include date of training held and must be maintained on-site for a period of three years.

(iv) *Written certification*. A written certification must be obtained by the combustor for every new or modified contract, purchase agreement, or other legally binding document, from each final processor of C&D wood and must include the statement: *the processed C&D wood has been sorted by trained operators in accordance with best management practices*.

(6) Paper recycling residuals generated from the recycling of recovered paper, paperboard and corrugated containers and combusted by paper recycling mills whose boilers are designed to burn solid fuel.

(7) Creosote-treated railroad ties that are processed and then combusted in the following types of units. Processing must include, at a minimum, metal removal and shredding or grinding.

(i) Units designed to burn both biomass and fuel oil as part of normal operations and not solely as part of start-up or shut-down operations, and

(ii) Units at major source pulp and paper mills or power producers subject to 40 CFR part 63, subpart DDDDD, that combust CTRTs and had been designed to burn biomass and fuel oil, but are modified (*e.g.* oil delivery mechanisms are removed) in order to use natural gas instead of fuel oil, as part of normal operations and not solely as part of start-up or shut-down operations. The CTRTs may continue to be combusted as product fuel under this subparagraph only if the following conditions are met, which are intended to ensure that the CTRTs are not being discarded:

(A) CTRTs must be burned in existing (*i.e.* commenced construction prior to April 14, 2014) stoker, bubbling bed, fluidized bed, or hybrid suspension grate boilers; and

(B) CTRTs can comprise no more than 40 percent of the fuel that is used on an annual heat input basis.

(b) Any person may submit a rulemaking petition to the Administrator to identify additional non-hazardous secondary materials to be listed in paragraph (a) of this section. Contents and procedures for the submittal of the petitions include the following:

(1) Each petition must be submitted to the Administrator by certified mail and must include:

(i) The petitioner's name and address;

(ii) A statement of the petitioner's interest in the proposed action;

(iii) A description of the proposed action, including (where appropriate) suggested regulatory language; and

(iv) A statement of the need and justification for the proposed action, including any supporting tests, studies, or other information. Where the non-hazardous secondary material does not meet the legitimacy criteria, the applicant must explain why such non-hazardous secondary material should be considered a non-waste fuel, balancing the legitimacy criteria with other relevant factors.

(2) The Administrator will make a tentative decision to grant or deny a petition and will publish notice of such tentative decision, either in the form of an advanced notice of proposed rulemaking, a proposed rule, or a tentative determination to deny the petition, in the FEDERAL REGISTER for written public comment.

(3) Upon the written request of any interested person, the Administrator may, at its discretion, hold an informal public hearing to consider oral comments on the tentative decision. A person requesting a hearing must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The Administrator may in any case decide on its own motion to hold an informal public hearing.

(4) After evaluating all public comments the Administrator will make a final decision by publishing in the FEDERAL REGISTER a regulatory amendment or a denial of the petition.

(5) The Administrator will grant or deny a petition based on the weight of evidence showing the following:

(i) The non-hazardous secondary material has not been discarded in the first instance and is legitimately used as a fuel in a combustion unit, or if discarded, has been sufficiently processed

into a material that is legitimately used as a fuel.

(ii) Where any one of the legitimacy criteria in § 241.3(d)(1) is not met, that the use of the non-hazardous secondary material is integrally tied to the industrial production process, that the non-hazardous secondary material is functionally the same as the comparable traditional fuel, or other relevant factors as appropriate.

[78 FR 9213, Feb. 7, 2013, as amended by 81 FR 6743, Feb. 8, 2016]

PART 243—GUIDELINES FOR THE STORAGE AND COLLECTION OF RESIDENTIAL, COMMERCIAL, AND INSTITUTIONAL SOLID WASTE

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APPENDIX TO PART 243—RECOMMENDED BIBLIOGRAPHY

AUTHORITY: 42 U.S.C. 6907(a)(3), 6912(a)(1), and 6944(a).

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 12088, 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 12088.

(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.

[41 FR 6769, Feb. 13, 1976, as amended at 64 FR 70606, Dec. 17, 1999]

§ 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.

(e) Waste containers used for the storage of solid waste (or materials which have been separated for recycling) must meet the standards established by the American National Standards Institute (ANSI) for waste containers as follows: Waste Containers—Safety Requirements, 1994, American National Standards Institute, ANSI Z245.30–1994; and Waste Containers—Compatibility Dimensions, 1996, American National Standards Institute, ANSI Z245.60–1996.

(1) The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You may obtain a copy from American National Standards Institute, 11 W. 42nd Street, New York, NY

10036. You may inspect a copy at the Environmental Protection Agency's RCRA Information Center, 1235 Jefferson Davis Highway, Arlington, VA or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal__register/code__of__federal__regulations/ibr__locations.html.*

[41 FR 6769, Feb. 13, 1976, as amended at 64 FR 70606, Dec. 17, 1999; 69 FR 18803, Apr. 9, 2004]

§ 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 used for the collection, storage, and transportation of solid waste (or materials which have been separated for recycling) must meet the standards established by the American National Standards Institute as follows: Mobile Refuse Collection and Compaction Equipment—Safety Requirements, 1992, American National Standards Institute, ANSI Z245.1–1992; and Stationary Compactors—Safety Requirements, 1997, American National Standards Institute, ANSI Z245.2–1997.

(1) The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You may obtain a copy from American National Standards Institute, 11 W. 42nd Street, New York, NY 10036. You may inspect a copy at the Environmental Protection Agency's RCRA Information Center, 1235 Jefferson Davis Highway, Arlington, VA or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

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.

[41 FR 6769, Feb. 13, 1976, as amended at 64 FR 70606, Dec. 17, 1999; 69 FR 18803, Apr. 9, 2004]

§ 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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10. Shuster, K. A., and D. A. Schur. Heuristic routing for solid waste collection vehicles. Environmental Protection Publication SW-113. Washington, U.S. Government Printing Office, 1974. 45 p.

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PART 246—SOURCE SEPARATION FOR MATERIALS RECOVERY GUIDELINES

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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

Sec.
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AUTHORITY: 42 U.S.C. 6912(a) and 6962; E.O. 13423, 72 FR 3919, 3 CFR, 1998 Comp., p. 210.

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;*

Awards and plaques refers to free-standing statues and boardlike products generally used as wall-hangings.

Bike racks are free-standing or anchored units that provide a method for cyclists to secure their bicycles safely.

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;

Blasting grit is a type of industrial abrasive used to shape, cut, sharpen, polish, or finish surfaces and materials.

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;

Carpet cushion, also known as carpet underlay, is padding placed beneath carpet to reduce carpet wear caused by foot traffic or furniture indentation, enhance comfort, and prolong appearance.

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;

Cenospheres, a naturally-occurring waste component of coal fly ash, are very small, inert, lightweight, hollow, ''glass'' spheres composed of silica and alumina and filled with air or other gases.

Channelizers means highly visible barrels or drums that can be positioned to direct traffic through detours;

Compost is a thermophilic converted product with high humus content. Compost can be used as a soil amendment and can also be used to prevent or remediate pollutants in soil, air, and storm water run-off.

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;

Fertilizer made from recovered organic materials is a single or blended substance, made from organic matter such as plant and animal by-products, manure-based or biosolid products, and rock and mineral powders, that contains one or more recognized plant nutrient(s) and is used primarily for its

plant nutrient content and is designed for use or claimed to have value in promoting plant growth.

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;

Flowable fill is a low strength material that is mixed to a wet, flowable slurry and used as an economical fill or backfill material in place of concrete, compacted soils, or sand.

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;

Industrial drums are cylindrical containers used for shipping and storing liquid or solid materials.

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;

Manual-grade strapping refers to straps of material used with transport packaging to hold products in place on pallets or in other methods of commercial, bulk shipment. Strapping can also prevent tampering and pilferage during shipping.

Mats are temporary or semipermanent protective floor coverings used for numerous applications, including home and office carpet protection, car and truck floor board protection, traction on slippery surfaces, cushion from floor hardness, and reduction of injury risk during athletic events.

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;

Modular threshold ramps are ramps used to modify existing door thresholds and other small rises to remove access barriers created by differentials in landing levels.

Nonpressure pipe is pipe used to drain waste and wastewater, to vent gases, and to channel cable and conduit in various applications.

Office furniture is furniture typically used in offices, including seating, desks, storage units, file cabinets, tables, and systems furniture (or ''cubicles'').

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.

Park benches and picnic tables are recreational furniture found in parks, outdoor recreational facilities, and the grounds of office buildings and other facilities.

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;

Plastic lumber landscaping timbers and posts are used to enhance the appearance of and control erosion in parks, highways, housing developments, urban plazas, zoos, and the exteriors of office buildings, military facilities, schools, and other public use areas.

Playground equipment includes many components, like slides, merry-go-rounds, hand rails, etc., and is found in parks, schools, child care facilities, institutions, multiple family dwellings, restaurants, resort and recreational developments, and other public use 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;

Railroad grade crossing surfaces are materials placed between railroad tracks, and between the track and the road at highway and street railroad crossings, to enhance automobile and pedestrian safety.

Rebuilt vehicular parts are vehicular parts that have been remanufactured, reusing parts in their original form.

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;

Roofing materials are materials used to construct a protective cover over a structure to shield its interior from the natural elements.

Shower divider/partition means a water-proof barrier used to provide privacy in public shower facilities;

Signage (including sign posts and supports) is used for identification and directional purposes for public roads and highways, and inside and outside office buildings, museums, parks, and other public places.

Silica fume is a waste byproduct of alloyed metal production.

Soaker hose means a perforated flexible tubing that is used to deliver gentle irrigation to plants;

Sorbents (i.e., absorbents and adsorbents) are materials used to retain liquids and gases in a diverse number of

environmental, industrial, agricultural, medical, and scientific applications. Absorbents incorporate a substance while adsorbents gather substances on their surfaces.

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; 65 FR 3080, Jan. 19, 2000; 69 FR 24038, Apr. 30, 2004; 72 FR 52488, Sept. 14, 2007]

§ 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.

(d) Rebuilt vehicular parts.

[60 FR 21381, May 1, 1995, as amended at 69 FR 24038, Apr. 30, 2004]

§ 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:

(1) Coal fly ash;

(2) Ground granulated blast furnace slag (GGBF);

(3) Cenospheres; or

(4) Silica fume from silicon and ferrosilicon metal production.

(d) Carpet made from polyester fiber made from recovered materials for use in moderate-wear applications such as single-family housing and similar 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.

(h) Carpet cushion made from bonded polyurethane, jute, synthetic fibers, or rubber containing recovered materials.

(i) Flowable fill containing coal fly ash and/or ferrous foundry sands.

(j) Railroad grade crossing surfaces made from cement and concrete containing fly ash, recovered rubber, recovered steel, recovered wood, or recovered plastic.

(k) Modular threshold ramps containing recovered steel, rubber, or aluminum.

(l) Nonpressure pipe containing recovered steel, plastic, or cement.

(m) Roofing materials containing recovered steel, aluminum, fiber, rubber, plastic or plastic composites, or cement.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997; 65 FR 3081, Jan. 19, 2000; 69 FR 24038, Apr. 30, 2004]

§ 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]

§ 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.

(c) Park benches and picnic tables containing recovered steel, aluminum, plastic, or concrete.

(d) Playground equipment containing recovered plastic, steel, or aluminum.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997; 65 FR 3081, Jan. 19, 2000]

§ 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 recovered organic materials.

(c) Garden and soaker hoses containing recovered plastic or rubber.

(d) Lawn and garden edging containing recovered plastic or rubber.

(e) Plastic lumber landscaping timbers and posts containing recovered materials.

(f) Fertilizer made from recovered organic materials.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997; 65 FR 3081, Jan. 19, 2000; 72 FR 52488, Sept. 14, 2007]

§ 247.16 Non-paper office products.

(a) Office recycling containers and office waste receptacles.

(b) Plastic desktop accessories.

(c) Toner cartridges.

(d) Plastic-covered binders containing recovered plastic; chipboard and pressboard binders containing recovered paper; and solid plastic binders containing recovered plastic.

(e) Plastic trash bags.

(f) Printer ribbons.

(g) Plastic envelopes.

(h) Plastic clipboards containing recovered plastic.

(i) Plastic file folders containing recovered plastic.

(j) Plastic clip portfolios containing recovered plastic.

(k) Plastic presentation folders containing recovered plastic.

(l) Office furniture containing recovered steel, aluminum, wood, agricultural fiber, or plastic.

[60 FR 21381, May 1, 1995, as amended at 62 FR 60974, Nov. 13, 1997; 65 FR 3081, Jan. 19, 2000; 69 FR 24038, Apr. 30, 2004]

§ 247.17 Miscellaneous products.

(a) Pallets containing recovered wood, plastic, or paperboard.

(b) Sorbents containing recovered materials for use in oil and solvent clean-ups and as animal bedding.

(c) Industrial drums containing recovered steel, plastic, or paper.

(d) Awards and plaques containing recovered glass, wood, paper, or plastic.

(e) Mats containing recovered rubber and/or plastic.

(f)(1) Non-road signs containing recovered plastic or aluminum and road signs containing recovered aluminum.

(2) Sign supports and posts containing recovered plastic or steel.

(g) Manual-grade strapping containing recovered steel or plastic.

(h) Bike racks containing recovered steel or plastic.

(i) Blasting grit containing recovered steel, coal and metal slag, bottom ash, glass, plastic, fused alumina oxide, or walnut shells.

[62 FR 60974, Nov. 13, 1997, as amended at 65 FR 3081, Jan. 19, 2000; 69 FR 24038, Apr. 30, 2004]

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.

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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

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Sec.

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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 management 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

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AUTHORITY: 42 U.S.C. 6907(a)(3), 6912(a)(1), 6944(a), and 6949a(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. Unless otherwise provided, the criteria in §§ 257.50 through 257.107 are adopted for determining which CCR landfills and CCR surface impoundments pose a reasonable probability of adverse effects on health or the environment under sections 1008(a)(3) and 4004(a) of the Act.

(1) Facilities failing to satisfy any of the criteria in §§ 257.1 through 257.4 or §§ 257.5 through 257.30 or §§ 257.50 through 257.107 are considered open dumps, which are prohibited under section 4005 of the Act.

(2) Practices failing to satisfy any of the criteria in §§ 257.1 through 257.4 or §§ 257.5 through 257.30 or §§ 257.50 through 257.107 constitute open dumping, which is prohibited under section 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.

(12) Except as otherwise specifically provided in subpart D of this part, the criteria in subpart A of this part do not apply to CCR landfills, CCR surface impoundments, and lateral expansions of CCR units, as those terms are defined in subpart D of this part. Such units are instead subject to subpart D of this part.

[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; 80 FR 21467, Apr. 17, 2015]

§ 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.

CCR landfill means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of this subpart, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR.

CCR surface impoundment means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.

Construction and demolition (C&D) landfill means a solid waste disposal facility subject to the requirements of subparts A or B of this part that receives construction and demolition waste and does not receive hazardous waste (defined in § 261.3 of this chapter) or industrial solid waste (defined in § 258.2 of this chapter). Only a C&D landfill that meets the requirements of subpart B of this part may receive conditionally exempt small quantity generator waste (defined in § 261.5 of this chapter). A C&D landfill typically receives any one or more of the following types of solid wastes: roadwork material, excavated material, demolition waste, construction/renovation waste, and site clearance waste.

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. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion. A construction and demolition landfill that receives residential lead-based paint waste and does not receive any other household waste is not a MSWLF unit.

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.

Residential lead-based paint waste means waste containing lead-based paint, which is generated as a result of activities such as abatement, rehabilitation, renovation and remodeling in homes and other residences. The term residential lead-based paint waste includes, but is not limited to, lead-based paint debris, chips, dust, and sludges.

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; 68 FR 36495, June 18, 2003]

§ 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 floodprone 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.

State Director means the chief administrative officer of the lead state agency responsible for implementing the state permit program for 40 CFR part 257, subpart B and 40 CFR part 258 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.

[61 FR 34269, July 1, 1996, as amended at 63 FR 57044, Oct. 23, 1998]

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 groundwater 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 groundwater 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.

§ 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 1×10^{-4} to 1×10^{-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.

§ 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.

§ 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 groundwater;

(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 groundwater.

(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 groundwater 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).

(d) The Director of an approved state program may receive electronic documents only if the state program includes the requirements of 40 CFR Part 3—(Electronic reporting).

[44 FR 53460, Sept. 13, 1979, as amended at 70 FR 59888, Oct. 13, 2005]

Subpart C [Reserved]

Subpart D—Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments

SOURCE: 80 FR 21468, Apr. 17, 2015, unless otherwise noted.

§ 257.50 Scope and purpose.

(a) This subpart establishes minimum national criteria for purposes of determining which solid waste disposal facilities and solid waste management practices do not 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.

(b) This subpart applies to owners and operators of new and existing landfills and surface impoundments, including any lateral expansions of such units that dispose or otherwise engage in solid waste management of CCR generated from the combustion of coal at electric utilities and independent power producers. Unless otherwise provided in this subpart, these requirements also apply to disposal units located off-site of the electric utility or independent power producer. This subpart also applies to any practice that does not meet the definition of a beneficial use of CCR.

(c) This subpart also applies to inactive CCR surface impoundments at active electric utilities or independent power producers, regardless of the fuel currently used at the facility to produce electricity.

(d) This subpart does not apply to CCR landfills that have ceased receiving CCR prior to October 19, 2015.

(e) This subpart does not apply to electric utilities or independent power producers that have ceased producing electricity prior to October 19, 2015.

(f) This subpart does not apply to wastes, including fly ash, bottom ash, boiler slag, and flue gas desulfurization

materials generated at facilities that are not part of an electric utility or independent power producer, such as manufacturing facilities, universities, and hospitals. This subpart also does not apply to fly ash, bottom ash, boiler slag, and flue gas desulfurization materials, generated primarily from the combustion of fuels (including other fossil fuels) other than coal, for the purpose of generating electricity unless the fuel burned consists of more than fifty percent (50%) coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal.

(g) This subpart does not apply to practices that meet the definition of a beneficial use of CCR.

(h) This subpart does not apply to CCR placement at active or abandoned underground or surface coal mines.

(i) This subpart does not apply to municipal solid waste landfills that receive CCR.

§ 257.51 Effective date of this subpart.

The requirements of this subpart take effect on October 19, 2015.

§ 257.52 Applicability of other regulations.

(a) Compliance with the requirements of this subpart does not affect the need for the owner or operator of a CCR landfill, CCR surface impoundment, or lateral expansion of a CCR unit to comply with all other applicable federal, state, tribal, or local laws or other requirements.

(b) Any CCR landfill, CCR surface impoundment, or lateral expansion of a CCR unit continues to be subject to the requirements in §§ 257.3–1, 257.3–2, and 257.3–3.

§ 257.53 Definitions.

The following definitions apply to this subpart. Terms not defined in this section have the meaning given by RCRA.

Acre foot means the volume of one acre of surface area to a depth of one foot.

Active facility or *active electric utilities or independent power producers* means any facility subject to the requirements of this subpart that is in operation on October 19, 2015. An electric utility or independent power producer is in operation if it is generating electricity that is provided to electric power transmission systems or to electric power distribution systems on or after October 19, 2015. An off-site disposal facility is in operation if it is accepting or managing CCR on or after October 19, 2015.

Active life or *in operation* means the period of operation beginning with the initial placement of CCR in the CCR unit and ending at completion of closure activities in accordance with § 257.102.

Active portion means that part of the CCR unit that has received or is receiving CCR or non-CCR waste and that has not completed closure in accordance with § 257.102.

Aquifer means a geologic formation, group of formations, or portion of a formation capable of yielding usable quantities of groundwater to wells or springs.

Area-capacity curves means graphic curves which readily show the reservoir water surface area, in acres, at different elevations from the bottom of the reservoir to the maximum water surface, and the capacity or volume, in acre-feet, of the water contained in the reservoir at various elevations.

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, because of natural or human-induced events, the movement of earthen material at, beneath, or adjacent to the CCR unit 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 fluctuation, block sliding, and rock fall.

Beneficial use of CCR means the CCR meet all of the following conditions:

(1) The CCR must provide a functional benefit;

(2) The CCR must substitute for the use of a virgin material, conserving natural resources that would otherwise need to be obtained through practices, such as extraction;

(3) The use of the CCR must meet relevant product specifications, regulatory standards or design standards when available, and when such standards are not available, the CCR is not used in excess quantities; and

(4) When unencapsulated use of CCR involving placement on the land of 12,400 tons or more in non-roadway applications, the user must demonstrate and keep records, and provide such documentation upon request, that environmental releases to groundwater, surface water, soil and air are comparable to or lower than those from analogous products made without CCR, or that environmental releases to groundwater, surface water, soil and air will be at or below relevant regulatory and health-based benchmarks for human and ecological receptors during use.

Closed means placement of CCR in a CCR unit has ceased, and the owner or operator has completed closure of the CCR unit in accordance with § 257.102 and has initiated post-closure care in accordance with § 257.104.

Coal combustion residuals (CCR) means fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.

CCR fugitive dust means solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than a stack or chimney.

CCR landfill or landfill means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of this subpart, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR.

CCR pile or pile means any non-containerized accumulation of solid, nonflowing CCR that is placed on the land. CCR that is beneficially used off-site is not a CCR pile.

CCR surface impoundment or impoundment means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.

CCR unit means any CCR landfill, CCR surface impoundment, or lateral expansion of a CCR unit, or a combination of more than one of these units, based on the context of the paragraph(s) in which it is used. This term includes both new and existing units, unless otherwise specified.

Dike means an embankment, berm, or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

Displacement means the relative movement of any two sides of a fault measured in any direction.

Disposal means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste as defined in section 1004(27) of the Resource Conservation and Recovery Act into or on any land or water so that such solid waste, or constituent thereof, may enter the environment or be emitted into the air or discharged into any waters, including groundwaters. For purposes of this subpart, disposal does not include the storage or the beneficial use of CCR.

Downstream toe means the junction of the downstream slope or face of the CCR surface impoundment with the ground surface.

Encapsulated beneficial use means a beneficial use of CCR that binds the CCR into a solid matrix that minimizes its mobilization into the surrounding environment.

Existing CCR landfill means a CCR landfill that receives CCR both before and after October 19, 2015, or for which construction commenced prior to October 19, 2015 and receives CCR on or after October 19, 2015. A CCR landfill has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun prior to October 19, 2015.

Existing CCR surface impoundment means a CCR surface impoundment that receives CCR both before and after

October 19, 2015, or for which construction commenced prior to October 19, 2015 and receives CCR on or after October 19, 2015. A CCR surface impoundment has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun prior to October 19, 2015.

Facility means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, disposing, or otherwise conducting solid waste management of CCR. A facility may consist of several treatment, storage, or disposal operational units (*e.g.,* one or more landfills, surface impoundments, or combinations of them).

Factor of safety (Safety factor) means the ratio of the forces tending to resist the failure of a structure to the forces tending to cause such failure as determined by accepted engineering practice.

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.

Flood hydrograph means a graph showing, for a given point on a stream, the discharge, height, or other characteristic of a flood as a function of time.

Freeboard means the vertical distance between the lowest point on the crest of the impoundment dike and the surface of the waste contained therein.

Free liquids means liquids that readily separate from the solid portion of a waste under ambient temperature and pressure.

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

Hazard potential classification means the possible adverse incremental consequences that result from the release of water or stored contents due to failure of the diked CCR surface impoundment or mis-operation of the diked CCR surface impoundment or its appurtenances. The hazardous potential classifications include high hazard potential CCR surface impoundment, significant hazard potential CCR surface impoundment, and low hazard potential CCR surface impoundment, which terms mean:

(1) *High hazard potential CCR surface impoundment* means a diked surface impoundment where failure or mis-operation will probably cause loss of human life.

(2) *Low hazard potential CCR surface impoundment* means a diked surface impoundment where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the surface impoundment owner's property.

(3) *Significant hazard potential CCR surface impoundment* means a diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.

Height means the vertical measurement from the downstream toe of the CCR surface impoundment at its lowest point to the lowest elevation of the crest of the CCR surface impoundment.

Holocene means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch, at 11,700 years before present, to present.

Hydraulic conductivity means the rate at which water can move through a permeable medium (*i.e.*, the coefficient of permeability).

Inactive CCR surface impoundment means a CCR surface impoundment that no longer receives CCR on or after October 19, 2015 and still contains both CCR and liquids on or after October 19, 2015.

Incised CCR surface impoundment means a CCR surface impoundment which is constructed by excavating entirely below the natural ground surface, holds an accumulation of CCR entirely below the adjacent natural ground surface, and does not consist of any constructed diked portion.

Indian country or *Indian lands* 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.

Inflow design flood means the flood hydrograph that is used in the design or modification of the CCR surface impoundments and its appurtenant works.

In operation means the same as *active life*.

Karst terrain means an area where karst topography, with its characteristic erosional 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, dolines, collapse shafts (sinkholes), sinking streams, caves, seeps, large springs, and blind valleys.

Lateral expansion means a horizontal expansion of the waste boundaries of an existing CCR landfill or existing CCR surface impoundment made after October 19, 2015.

Liquefaction factor of safety means the factor of safety (safety factor) determined using analysis under liquefaction conditions.

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.

Maximum horizontal acceleration in lithified earth material means the maximum expected horizontal acceleration at the ground surface as depicted on a seismic hazard map, with a 98% or greater probability that the acceleration will not be exceeded in 50 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

New CCR landfill means a CCR landfill or lateral expansion of a CCR landfill that first receives CCR or commences construction after October 19, 2015. A new CCR landfill has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun after October 19, 2015. Overfills are also considered new CCR landfills.

New CCR surface impoundment means a CCR surface impoundment or lateral expansion of an existing or new CCR surface impoundment that first receives CCR or commences construction after October 19, 2015. A new CCR surface impoundment has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun after October 19, 2015.

Operator means the person(s) responsible for the overall operation of a CCR unit.

Overfill means a new CCR landfill constructed over a closed CCR surface impoundment.

Owner means the person(s) who owns a CCR unit or part of a CCR unit.

Poor foundation conditions mean those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of an existing or new CCR unit. For example, failure to maintain static and seismic factors of safety as required in §§ 257.73(e) and 257.74(e) would cause a poor foundation condition.

Probable maximum flood means the flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in the drainage basin.

Qualified person means a person or persons trained to recognize specific appearances of structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit by visual observation and, if applicable, to monitor instrumentation.

Qualified professional engineer means an individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the specific technical certifications required under this subpart. Professional engineers making these certifications must be currently licensed in the state where the CCR unit(s) is located.

Recognized and generally accepted good engineering practices means engineering maintenance or operation activities based on established codes, widely accepted standards, published technical reports, or a practice widely recommended throughout the industry. Such practices generally detail approved ways to perform specific engineering, inspection, or mechanical integrity activities.

Retrofit means to remove all CCR and contaminated soils and sediments from the CCR surface impoundment, and to ensure the unit complies with the requirements in § 257.72

Representative sample means a sample of a universe or whole (*e.g.*, waste pile, lagoon, and groundwater) which can be expected to exhibit the average properties of the universe or whole. See EPA publication SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Chapter 9 (available at *http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm*) for a discussion and examples of representative samples.

Run-off means any rainwater, leachate, or other liquid that drains over land from any part of a CCR landfill or lateral expansion of a CCR landfill.

Run-on means any rainwater, leachate, or other liquid that drains over land onto any part of a CCR landfill or lateral expansion of a CCR landfill.

Sand and gravel pit or quarry means an excavation for the extraction of aggregate, minerals or metals. The term sand and gravel pit and/or quarry does not include subsurface or surface coal mines.

Seismic factor of safety means the factor of safety (safety factor) determined using analysis under earthquake conditions using the peak ground acceleration for a seismic event with a 2% probability of exceedance in 50 years, equivalent to a return period of approximately 2,500 years, based on the U.S. Geological Survey (USGS) seismic hazard maps for seismic events with this return period for the region where the CCR surface impoundment is located.

Seismic impact zone means an area having a 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10 g in 50 years.

Slope protection means engineered or non-engineered measures installed on the upstream or downstream slope of the CCR surface impoundment to protect the slope against wave action or erosion, including but not limited to rock riprap, wooden pile, or concrete revetments, vegetated wave berms, concrete facing, gabions, geotextiles, or fascines.

Solid waste management or management means the systematic administration of the activities which provide for the collection, source separation, storage, transportation, processing, treatment, or disposal of solid waste.

State means any of the fifty States in addition to 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 lead state agency responsible for implementing the state program regulating disposal in CCR landfills, CCR surface impoundments, and all lateral expansions of a CCR unit.

Static factor of safety means the factor of safety (safety factor) determined using analysis under the long-term, maximum storage pool loading condition, the maximum surcharge pool loading condition, and under the end-of-construction loading condition.

Structural components mean liners, leachate collection and removal systems, final covers, run-on and run-off systems, inflow design flood control systems, and any other component used in the construction and operation of the CCR unit that is necessary to ensure the integrity of the unit and that the contents of the unit are not released into the environment.

Unstable area means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity, including structural components of some or all of the CCR unit that are responsible for preventing releases from such unit. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

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. Upper limit is measured at a point nearest to the natural ground surface to which the aquifer rises during the wet season.

Waste boundary means a vertical surface located at the hydraulically downgradient limit of the CCR unit. The vertical surface extends down into the uppermost aquifer.

[80 FR 21468, Apr. 17, 2015, as amended at 80 FR 37991, July 2, 2015]

LOCATION RESTRICTIONS

§ 257.60 Placement above the uppermost aquifer.

(a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must be constructed with a base that is located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer, or must demonstrate that there will not be an intermittent, recurring, or sustained hydraulic connection between any portion of the base of the CCR unit and the uppermost aquifer due to normal fluctuations in groundwater elevations (including the seasonal high water table). The owner or operator must demonstrate by the dates specified in paragraph (c) of this section that the CCR unit meets the minimum requirements for placement above the uppermost aquifer.

(b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.

(c) The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this section by the date specified in either paragraph (c)(1) or (2) of this section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (c)(1) of this section is subject to the requirements of § 257.101(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the internet requirements specified in § 257.107(e).

§ 257.61 Wetlands.

(a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located in wetlands, as defined in § 232.2 of this chapter, unless

the owner or operator demonstrates by the dates specified in paragraph (c) of this section that the CCR unit meets the requirements of paragraphs (a)(1) through (5) of this section.

(1) Where applicable under section 404 of the Clean Water Act or applicable state wetlands laws, a clear and objective rebuttal of the presumption that an alternative to the CCR unit is reasonably available that does not involve wetlands.

(2) The construction and operation of the CCR unit will not cause or contribute to any of the following:

(i) A violation of any applicable state or federal water quality standard;

(ii) A violation of 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) A violation of any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary.

(3) The CCR unit will not cause or contribute to significant degradation of wetlands by addressing all of the following factors:

(i) Erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the CCR unit;

(ii) Erosion, stability, and migration potential of dredged and fill materials used to support the CCR unit;

(iii) The volume and chemical nature of the CCR;

(iv) Impacts on fish, wildlife, and other aquatic resources and their habitat from release of CCR;

(v) The potential effects of catastrophic release of CCR 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 reasonable as required by paragraphs (a)(1) through (3) of this section, then minimizing unavoidable impacts to the maximum extent reasonable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and reasonable 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 reasoned determination with respect to the demonstrations in paragraphs (a)(1) through (4) of this section.

(b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.

(c) The owner or operator of the CCR unit must complete the demonstrations required by paragraph (a) of this section by the date specified in either paragraph (c)(1) or (2) of this section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (c)(1) of this section is subject to the requirements of § 257.101(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstrations showing compliance with the requirements of paragraph (a) of

this section is prohibited from placing CCR in the CCR unit.

(d) The owner or operator must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the Internet requirements specified in § 257.107(e).

§ 257.62 Fault areas.

(a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located within 60 meters (200 feet) of the outermost damage zone of a fault that has had displacement in Holocene time unless the owner or operator demonstrates by the dates specified in paragraph (c) of this section that an alternative setback distance of less than 60 meters (200 feet) will prevent damage to the structural integrity of the CCR unit.

(b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.

(c) The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this section by the date specified in either paragraph (c)(1) or (2) of this section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (c)(1) of this section is subject to the requirements of § 257.101(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the Internet requirements specified in § 257.107(e).

§ 257.63 Seismic impact zones.

(a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located in seismic impact zones unless the owner or operator demonstrates by the dates specified in paragraph (c) of this section that all structural components including liners, leachate collection and removal systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

(b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.

(c) The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this section by the date specified in either paragraph (c)(1) or (2) of this section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment who

fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (c)(1) of this section is subject to the requirements of § 257.101(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the Internet requirements specified in § 257.107(e).

§ 257.64 Unstable areas.

(a) An existing or new CCR landfill, existing or new CCR surface impoundment, or any lateral expansion of a CCR unit must not be located in an unstable area unless the owner or operator demonstrates by the dates specified in paragraph (d) of this section that recognized and generally accepted good engineering practices have been incorporated into the design of the CCR unit to ensure that the integrity of the structural components of the CCR unit will not be disrupted.

(b) The owner or operator must consider all of 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).

(c) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.

(d) The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this section by the date specified in either paragraph (d)(1) or (2) of this section.

(1) For an existing CCR landfill or existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment or existing CCR landfill who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (d)(1) of this section is subject to the requirements of § 257.101(b)(1) or (d)(1), respectively.

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.

(e) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the Internet requirements specified in § 257.107(e).

DESIGN CRITERIA

§ 257.70 Design criteria for new CCR landfills and any lateral expansion of a CCR landfill.

(a)(1) New CCR landfills and any lateral expansion of a CCR landfill must be designed, constructed, operated, and maintained with either a composite liner that meets the requirements of paragraph (b) of this section or an alternative composite liner that meets the requirements in paragraph (c) of this section, and a leachate collection and removal system that meets the requirements of paragraph (d) of this section.

(2) Prior to construction of an overfill the underlying surface impoundment must meet the requirements of § 257.102(d).

(b) A *composite liner* must consist of two components; the upper component consisting of, at a minimum, a 30-mil geomembrane liner (GM), and the lower component consisting of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} centimeters per second (cm/sec). GM components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. The GM or upper liner component must be installed in direct and uniform contact with the compacted soil or lower liner component. The composite liner must be:

(1) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the CCR or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(2) Constructed of materials that provide appropriate shear resistance of the upper and lower component interface to prevent sliding of the upper component including on slopes;

(3) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(4) Installed to cover all surrounding earth likely to be in contact with the CCR or leachate.

(c) If the owner or operator elects to install an alternative composite liner, all of the following requirements must be met:

(1) An *alternative composite liner* must consist of two components; the upper component consisting of, at a minimum, a 30-mil GM, and a lower component, that is not a geomembrane, with a liquid flow rate no greater than the liquid flow rate of two feet of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. GM components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. If the lower component of the alternative liner is compacted soil, the GM must be installed in direct and uniform contact with the compacted soil.

(2) The owner or operator must obtain certification from a qualified professional engineer that the liquid flow rate through the lower component of the alternative composite liner is no greater than the liquid flow rate through two feet of compacted soil with a hydraulic conductivity of 1×10^{-7} cm/sec. The hydraulic conductivity for the two feet of compacted soil used in the comparison shall be no greater than 1×10^{-7} cm/sec. The hydraulic conductivity of any alternative to the two feet of compacted soil must be determined using recognized and generally accepted methods. The liquid flow rate comparison must be made using Equation 1 of this section, which is derived from Darcy's Law for gravity flow through porous media.

$$\text{(Eq. 1)} \qquad \frac{Q}{A} = q = k\left(\frac{h}{t} + 1\right)$$

Where,

Q = flow rate (cubic centimeters/second);

A = surface area of the liner (squared centimeters);

q = flow rate per unit area (cubic centimeters/second/squared centimeter);

k = hydraulic conductivity of the liner (centimeters/second);

h = hydraulic head above the liner (centimeters); and

t = thickness of the liner (centimeters).

(3) The alternative composite liner must meet the requirements specified in paragraphs (b)(1) through (4) of this section.

(d) The *leachate collection and removal system* must be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and post-closure care period. The leachate collection and removal system must be:

(1) Designed and operated to maintain less than a 30-centimeter depth of leachate over the composite liner or alternative composite liner;

(2) Constructed of materials that are chemically resistant to the CCR and any non-CCR waste managed in the CCR unit and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying waste, waste cover materials, and equipment used at the CCR unit; and

(3) Designed and operated to minimize clogging during the active life and post-closure care period.

(e) Prior to construction of the CCR landfill or any lateral expansion of a CCR landfill, the owner or operator must obtain a certification from a qualified professional engineer that the design of the composite liner (or, if applicable, alternative composite liner) and the leachate collection and removal system meets the requirements of this section.

(f) Upon completion of construction of the CCR landfill or any lateral expansion of a CCR landfill, the owner or operator must obtain a certification from a qualified professional engineer that the composite liner (or, if applicable, alternative composite liner) and the leachate collection and removal system has been constructed in accordance with the requirements of this section.

(g) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in §257.105(f), the notification requirements specified in §257.106(f), and the Internet requirements specified in §257.107(f).

§257.71 Liner design criteria for existing CCR surface impoundments.

(a)(1) No later than October 17, 2016, the owner or operator of an existing CCR surface impoundment must document whether or not such unit was constructed with any one of the following:

(i) A liner consisting of a minimum of two feet of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec;

(ii) A composite liner that meets the requirements of §257.70(b); or

(iii) An alternative composite liner that meets the requirements of §257.70(c).

(2) The hydraulic conductivity of the compacted soil must be determined using recognized and generally accepted methods.

(3) An existing CCR surface impoundment is considered to be an existing unlined CCR surface impoundment if either:

(i) The owner or operator of the CCR unit determines that the CCR unit is not constructed with a liner that meets the requirements of paragraphs (a)(1)(i), (ii), or (iii) of this section; or

(ii) The owner or operator of the CCR unit fails to document whether the CCR unit was constructed with a liner that meets the requirements of paragraphs (a)(1)(i), (ii), or (iii) of this section.

(4) All existing unlined CCR surface impoundments are subject to the requirements of §257.101(a).

(b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer attesting that the documentation as to whether a CCR unit meets the requirements of paragraph (a) of this section is accurate.

(c) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in §257.105(f), the notification requirements specified in §257.106(f), and the Internet requirements specified in §257.107(f).

§257.72 Liner design criteria for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment.

(a) New CCR surface impoundments and lateral expansions of existing and new CCR surface impoundments must be designed, constructed, operated, and maintained with either a composite liner or an alternative composite liner that meets the requirements of §257.70(b) or (c).

(b) Any liner specified in this section must be installed to cover all surrounding earth likely to be in contact with CCR. Dikes shall not be constructed on top of the composite liner.

(c) Prior to construction of the CCR surface impoundment or any lateral expansion of a CCR surface impoundment, the owner or operator must obtain certification from a qualified professional engineer that the design of the composite liner or, if applicable, the design of an alternative composite liner complies with the requirements of this section.

(d) Upon completion, the owner or operator must obtain certification from a qualified professional engineer that the composite liner or if applicable, the alternative composite liner has been constructed in accordance with the requirements of this section.

(e) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(f), the notification requirements specified in § 257.106(f), and the Internet requirements specified in § 257.107(f).

§ 257.73 Structural integrity criteria for existing CCR surface impoundments.

(a) The requirements of paragraphs (a)(1) through (4) of this section apply to all existing CCR surface impoundments, except for those existing CCR surface impoundments that are incised CCR units. If an incised CCR surface impoundment is subsequently modified (*e.g.*, a dike is constructed) such that the CCR unit no longer meets the definition of an incised CCR unit, the CCR unit is subject to the requirements of paragraphs (a)(1) through (4) of this section.

(1) No later than, December 17, 2015, the owner or operator of the CCR unit must place on or immediately adjacent to the CCR unit a permanent identification marker, at least six feet high showing the identification number of the CCR unit, if one has been assigned by the state, the name associated with the CCR unit and the name of the owner or operator of the CCR unit.

(2) *Periodic hazard potential classification assessments.* (i) The owner or operator of the CCR unit must conduct initial and periodic hazard potential classification assessments of the CCR unit according to the timeframes specified in paragraph (f) of this section. The owner or operator must document the hazard potential classification of each CCR unit as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment, or a low hazard potential CCR surface impoundment. The owner or operator must also document the basis for each hazard potential classification.

(ii) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial hazard potential classification and each subsequent periodic classification specified in paragraph (a)(2)(i) of this section was conducted in accordance with the requirements of this section.

(3) *Emergency Action Plan (EAP)*—(i) *Development of the plan.* No later than April 17, 2017, the owner or operator of a CCR unit determined to be either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment under paragraph (a)(2) of this section must prepare and maintain a written EAP. At a minimum, the EAP must:

(A) Define the events or circumstances involving the CCR unit that represent a safety emergency, along with a description of the procedures that will be followed to detect a safety emergency in a timely manner;

(B) Define responsible persons, their respective responsibilities, and notification procedures in the event of a safety emergency involving the CCR unit;

(C) Provide contact information of emergency responders;

(D) Include a map which delineates the downstream area which would be affected in the event of a CCR unit failure and a physical description of the CCR unit; and

(E) Include provisions for an annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders.

(ii) *Amendment of the plan.* (A) The owner or operator of a CCR unit subject to the requirements of paragraph

(a)(3)(i) of this section may amend the written EAP at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(f)(6). The owner or operator must amend the written EAP whenever there is a change in conditions that would substantially affect the EAP in effect.

(B) The written EAP must be evaluated, at a minimum, every five years to ensure the information required in paragraph (a)(3)(i) of this section is accurate. As necessary, the EAP must be updated and a revised EAP placed in the facility's operating record as required by § 257.105(f)(6).

(iii) *Changes in hazard potential classification.* (A) If the owner or operator of a CCR unit determines during a periodic hazard potential assessment that the CCR unit is no longer classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit is no longer subject to the requirement to prepare and maintain a written EAP beginning on the date the periodic hazard potential assessment documentation is placed in the facility's operating record as required by § 257.105(f)(5).

(B) If the owner or operator of a CCR unit classified as a low hazard potential CCR surface impoundment subsequently determines that the CCR unit is properly re-classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit must prepare a written EAP for the CCR unit as required by paragraph (a)(3)(i) of this section within six months of completing such periodic hazard potential assessment.

(iv) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the written EAP, and any subsequent amendment of the EAP, meets the requirements of paragraph (a)(3) of this section.

(v) *Activation of the EAP.* The EAP must be implemented once events or circumstances involving the CCR unit that represent a safety emergency are detected, including conditions identified during periodic structural stability assessments, annual inspections, and inspections by a qualified person.

(4) The CCR unit and surrounding areas must be designed, constructed, operated, and maintained with vegetated slopes of dikes not to exceed a height of 6 inches above the slope of the dike, except for slopes which are protected with an alternate form(s) of slope protection.

(b) The requirements of paragraphs (c) through (e) of this section apply to an owner or operator of an existing CCR surface impoundment that either:

(1) Has a height of five feet or more and a storage volume of 20 acre-feet or more; or

(2) Has a height of 20 feet or more.

(c)(1) No later than October 17, 2016, the owner or operator of the CCR unit must compile a history of construction, which shall contain, to the extent feasible, the information specified in paragraphs (c)(1)(i) through (xi) of this section.

(i) The name and address of the person(s) owning or operating the CCR unit; the name associated with the CCR unit; and the identification number of the CCR unit if one has been assigned by the state.

(ii) The location of the CCR unit identified on the most recent U.S. Geological Survey (USGS) 7½ minute or 15 minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.

(iii) A statement of the purpose for which the CCR unit is being used.

(iv) The name and size in acres of the watershed within which the CCR unit is located.

(v) A description of the physical and engineering properties of the foundation and abutment materials on which the CCR unit is constructed.

(vi) A statement of the type, size, range, and physical and engineering properties of the materials used in constructing each zone or stage of the CCR unit; the method of site preparation and construction of each zone of the CCR unit; and the approximate dates of construction of each successive stage of construction of the CCR unit.

(vii) At a scale that details engineering structures and appurtenances relevant to the design, construction, operation, and maintenance of the CCR unit, detailed dimensional drawings of the CCR unit, including a plan view and cross sections of the length and width of the CCR unit, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection, in addition to the normal operating pool surface elevation and the maximum pool surface elevation following peak discharge from the inflow design flood, the expected maximum depth of CCR within the CCR surface impoundment, and any identifiable natural or manmade features that could adversely affect operation of the CCR unit due to malfunction or mis-operation.

(viii) A description of the type, purpose, and location of existing instrumentation.

(ix) Area-capacity curves for the CCR unit.

(x) A description of each spillway and diversion design features and capacities and calculations used in their determination.

(xi) The construction specifications and provisions for surveillance, maintenance, and repair of the CCR unit.

(xii) Any record or knowledge of structural instability of the CCR unit.

(2) *Changes to the history of construction.* If there is a significant change to any information compiled under paragraph (c)(1) of this section, the owner or operator of the CCR unit must update the relevant information and place it in the facility's operating record as required by § 257.105(f)(9).

(d) *Periodic structural stability assessments.* (1) The owner or operator of the CCR unit must conduct initial and periodic structural stability assessments and document whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. The assessment must, at a minimum, document whether the CCR unit has been designed, constructed, operated, and maintained with:

(i) Stable foundations and abutments;

(ii) Adequate slope protection to protect against surface erosion, wave action, and adverse effects of sudden drawdown;

(iii) Dikes mechanically compacted to a density sufficient to withstand the range of loading conditions in the CCR unit;

(iv) Vegetated slopes of dikes and surrounding areas not to exceed a height of six inches above the slope of the dike, except for slopes which have an alternate form or forms of slope protection;

(v) A single spillway or a combination of spillways configured as specified in paragraph (d)(1)(v)(A) of this section. The combined capacity of all spillways must be designed, constructed, operated, and maintained to adequately manage flow during and following the peak discharge from the event specified in paragraph (d)(1)(v)(B) of this section.

(A) All spillways must be either:

(*1*) Of non-erodible construction and designed to carry sustained flows; or

(*2*) Earth- or grass-lined and designed to carry short-term, infrequent flows at non-erosive velocities where sustained flows are not expected.

(B) The combined capacity of all spillways must adequately manage flow during and following the peak discharge from a:

(*1*) Probable maximum flood (PMF) for a high hazard potential CCR surface impoundment; or

(*2*) 1000-year flood for a significant hazard potential CCR surface impoundment; or

(*3*) 100-year flood for a low hazard potential CCR surface impoundment.

(vi) Hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit that maintain structural integrity and are free of significant deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the hydraulic structure; and

(vii) For CCR units with downstream slopes which can be inundated by the pool of an adjacent water body, such as a river, stream or lake, downstream

slopes that maintain structural stability during low pool of the adjacent water body or sudden drawdown of the adjacent water body.

(2) The periodic assessment described in paragraph (d)(1) of this section must identify any structural stability deficiencies associated with the CCR unit in addition to recommending corrective measures. If a deficiency or a release is identified during the periodic assessment, the owner or operator unit must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(3) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment was conducted in accordance with the requirements of this section.

(e) *Periodic safety factor assessments.* (1) The owner or operator must conduct an initial and periodic safety factor assessments for each CCR unit and document whether the calculated factors of safety for each CCR unit achieve the minimum safety factors specified in paragraphs (e)(1)(i) through (iv) of this section for the critical cross section of the embankment. The critical cross section is the cross section anticipated to be the most susceptible of all cross sections to structural failure based on appropriate engineering considerations, including loading conditions. The safety factor assessments must be supported by appropriate engineering calculations.

(i) The calculated static factor of safety under the long-term, maximum storage pool loading condition must equal or exceed 1.50.

(ii) The calculated static factor of safety under the maximum surcharge pool loading condition must equal or exceed 1.40.

(iii) The calculated seismic factor of safety must equal or exceed 1.00.

(iv) For dikes constructed of soils that have susceptibility to liquefaction, the calculated liquefaction factor of safety must equal or exceed 1.20.

(2) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment specified in paragraph (e)(1) of this section meets the requirements of this section.

(f) *Timeframes for periodic assessments*—(1) *Initial assessments.* Except as provided by paragraph (f)(2) of this section, the owner or operator of the CCR unit must complete the initial assessments required by paragraphs (a)(2), (d), and (e) of this section no later than October 17, 2016. The owner or operator has completed an initial assessment when the owner or operator has placed the assessment required by paragraphs (a)(2), (d), and (e) of this section in the facility's operating record as required by § 257.105(f)(5), (10), and (12).

(2) *Use of a previously completed assessment(s) in lieu of the initial assessment(s).* The owner or operator of the CCR unit may elect to use a previously completed assessment to serve as the initial assessment required by paragraphs (a)(2), (d), and (e) of this section provided that the previously completed assessment(s):

(i) Was completed no earlier than 42 months prior to October 17, 2016; and

(ii) Meets the applicable requirements of paragraphs (a)(2), (d), and (e) of this section.

(3) *Frequency for conducting periodic assessments.* The owner or operator of the CCR unit must conduct and complete the assessments required by paragraphs (a)(2), (d), and (e) of this section every five years. The date of completing the initial assessment is the basis for establishing the deadline to complete the first subsequent assessment. If the owner or operator elects to use a previously completed assessment(s) in lieu of the initial assessment as provided by paragraph (f)(2) of this section, the date of the report for the previously completed assessment is the basis for establishing the deadline to complete the first subsequent assessment. The owner or operator may complete any required assessment prior to the required deadline provided the owner or operator places the completed assessment(s) into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent assessments is based on the date of completing the previous assessment. For purposes of this paragraph (f)(3), the

owner or operator has completed an assessment when the relevant assessment(s) required by paragraphs (a)(2), (d), and (e) of this section has been placed in the facility's operating record as required by § 257.105(f)(5), (10), and (12).

(4) *Closure of the CCR unit.* An owner or operator of a CCR unit who either fails to complete a timely safety factor assessment or fails to demonstrate minimum safety factors as required by paragraph (e) of this section is subject to the requirements of § 257.101(b)(2).

(g) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(f), the notification requirements specified in § 257.106(f), and the internet requirements specified in § 257.107(f).

§ 257.74 Structural integrity criteria for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment.

(a) The requirements of paragraphs (a)(1) through (4) of this section apply to all new CCR surface impoundments and any lateral expansion of a CCR surface impoundment, except for those new CCR surface impoundments that are incised CCR units. If an incised CCR surface impoundment is subsequently modified (*e.g.*, a dike is constructed) such that the CCR unit no longer meets the definition of an incised CCR unit, the CCR unit is subject to the requirements of paragraphs (a)(1) through (4) of this section.

(1) No later than the initial receipt of CCR, the owner or operator of the CCR unit must place on or immediately adjacent to the CCR unit a permanent identification marker, at least six feet high showing the identification number of the CCR unit, if one has been assigned by the state, the name associated with the CCR unit and the name of the owner or operator of the CCR unit.

(2) *Periodic hazard potential classification assessments.* (i) The owner or operator of the CCR unit must conduct initial and periodic hazard potential classification assessments of the CCR unit according to the timeframes specified in paragraph (f) of this section. The owner or operator must document the hazard potential classification of each CCR unit as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment, or a low hazard potential CCR surface impoundment. The owner or operator must also document the basis for each hazard potential classification.

(ii) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial hazard potential classification and each subsequent periodic classification specified in paragraph (a)(2)(i) of this section was conducted in accordance with the requirements of this section.

(3) *Emergency Action Plan (EAP)*—(i) *Development of the plan.* Prior to the initial receipt of CCR in the CCR unit, the owner or operator of a CCR unit determined to be either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment under paragraph (a)(2) of this section must prepare and maintain a written EAP. At a minimum, the EAP must:

(A) Define the events or circumstances involving the CCR unit that represent a safety emergency, along with a description of the procedures that will be followed to detect a safety emergency in a timely manner;

(B) Define responsible persons, their respective responsibilities, and notification procedures in the event of a safety emergency involving the CCR unit;

(C) Provide contact information of emergency responders;

(D) Include a map which delineates the downstream area which would be affected in the event of a CCR unit failure and a physical description of the CCR unit; and

(E) Include provisions for an annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders.

(ii) *Amendment of the plan.* (A) The owner or operator of a CCR unit subject to the requirements of paragraph (a)(3)(i) of this section may amend the written EAP at any time provided the revised plan is placed in the facility's operating record as required by

§ 257.105(f)(6). The owner or operator must amend the written EAP whenever there is a change in conditions that would substantially affect the EAP in effect.

(B) The written EAP must be evaluated, at a minimum, every five years to ensure the information required in paragraph (a)(3)(i) of this section is accurate. As necessary, the EAP must be updated and a revised EAP placed in the facility's operating record as required by § 257.105(f)(6).

(iii) *Changes in hazard potential classification*. (A) If the owner or operator of a CCR unit determines during a periodic hazard potential assessment that the CCR unit is no longer classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit is no longer subject to the requirement to prepare and maintain a written EAP beginning on the date the periodic hazard potential assessment documentation is placed in the facility's operating record as required by § 257.105(f)(5).

(B) If the owner or operator of a CCR unit classified as a low hazard potential CCR surface impoundment subsequently determines that the CCR unit is properly re-classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit must prepare a written EAP for the CCR unit as required by paragraph (a)(3)(i) of this section within six months of completing such periodic hazard potential assessment.

(iv) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the written EAP, and any subsequent amendment of the EAP, meets the requirements of paragraph (a)(3) of this section.

(v) *Activation of the EAP*. The EAP must be implemented once events or circumstances involving the CCR unit that represent a safety emergency are detected, including conditions identified during periodic structural stability assessments, annual inspections, and inspections by a qualified person.

(4) The CCR unit and surrounding areas must be designed, constructed, operated, and maintained with vegetated slopes of dikes not to exceed a height of six inches above the slope of the dike, except for slopes which are protected with an alternate form(s) of slope protection.

(b) The requirements of paragraphs (c) through (e) of this section apply to an owner or operator of a new CCR surface impoundment and any lateral expansion of a CCR surface impoundment that either:

(1) Has a height of five feet or more and a storage volume of 20 acre-feet or more; or

(2) Has a height of 20 feet or more.

(c)(1) No later than the initial receipt of CCR in the CCR unit, the owner or operator unit must compile the design and construction plans for the CCR unit, which must include, to the extent feasible, the information specified in paragraphs (c)(1)(i) through (xi) of this section.

(i) The name and address of the person(s) owning or operating the CCR unit; the name associated with the CCR unit; and the identification number of the CCR unit if one has been assigned by the state.

(ii) The location of the CCR unit identified on the most recent U.S. Geological Survey (USGS) 7½ minute or 15 minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.

(iii) A statement of the purpose for which the CCR unit is being used.

(iv) The name and size in acres of the watershed within which the CCR unit is located.

(v) A description of the physical and engineering properties of the foundation and abutment materials on which the CCR unit is constructed.

(vi) A statement of the type, size, range, and physical and engineering properties of the materials used in constructing each zone or stage of the CCR unit; the method of site preparation and construction of each zone of the CCR unit; and the dates of construction of each successive stage of construction of the CCR unit.

(vii) At a scale that details engineering structures and appurtenances relevant to the design, construction, operation, and maintenance of the CCR unit, detailed dimensional drawings of the CCR unit, including a plan view and cross sections of the length and width of the CCR unit, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection, in addition to the normal operating pool surface elevation and the maximum pool surface elevation following peak discharge from the inflow design flood, the expected maximum depth of CCR within the CCR surface impoundment, and any identifiable natural or manmade features that could adversely affect operation of the CCR unit due to malfunction or mis-operation.

(viii) A description of the type, purpose, and location of existing instrumentation.

(ix) Area-capacity curves for the CCR unit.

(x) A description of each spillway and diversion design features and capacities and calculations used in their determination.

(xi) The construction specifications and provisions for surveillance, maintenance, and repair of the CCR unit.

(xii) Any record or knowledge of structural instability of the CCR unit.

(2) *Changes in the design and construction.* If there is a significant change to any information compiled under paragraph (c)(1) of this section, the owner or operator of the CCR unit must update the relevant information and place it in the facility's operating record as required by § 257.105(f)(13).

(d) *Periodic structural stability assessments.* (1) The owner or operator of the CCR unit must conduct initial and periodic structural stability assessments and document whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. The assessment must, at a minimum, document whether the CCR unit has been designed, constructed, operated, and maintained with:

(i) Stable foundations and abutments;

(ii) Adequate slope protection to protect against surface erosion, wave action, and adverse effects of sudden drawdown;

(iii) Dikes mechanically compacted to a density sufficient to withstand the range of loading conditions in the CCR unit;

(iv) Vegetated slopes of dikes and surrounding areas not to exceed a height of six inches above the slope of the dike, except for slopes which have an alternate form or forms of slope protection;

(v) A single spillway or a combination of spillways configured as specified in paragraph (d)(1)(v)(A) of this section. The combined capacity of all spillways must be designed, constructed, operated, and maintained to adequately manage flow during and following the peak discharge from the event specified in paragraph (d)(1)(v)(B) of this section.

(A) All spillways must be either:

(*1*) Of non-erodible construction and designed to carry sustained flows; or

(*2*) Earth- or grass-lined and designed to carry short-term, infrequent flows at non-erosive velocities where sustained flows are not expected.

(B) The combined capacity of all spillways must adequately manage flow during and following the peak discharge from a:

(*1*) Probable maximum flood (PMF) for a high hazard potential CCR surface impoundment; or

(*2*) 1000-year flood for a significant hazard potential CCR surface impoundment; or

(*3*) 100-year flood for a low hazard potential CCR surface impoundment.

(vi) Hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit that maintain structural integrity and are free of significant deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the hydraulic structure; and

(vii) For CCR units with downstream slopes which can be inundated by the pool of an adjacent water body, such as a river, stream or lake, downstream

slopes that maintain structural stability during low pool of the adjacent water body or sudden drawdown of the adjacent water body.

(2) The periodic assessment described in paragraph (d)(1) of this section must identify any structural stability deficiencies associated with the CCR unit in addition to recommending corrective measures. If a deficiency or a release is identified during the periodic assessment, the owner or operator unit must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(3) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment was conducted in accordance with the requirements of this section.

(e) *Periodic safety factor assessments.* (1) The owner or operator must conduct an initial and periodic safety factor assessments for each CCR unit and document whether the calculated factors of safety for each CCR unit achieve the minimum safety factors specified in paragraphs (e)(1)(i) through (v) of this section for the critical cross section of the embankment. The critical cross section is the cross section anticipated to be the most susceptible of all cross sections to structural failure based on appropriate engineering considerations, including loading conditions. The safety factor assessments must be supported by appropriate engineering calculations.

(i) The calculated static factor of safety under the end-of-construction loading condition must equal or exceed 1.30. The assessment of this loading condition is only required for the initial safety factor assessment and is not required for subsequent assessments.

(ii) The calculated static factor of safety under the long-term, maximum storage pool loading condition must equal or exceed 1.50.

(iii) The calculated static factor of safety under the maximum surcharge pool loading condition must equal or exceed 1.40.

(iv) The calculated seismic factor of safety must equal or exceed 1.00.

(v) For dikes constructed of soils that have susceptibility to liquefaction, the calculated liquefaction factor of safety must equal or exceed 1.20.

(2) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment specified in paragraph (e)(1) of this section meets the requirements of this section.

(f) *Timeframes for periodic assessments*—(1) *Initial assessments.* Except as provided by paragraph (f)(2) of this section, the owner or operator of the CCR unit must complete the initial assessments required by paragraphs (a)(2), (d), and (e) of this section prior to the initial receipt of CCR in the unit. The owner or operator has completed an initial assessment when the owner or operator has placed the assessment required by paragraphs (a)(2), (d), and (e) of this section in the facility's operating record as required by § 257.105(f)(5), (10), and (12).

(2) *Frequency for conducting periodic assessments.* The owner or operator of the CCR unit must conduct and complete the assessments required by paragraphs (a)(2), (d), and (e) of this section every five years. The date of completing the initial assessment is the basis for establishing the deadline to complete the first subsequent assessment. The owner or operator may complete any required assessment prior to the required deadline provided the owner or operator places the completed assessment(s) into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent assessments is based on the date of completing the previous assessment. For purposes of this paragraph (f)(2), the owner or operator has completed an assessment when the relevant assessment(s) required by paragraphs (a)(2), (d), and (e) of this section has been placed in the facility's operating record as required by § 257.105(f)(5), (10), and (12).

(3) *Failure to document minimum safety factors during the initial assessment.* Until the date an owner or operator of a CCR unit documents that the calculated factors of safety achieve the minimum safety factors specified in

paragraphs (e)(1)(i) through (v) of this section, the owner or operator is prohibited from placing CCR in such unit.

(4) *Closure of the CCR unit.* An owner or operator of a CCR unit who either fails to complete a timely periodic safety factor assessment or fails to demonstrate minimum safety factors as required by paragraph (e) of this section is subject to the requirements of § 257.101(c).

(g) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(f), the notification requirements specified in § 257.106(f), and the internet requirements specified in § 257.107(f).

OPERATING CRITERIA

§ 257.80 Air criteria.

(a) The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities.

(b) *CCR fugitive dust control plan.* The owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust control plan as specified in paragraphs (b)(1) through (7) of this section. This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act.

(1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: Locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.

(2) If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.

(3) The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.

(4) The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.

(5) The owner or operator of a CCR unit must prepare an initial CCR fugitive dust control plan for the facility no later than October 19, 2015, or by initial receipt of CCR in any CCR unit at the facility if the owner or operator becomes subject to this subpart after October 19, 2015. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(1).

(6) *Amendment of the plan.* The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(1). The owner or operator must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit.

(7) The owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any

subsequent amendment of it, meets the requirements of this section.

(c) *Annual CCR fugitive dust control report.* The owner or operator of a CCR unit must prepare an annual CCR fugitive dust control report that includes a description of the actions taken by the owner or operator to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken. The initial annual report must be completed no later than 14 months after placing the initial CCR fugitive dust control plan in the facility's operating record. The deadline for completing a subsequent report is one year after the date of completing the previous report. For purposes of this paragraph (c), the owner or operator has completed the annual CCR fugitive dust control report when the plan has been placed in the facility's operating record as required by § 257.105(g)(2).

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

§ 257.81 Run-on and run-off controls for CCR landfills.

(a) The owner or operator of an existing or new CCR landfill or any lateral expansion of a CCR landfill must design, construct, operate, and maintain:

(1) A run-on control system to prevent flow onto the active portion of the CCR unit during the peak discharge from a 24-hour, 25-year storm; and

(2) A run-off control system from the active portion of the CCR unit 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 CCR unit must be handled in accordance with the surface water requirements under § 257.3–3.

(c) *Run-on and run-off control system plan*—(1) *Content of the plan.* The owner or operator must prepare initial and periodic run-on and run-off control system plans for the CCR unit according to the timeframes specified in paragraphs (c)(3) and (4) of this section. These plans must document how the run-on and run-off control systems have been designed and constructed to meet the applicable requirements of this section. Each plan must be supported by appropriate engineering calculations. The owner or operator has completed the initial run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(3).

(2) *Amendment of the plan.* The owner or operator may amend the written run-on and run-off control system plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(3). The owner or operator must amend the written run-on and run-off control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.

(3) *Timeframes for preparing the initial plan*—(i) *Existing CCR landfills.* The owner or operator of the CCR unit must prepare the initial run-on and run-off control system plan no later than October 17, 2016.

(ii) *New CCR landfills and any lateral expansion of a CCR landfill.* The owner or operator must prepare the initial run-on and run-off control system plan no later than the date of initial receipt of CCR in the CCR unit.

(4) *Frequency for revising the plan.* The owner or operator of the CCR unit must prepare periodic run-on and run-off control system plans required by paragraph (c)(1) of this section every five years. The date of completing the initial plan is the basis for establishing the deadline to complete the first subsequent plan. The owner or operator may complete any required plan prior to the required deadline provided the owner or operator places the completed plan into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing a subsequent plan is based on the date of completing the previous plan. For purposes of this paragraph (c)(4), the owner or operator has completed a periodic run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(3).

(5) The owner or operator must obtain a certification from a qualified

professional engineer stating that the initial and periodic run-on and run-off control system plans meet the requirements of this section.

(d) The owner or operator of the CCR unit must comply with the record-keeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

§ 257.82 Hydrologic and hydraulic capacity requirements for CCR surface impoundments.

(a) The owner or operator of an existing or new CCR surface impoundment or any lateral expansion of a CCR surface impoundment must design, construct, operate, and maintain an inflow design flood control system as specified in paragraphs (a)(1) and (2) of this section.

(1) The inflow design flood control system must adequately manage flow into the CCR unit during and following the peak discharge of the inflow design flood specified in paragraph (a)(3) of this section.

(2) The inflow design flood control system must adequately manage flow from the CCR unit to collect and control the peak discharge resulting from the inflow design flood specified in paragraph (a)(3) of this section.

(3) The inflow design flood is:

(i) For a high hazard potential CCR surface impoundment, as determined under § 257.73(a)(2) or § 257.74(a)(2), the probable maximum flood;

(ii) For a significant hazard potential CCR surface impoundment, as determined under § 257.73(a)(2) or § 257.74(a)(2), the 1,000-year flood;

(iii) For a low hazard potential CCR surface impoundment, as determined under § 257.73(a)(2) or § 257.74(a)(2), the 100-year flood; or

(iv) For an incised CCR surface impoundment, the 25-year flood.

(b) Discharge from the CCR unit must be handled in accordance with the surface water requirements under § 257.3–3.

(c) *Inflow design flood control system plan*—(1) *Content of the plan*. The owner or operator must prepare initial and periodic inflow design flood control system plans for the CCR unit according to the timeframes specified in paragraphs (c)(3) and (4) of this section. These plans must document how the inflow design flood control system has been designed and constructed to meet the requirements of this section. Each plan must be supported by appropriate engineering calculations. The owner or operator of the CCR unit has completed the inflow design flood control system plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(4).

(2) *Amendment of the plan*. The owner or operator of the CCR unit may amend the written inflow design flood control system plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(4). The owner or operator must amend the written inflow design flood control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.

(3) *Timeframes for preparing the initial plan*—(i) *Existing CCR surface impoundments*. The owner or operator of the CCR unit must prepare the initial inflow design flood control system plan no later than October 17, 2016.

(ii) *New CCR surface impoundments and any lateral expansion of a CCR surface impoundment*. The owner or operator must prepare the initial inflow design flood control system plan no later than the date of initial receipt of CCR in the CCR unit.

(4) *Frequency for revising the plan*. The owner or operator must prepare periodic inflow design flood control system plans required by paragraph (c)(1) of this section every five years. The date of completing the initial plan is the basis for establishing the deadline to complete the first periodic plan. The owner or operator may complete any required plan prior to the required deadline provided the owner or operator places the completed plan into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing a subsequent plan is based on the date of completing the previous plan. For purposes of this paragraph (c)(4), the owner or operator has completed an inflow design flood control system plan when

the plan has been placed in the facility's operating record as required by § 257.105(g)(4).

(5) The owner or operator must obtain a certification from a qualified professional engineer stating that the initial and periodic inflow design flood control system plans meet the requirements of this section.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

§ 257.83 Inspection requirements for CCR surface impoundments.

(a) *Inspections by a qualified person.* (1) All CCR surface impoundments and any lateral expansion of a CCR surface impoundment must be examined by a qualified person as follows:

(i) At intervals not exceeding seven days, inspect for any appearances of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit;

(ii) At intervals not exceeding seven days, inspect the discharge of all outlets of hydraulic structures which pass underneath the base of the surface impoundment or through the dike of the CCR unit for abnormal discoloration, flow or discharge of debris or sediment; and

(iii) At intervals not exceeding 30 days, monitor all CCR unit instrumentation.

(iv) The results of the inspection by a qualified person must be recorded in the facility's operating record as required by § 257.105(g)(5).

(2) *Timeframes for inspections by a qualified person*—(i) *Existing CCR surface impoundments.* The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section no later than October 19, 2015.

(ii) *New CCR surface impoundments and any lateral expansion of a CCR surface impoundment.* The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section upon initial receipt of CCR by the CCR unit.

(b) Annual i*nspections by a qualified professional engineer.* (1) If the existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment is subject to the periodic structural stability assessment requirements under § 257.73(d) or § 257.74(d), the CCR unit must additionally be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:

(i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (*e.g.,* CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections);

(ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and

(iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

(2) *Inspection report.* The qualified professional engineer must prepare a report following each inspection that addresses the following:

(i) Any changes in geometry of the impounding structure since the previous annual inspection;

(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection;

(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;

(iv) The storage capacity of the impounding structure at the time of the inspection;

(v) The approximate volume of the impounded water and CCR at the time of the inspection;

(vi) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures; and

(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

(3) *Timeframes for conducting the initial inspection*—(i) *Existing CCR surface impoundments.* The owner or operator of the CCR unit must complete the initial inspection required by paragraphs (b)(1) and (2) of this section no later than January 19, 2016.

(ii) *New CCR surface impoundments and any lateral expansion of a CCR surface impoundment.* The owner or operator of the CCR unit must complete the initial annual inspection required by paragraphs (b)(1) and (2) of this section is completed no later than 14 months following the date of initial receipt of CCR in the CCR unit.

(4) *Frequency of inspections.* (i) Except as provided for in paragraph (b)(4)(ii) of this section, the owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by § 257.105(g)(6).

(ii) In any calendar year in which both the periodic inspection by a qualified professional engineer and the quinquennial (occurring every five years) structural stability assessment by a qualified professional engineer required by §§ 257.73(d) and 257.74(d) are required to be completed, the annual inspection is not required, provided the structural stability assessment is completed during the calendar year. If the annual inspection is not conducted in a year as provided by this paragraph (b)(4)(ii), the deadline for completing the next annual inspection is one year from the date of completing the quinquennial structural stability assessment.

(5) If a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(c) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

[80 FR 21468, Apr. 17, 2015, as amended at 80 FR 37992, July 2, 2015]

§ 257.84 Inspection requirements for CCR landfills.

(a) *Inspections by a qualified person.* (1) All CCR landfills and any lateral expansion of a CCR landfill must be examined by a qualified person as follows:

(i) At intervals not exceeding seven days, inspect for any appearances of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit; and

(ii) The results of the inspection by a qualified person must be recorded in the facility's operating record as required by § 257.105(g)(8).

(2) *Timeframes for inspections by a qualified person*—(i) *Existing CCR landfills.* The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section no later than October 19, 2015.

(ii) *New CCR landfills and any lateral expansion of a CCR landfill.* The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section upon initial receipt of CCR by the CCR unit.

(b) *Annual inspections by a qualified professional engineer.* (1) Existing and new CCR landfills and any lateral expansion of a CCR landfill must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:

(i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (*e.g.,* the results of inspections by a qualified person, and results of previous annual inspections); and

(ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.

(2) *Inspection report.* The qualified professional engineer must prepare a report following each inspection that addresses the following:

(i) Any changes in geometry of the structure since the previous annual inspection;

(ii) The approximate volume of CCR contained in the unit at the time of the inspection;

(iii) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit; and

(iv) Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.

(3) *Timeframes for conducting the initial inspection*—(i) *Existing CCR landfills.* The owner or operator of the CCR unit must complete the initial inspection required by paragraphs (b)(1) and (2) of this section no later than January 19, 2016.

(ii) *New CCR landfills and any lateral expansion of a CCR landfill.* The owner or operator of the CCR unit must complete the initial annual inspection required by paragraphs (b)(1) and (2) of this section no later than 14 months following the date of initial receipt of CCR in the CCR unit.

(4) *Frequency of inspections.* The owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by § 257.105(g)(9).

(5) If a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(c) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

[80 FR 21468, Apr. 17, 2015, as amended at 80 FR 37992, July 2, 2015]

GROUNDWATER MONITORING AND CORRECTIVE ACTION

§ 257.90 Applicability.

(a) Except as provided for in § 257.100 for inactive CCR surface impoundments, all CCR landfills, CCR surface impoundments, and lateral expansions of CCR units are subject to the groundwater monitoring and corrective action requirements under §§ 257.90 through 257.98.

(b) *Initial timeframes*—(1) *Existing CCR landfills and existing CCR surface impoundments.* No later than October 17, 2017, the owner or operator of the CCR unit must be in compliance with the following groundwater monitoring requirements:

(i) Install the groundwater monitoring system as required by § 257.91;

(ii) Develop the groundwater sampling and analysis program to include selection of the statistical procedures to be used for evaluating groundwater monitoring data as required by § 257.93;

(iii) Initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background and downgradient well as required by § 257.94(b); and

(iv) Begin evaluating the groundwater monitoring data for statistically significant increases over background levels for the constituents listed in appendix III of this part as required by § 257.94.

(2) *New CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units.* Prior to initial receipt of CCR by the CCR unit, the owner or operator must be in compliance with the groundwater monitoring requirements specified in paragraph (b)(1)(i) and (ii) of this section. In addition, the owner or operator of the CCR unit must initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background well as required by § 257.94(b).

(c) Once a groundwater monitoring system and groundwater monitoring program has been established at the CCR unit as required by this subpart, the owner or operator must conduct groundwater monitoring and, if necessary, corrective action throughout the active life and post-closure care period of the CCR unit.

(d) In the event of a release from a CCR unit, the owner or operator must immediately take all necessary measures to control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of contaminants into the environment. The owner or operator of the CCR unit must comply with all applicable requirements in §§ 257.96, 257.97, and 257.98.

(e) *Annual groundwater monitoring and corrective action report.* For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this subpart, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1). At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

(1) A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

(2) Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

(3) In addition to all the monitoring data obtained under §§ 257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

(4) A narrative discussion of any transition between monitoring programs (*e.g.*, the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and

(5) Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).

§ 257.91 Groundwater monitoring systems.

(a) *Performance standard.* The owner or operator of a CCR unit must install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that:

(1) Accurately represent the quality of background groundwater that has not been affected by leakage from a CCR unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the CCR management area where:

(i) Hydrogeologic conditions do not allow the owner or operator of the CCR unit to determine what wells are hydraulically upgradient; or

(ii) Sampling at other wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient wells; and

(2) Accurately represent the quality of groundwater passing the waste boundary of the CCR unit. The downgradient monitoring system must be installed at the waste boundary that ensures detection of groundwater contamination in the uppermost aquifer. All potential contaminant pathways must be monitored.

(b) The number, spacing, and depths of monitoring systems shall be determined based upon site-specific technical information that must include thorough characterization of:

(1) Aquifer thickness, groundwater flow rate, groundwater flow direction including seasonal and temporal fluctuations in groundwater flow; and

(2) 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.

(c) The groundwater monitoring system must include the minimum number of monitoring wells necessary to meet the performance standards specified in paragraph (a) of this section, based on the site-specific information specified in paragraph (b) of this section. The groundwater monitoring system must contain:

(1) A minimum of one upgradient and three downgradient monitoring wells; and

(2) Additional monitoring wells as necessary to accurately represent the quality of background groundwater that has not been affected by leakage from the CCR unit and the quality of groundwater passing the waste boundary of the CCR unit.

(d) The owner or operator of multiple CCR units may install a multiunit groundwater monitoring system instead of separate groundwater monitoring systems for each CCR unit.

(1) The multiunit groundwater monitoring system must be equally as capable of detecting monitored constituents at the waste boundary of the CCR unit as the individual groundwater monitoring system specified in paragraphs (a) through (c) of this section for each CCR unit based on the following factors:

(i) Number, spacing, and orientation of each CCR unit;

(ii) Hydrogeologic setting;

(iii) Site history; and

(iv) Engineering design of the CCR unit.

(2) If the owner or operator elects to install a multiunit groundwater monitoring system, and if the multiunit system includes at least one existing unlined CCR surface impoundment as determined by § 257.71(a), and if at any time after October 19, 2015 the owner or operator determines in any sampling event that the concentrations of one or more constituents listed in appendix IV to this part are detected at statistically significant levels above the

groundwater protection standard established under § 257.95(h) for the multiunit system, then all unlined CCR surface impoundments comprising the multiunit groundwater monitoring system are subject to the closure requirements under § 257.101(a) to retrofit or close.

(e) Monitoring wells must be cased in a manner that maintains the integrity of the monitoring well borehole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of groundwater samples. The annular space (*i.e.*, the space between the borehole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the groundwater.

(1) The owner or operator of the CCR unit must document and include in the operating record the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices. The qualified professional engineer must be given access to this documentation when completing the groundwater monitoring system certification required under paragraph (f) of this section.

(2) The monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to the design specifications throughout the life of the monitoring program.

(f) The owner or operator must obtain a certification from a qualified professional engineer stating that the groundwater monitoring system has been designed and constructed to meet the requirements of this section. If the groundwater monitoring system includes the minimum number of monitoring wells specified in paragraph (c)(1) of this section, the certification must document the basis supporting this determination.

(g) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).

§ 257.92 [Reserved]

§ 257.93 Groundwater sampling and analysis requirements.

(a) The groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of groundwater quality at the background and downgradient wells required by § 257.91. The owner or operator of the CCR unit must develop a sampling and analysis program that includes 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 groundwater monitoring program must include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents and other monitoring parameters in groundwater samples. For purposes of §§ 257.90 through 257.98, the term *constituent* refers to both hazardous constituents and other monitoring parameters listed in either appendix III or IV of this part.

(c) Groundwater elevations must be measured in each well immediately prior to purging, each time groundwater is sampled. The owner or operator of the CCR unit must determine the rate and direction of groundwater flow each time groundwater is sampled. Groundwater elevations in wells which monitor the same CCR management area must be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow rate and direction.

(d) The owner or operator of the CCR unit must establish background groundwater quality in a hydraulically upgradient or background well(s) for each of the constituents required in the particular groundwater monitoring program that applies to the CCR unit as determined under § 257.94(a) or § 257.95(a). Background groundwater quality may be established at wells that are not located hydraulically

upgradient from the CCR unit if it meets the requirements of § 257.91(a)(1).

(e) The number of samples collected when conducting detection monitoring and assessment monitoring (for both downgradient and background wells) must be consistent with the statistical procedures chosen under paragraph (f) of this section and the performance standards under paragraph (g) of this section. The sampling procedures shall be those specified under § 257.94(b) through (d) for detection monitoring, § 257.95(b) through (d) for assessment monitoring, and § 257.96(b) for corrective action.

(f) The owner or operator of the CCR unit must select one of the statistical methods specified in paragraphs (f)(1) through (5) of this section to be used in evaluating groundwater monitoring data for each specified constituent. The statistical test chosen shall be conducted separately for each constituent in each monitoring well.

(1) A parametric analysis of variance followed by multiple comparison 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 based on ranks followed by multiple comparison 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 (g) of this section.

(6) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area. The certification must include a narrative description of the statistical method selected to evaluate the groundwater monitoring data.

(g) Any statistical method chosen under paragraph (f) of this section shall comply with the following performance standards, as appropriate, based on the statistical test method used:

(1) The statistical method used to evaluate groundwater monitoring data shall be appropriate for the distribution of constituents. Normal distributions of data values shall use parametric methods. Non-normal distributions shall use non-parametric methods. If the distribution of the constituents is shown by the owner or operator of the CCR unit to be inappropriate for a normal theory test, then the data must be transformed or a distribution-free (non-parametric) theory test must 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 groundwater 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 comparison 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 groundwater monitoring data, the specific type of control chart and its associated parameter values shall be such that this approach is at least as effective as any other approach in this section for evaluating groundwater data. The parameter values 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 groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be such that this approach is at least as effective as any other approach in this section for evaluating groundwater data. 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 must account for data below the limit of detection with one or more statistical procedures that shall at least as effective as any other approach in this section for evaluating groundwater data. Any practical quantitation limit 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 must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(h) The owner or operator of the CCR unit must determine whether or not there is a statistically significant increase over background values for each constituent required in the particular groundwater monitoring program that applies to the CCR unit, as determined under § 257.94(a) or § 257.95(a).

(1) In determining whether a statistically significant increase has occurred, the owner or operator must compare the groundwater quality of each constituent at each monitoring well designated pursuant to § 257.91(a)(2) or (d)(1) to the background value of that constituent, according to the statistical procedures and performance standards specified under paragraphs (f) and (g) of this section.

(2) Within 90 days after completing sampling and analysis, the owner or operator must determine whether there has been a statistically significant increase over background for any constituent at each monitoring well.

(i) The owner or operator must measure ''total recoverable metals'' concentrations in measuring groundwater quality. Measurement of total recoverable metals captures both the particulate fraction and dissolved fraction of metals in natural waters. Groundwater samples shall not be field-filtered prior to analysis.

(j) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

§ 257.94 Detection monitoring program.

(a) The owner or operator of a CCR unit must conduct detection monitoring at all groundwater monitoring wells consistent with this section. At a minimum, a detection monitoring program must include groundwater monitoring for all constituents listed in appendix III to this part.

(b) Except as provided in paragraph (d) of this section, the monitoring frequency for the constituents listed in appendix III to this part shall be at least semiannual during the active life of the CCR unit and the post-closure period. For existing CCR landfills and existing CCR surface impoundments, a minimum of eight independent samples from each background and downgradient well must be collected and analyzed for the constituents listed in appendix III and IV to this part no later than October 17, 2017. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, a minimum of eight independent samples for each background well must be collected and analyzed for the constituents listed in appendices III and IV to this part during the first six months of sampling.

(c) The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent with § 257.93(e), and must account for any unique characteristics of the site, but must be at least one sample from each background and downgradient well.

(d) The owner or operator of a CCR unit may demonstrate the need for an alternative monitoring frequency for repeated sampling and analysis for constituents listed in appendix III to this part during the active life and the post-closure care period based on the availability of groundwater. If there is not adequate groundwater flow to sample wells semiannually, the alternative frequency shall be no less than annual. The need to vary monitoring frequency must be evaluated on a site-specific basis. The demonstration must be supported by, at a minimum, the information specified in paragraphs (d)(1) and (2) of this section.

(1) Information documenting that the need for less frequent sampling. The alternative frequency must be based on consideration of the following factors:

(i) Lithology of the aquifer and unsaturated zone;

(ii) Hydraulic conductivity of the aquifer and unsaturated zone; and

(iii) Groundwater flow rates.

(2) Information documenting that the alternative frequency will be no less effective in ensuring that any leakage from the CCR unit will be discovered within a timeframe that will not materially delay establishment of an assessment monitoring program.

(3) The owner or operator must obtain a certification from a qualified professional engineer stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by § 257.90(e).

(e) If the owner or operator of the CCR unit determines, pursuant to § 257.93(h) that there is a statistically significant increase over background levels for one or more of the constituents listed in appendix III to this part at any monitoring well at the waste boundary specified under § 257.91(a)(2), the owner or operator must:

(1) Except as provided for in paragraph (e)(2) of this section, within 90 days of detecting a statistically significant increase over background levels for any constituent, establish an assessment monitoring program meeting the requirements of § 257.95.

(2) The owner or operator may demonstrate that a source other than the CCR unit caused the statistically significant increase over background levels for a constituent or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The owner or operator must complete the written demonstration within 90 days of detecting a statistically significant increase over background levels to include obtaining a certification from a qualified professional engineer verifying the accuracy of the information in the report. If a successful demonstration is completed within the 90-day period, the owner or operator of the CCR unit may continue with a detection monitoring program under this section. If a successful demonstration is not completed within the 90-day period, the owner or operator of the CCR unit must initiate an assessment monitoring program as required under § 257.95. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer.

(3) The owner or operator of a CCR unit must prepare a notification stating that an assessment monitoring program has been established. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by § 257.105(h)(5).

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

§ 257.95 Assessment monitoring program.

(a) Assessment monitoring is required whenever a statistically significant increase over background levels has been detected for one or more of

the constituents listed in appendix III to this part.

(b) Within 90 days of triggering an assessment monitoring program, and annually thereafter, the owner or operator of the CCR unit must sample and analyze the groundwater for all constituents listed in appendix IV to this part. The number of samples collected and analyzed for each well during each sampling event must be consistent with § 257.93(e), and must account for any unique characteristics of the site, but must be at least one sample from each well.

(c) The owner or operator of a CCR unit may demonstrate the need for an alternative monitoring frequency for repeated sampling and analysis for constituents listed in appendix IV to this part during the active life and the post-closure care period based on the availability of groundwater. If there is not adequate groundwater flow to sample wells semiannually, the alternative frequency shall be no less than annual. The need to vary monitoring frequency must be evaluated on a site-specific basis. The demonstration must be supported by, at a minimum, the information specified in paragraphs (c)(1) and (2) of this section.

(1) Information documenting that the need for less frequent sampling. The alternative frequency must be based on consideration of the following factors:

(i) Lithology of the aquifer and unsaturated zone;

(ii) Hydraulic conductivity of the aquifer and unsaturated zone; and

(iii) Groundwater flow rates.

(2) Information documenting that the alternative frequency will be no less effective in ensuring that any leakage from the CCR unit will be discovered within a timeframe that will not materially delay the initiation of any necessary remediation measures.

(3) The owner or operator must obtain a certification from a qualified professional engineer stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by § 257.90(e).

(d) After obtaining the results from the initial and subsequent sampling events required in paragraph (b) of this section, the owner or operator must:

(1) Within 90 days of obtaining the results, and on at least a semiannual basis thereafter, resample all wells that were installed pursuant to the requirements of § 257.91, conduct analyses for all parameters in appendix III to this part and for those constituents in appendix IV to this part that are detected in response to paragraph (b) of this section, and record their concentrations in the facility operating record. The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent with § 257.93(e), and must account for any unique characteristics of the site, but must be at least one sample from each background and downgradient well;

(2) Establish groundwater protection standards for all constituents detected pursuant to paragraph (b) or (d) of this section. The groundwater protection standards must be established in accordance with paragraph (h) of this section; and

(3) Include the recorded concentrations required by paragraph (d)(1) of this section, identify the background concentrations established under § 257.94(b), and identify the groundwater protection standards established under paragraph (d)(2) of this section in the annual groundwater monitoring and corrective action report required by § 257.90(e).

(e) If the concentrations of all constituents listed in appendices III and IV to this part are shown to be at or below background values, using the statistical procedures in § 257.93(g), for two consecutive sampling events, the owner or operator may return to detection monitoring of the CCR unit. The owner or operator must prepare a notification stating that detection monitoring is resuming for the CCR unit. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by § 257.105(h)(7).

(f) If the concentrations of any constituent in appendices III and IV to this part are above background values, but all concentrations are below the groundwater protection standard established under paragraph (h) of this section, using the statistical procedures in §257.93(g), the owner or operator must continue assessment monitoring in accordance with this section.

(g) If one or more constituents in appendix IV to this part are detected at statistically significant levels above the groundwater protection standard established under paragraph (h) of this section in any sampling event, the owner or operator must prepare a notification identifying the constituents in appendix IV to this part that have exceeded the groundwater protection standard. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by §257.105(h)(8). The owner or operator of the CCR unit also must:

(1) Characterize the nature and extent of the release and any relevant site conditions that may affect the remedy ultimately selected. The characterization must be sufficient to support a complete and accurate assessment of the corrective measures necessary to effectively clean up all releases from the CCR unit pursuant to §257.96. Characterization of the release includes the following minimum measures:

(i) Install additional monitoring wells necessary to define the contaminant plume(s);

(ii) Collect data on the nature and estimated quantity of material released including specific information on the constituents listed in appendix IV of this part and the levels at which they are present in the material released;

(iii) 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)(1) of this section; and

(iv) Sample all wells in accordance with paragraph (d)(1) of this section to characterize the nature and extent of the release.

(2) 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 paragraph (g)(1) of this section. The owner or operator has completed the notifications when they are placed in the facility's operating record as required by §257.105(h)(8).

(3) Within 90 days of finding that any of the constituents listed in appendix IV to this part have been detected at a statistically significant level exceeding the groundwater protection standards the owner or operator must either:

(i) Initiate an assessment of corrective measures as required by §257.96; or

(ii) Demonstrate that a source other than the CCR unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Any such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions and must be certified to be accurate by a qualified professional engineer. If a successful demonstration is made, the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this section, and may return to detection monitoring if the constituents in appendices III and IV to this part are at or below background as specified in paragraph (e) of this section. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by §257.90(e), in addition to the certification by a qualified professional engineer.

(4) If a successful demonstration has not been made at the end of the 90 day period provided by paragraph (g)(3)(ii) of this section, the owner or operator of the CCR unit must initiate the assessment of corrective measures requirements under §257.96.

(5) If an assessment of corrective measures is required under §257.96 by either paragraph (g)(3)(i) or (g)(4) of this section, and if the CCR unit is an existing unlined CCR surface impoundment as determined by §257.71(a), then the CCR unit is subject to the closure

requirements under § 257.101(a) to retrofit or close. In addition, the owner or operator must prepare a notification stating that an assessment of corrective measures has been initiated.

(h) The owner or operator of the CCR unit must establish a groundwater protection standard for each constituent in appendix IV to this part detected in the groundwater. The groundwater protection standard shall be:

(1) For constituents for which a maximum contaminant level (MCL) has been established under §§ 141.62 and 141.66 of this title, the MCL for that constituent;

(2) For constituents for which an MCL has not been established, the background concentration for the constituent established from wells in accordance with § 257.91; or

(3) For constituents for which the background level is higher than the MCL identified under paragraph (h)(1) of this section, the background concentration.

(i) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

§ 257.96 Assessment of corrective measures.

(a) Within 90 days of finding that any constituent listed in appendix IV to this part has been detected at a statistically significant level exceeding the groundwater protection standard defined under § 257.95(h), or immediately upon detection of a release from a CCR unit, the owner or operator must initiate an assessment of corrective measures to prevent further releases, to remediate any releases and to restore affected area to original conditions. The assessment of corrective measures must be completed within 90 days, unless the owner or operator demonstrates the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances. The owner or operator must obtain a certification from a qualified professional engineer attesting that the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer.

(b) The owner or operator of the CCR unit must continue to monitor groundwater in accordance with the assessment monitoring program as specified in § 257.95.

(c) The assessment under paragraph (a) of this section must include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under § 257.97 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 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 place the completed assessment of corrective measures in the facility's operating record. The assessment has been completed when it is placed in the facility's operating record as required by § 257.105(h)(10).

(e) The owner or operator must discuss the results of the corrective measures assessment at least 30 days prior to the selection of remedy, in a public meeting with interested and affected parties.

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

§ 257.97 Selection of remedy.

(a) Based on the results of the corrective measures assessment conducted

under §257.96, the owner or operator must, as soon as feasible, select a remedy that, at a minimum, meets the standards listed in paragraph (b) of this section. This requirement applies to, not in place of, any applicable standards under the Occupational Safety and Health Act. The owner or operator must prepare a semiannual report describing the progress in selecting and designing the remedy. Upon selection of a remedy, the owner or operator must prepare a final report describing the selected remedy and how it meets the standards specified in paragraph (b) of this section. The owner or operator must obtain a certification from a qualified professional engineer that the remedy selected meets the requirements of this section. The report has been completed when it is placed in the operating record as required by §257.105(h)(12).

(b) Remedies must:

(1) Be protective of human health and the environment;

(2) Attain the groundwater protection standard as specified pursuant to §257.95(h);

(3) Control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of constituents in appendix IV to this part into the environment;

(4) Remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems;

(5) Comply with standards for management of wastes as specified in §257.98(d).

(c) In selecting a remedy that meets the standards of paragraph (b) of this section, the owner or operator of the CCR unit 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 CCR 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 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 of contaminant;

(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; and

(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) The degree to which community concerns are addressed by a potential remedy(s).

(d) The owner or operator must specify as part of the selected remedy a schedule(s) for implementing and completing remedial activities. Such a

schedule must require the completion of remedial activities within a reasonable period of time taking into consideration the factors set forth in paragraphs (d)(1) through (6) of this section. The owner or operator of the CCR unit must consider the following factors in determining the schedule of remedial activities:

(1) Extent and nature of contamination, as determined by the characterization required under § 257.95(g);

(2) Reasonable probabilities of remedial technologies in achieving compliance with the groundwater protection standards established under § 257.95(h) and other objectives of the remedy;

(3) Availability of treatment or disposal capacity for CCR managed during implementation of the remedy;

(4) Potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;

(5) Resource value of the aquifer including:

(i) Current and future uses;

(ii) Proximity and withdrawal rate of users;

(iii) Groundwater quantity and quality;

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

(v) The hydrogeologic characteristic of the facility and surrounding land; and

(vi) The availability of alternative water supplies; and

(6) Other relevant factors.

(e) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

§ 257.98 Implementation of the corrective action program.

(a) Within 90 days of selecting a remedy under § 257.97, the owner or operator must initiate remedial activities. Based on the schedule established under § 257.97(d) for implementation and completion of remedial activities the owner or operator must:

(1) Establish and implement a corrective action groundwater monitoring program that:

(i) At a minimum, meets the requirements of an assessment monitoring program under § 257.95;

(ii) Documents the effectiveness of the corrective action remedy; and

(iii) Demonstrates compliance with the groundwater protection standard pursuant to paragraph (c) of this section.

(2) Implement the corrective action remedy selected under § 257.97; and

(3) Take any interim measures necessary to reduce the contaminants leaching from the CCR unit, and/or potential exposures to human or ecological receptors. Interim measures must, to the greatest extent feasible, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to § 257.97. 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 any of the constituents listed in appendix IV of this part;

(iii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

(iv) Further degradation of the groundwater that may occur if remedial action is not initiated expeditiously;

(v) Weather conditions that may cause any of the constituents listed in appendix IV to this part to migrate or be released;

(vi) Potential for exposure to any of the constituents listed in appendix IV to this part 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) If an owner or operator of the CCR unit, determines, at any time, that compliance with the requirements of § 257.97(b) is not being achieved through the remedy selected, the owner or operator must implement other methods or techniques that could

feasibly achieve compliance with the requirements.

(c) Remedies selected pursuant to §257.97 shall be considered complete when:

(1) The owner or operator of the CCR unit demonstrates compliance with the groundwater protection standards established under §257.95(h) has been achieved at all points within the plume of contamination that lie beyond the groundwater monitoring well system established under §257.91.

(2) Compliance with the groundwater protection standards established under §257.95(h) has been achieved by demonstrating that concentrations of constituents listed in appendix IV to this part have not exceeded the groundwater protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in §257.93(f) and (g).

(3) All actions required to complete the remedy have been satisfied.

(d) All CCR that are managed pursuant to a remedy required under §257.97, or an interim measure required under paragraph (a)(3) of this section, shall be managed in a manner that complies with all applicable RCRA requirements.

(e) Upon completion of the remedy, the owner or operator must prepare a notification stating that the remedy has been completed. The owner or operator must obtain a certification from a qualified professional engineer attesting that the remedy has been completed in compliance with the requirements of paragraph (c) of this section. The report has been completed when it is placed in the operating record as required by §257.105(h)(13).

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in §257.105(h), the notification requirements specified in §257.106(h), and the internet requirements specified in §257.107(h).

CLOSURE AND POST-CLOSURE CARE

§257.100 Inactive CCR surface impoundments.

(a) Except as provided by paragraph (b) of this section, inactive CCR surface impoundments are subject to all of the requirements of this subpart applicable to existing CCR surface impoundments.

(b) An owner or operator of an inactive CCR surface impoundment that completes closure of such CCR unit, and meets all of the requirements of either paragraphs (b)(1) through (4) of this section or paragraph (b)(5) of this section no later than April 17, 2018, is exempt from all other requirements of this subpart.

(1) *Closure by leaving CCR in place.* If the owner or operator of the inactive CCR surface impoundment elects to close the CCR surface impoundment by leaving CCR in place, the owner or operator must ensure that, at a minimum, the CCR unit is closed in a manner that will:

(i) Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;

(ii) Preclude the probability of future impoundment of water, sediment, or slurry;

(iii) Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system; and

(iv) Minimize the need for further maintenance of the CCR unit.

(2) The owner or operator of the inactive CCR surface impoundment must meet the requirements of paragraphs (b)(2)(i) and (ii) of this section prior to installing the final cover system required under paragraph (b)(3) of this section.

(i) Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.

(ii) Remaining wastes must be stabilized sufficient to support the final cover system.

(3) The owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (b)(3)(i) of this section, or the requirements of an alternative final cover system specified in paragraph (b)(3)(ii) of this section.

(i) The final cover system must be designed and constructed to meet the criteria specified in paragraphs (b)(3)(i)(A) through (D) of this section.

(A) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1×10^{-5} centimeters/second, whichever is less.

(B) The infiltration of liquids through the CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.

(C) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.

(D) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(ii) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (b)(3)(ii)(A) through (C) of this section.

(A) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (b)(3)(i)(A) and (B) of this section.

(B) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (b)(3)(i)(C) of this section.

(C) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(4) The owner or operator of the CCR surface impoundment must obtain a written certification from a qualified professional engineer stating that the design of the final cover system meets either the requirements of paragraphs (b)(3)(i) or (ii) of this section.

(5) *Closure through removal of CCR.* The owner or operator may alternatively elect to close an inactive CCR surface impoundment by removing and decontaminating all areas affected by releases from the CCR surface impoundment. CCR removal and decontamination of the CCR surface impoundment are complete when all CCR in the inactive CCR surface impoundment is removed, including the bottom liner of the CCR unit.

(6) The owner or operator of the CCR surface impoundment must obtain a written certification from a qualified professional engineer that closure of the CCR surface impoundment under either paragraphs (b)(1) through (4) or (b)(5) of this section is technically feasible within the timeframe in paragraph (b) of this section.

(7) If the owner or operator of the CCR surface impoundment fails to complete closure of the inactive CCR surface impoundment within the timeframe in paragraph (b) of this section, the CCR unit must comply with all of the requirements applicable to existing CCR surface impoundments under this subpart.

(c) *Required notices and progress reports.* An owner or operator of an inactive CCR surface impoundment that closes in accordance with paragraph (b) of this section must complete the notices and progress reports specified in paragraphs (c)(1) through (3) of this section.

(1) No later than December 17, 2015, the owner or operator must prepare and place in the facility's operating record a notification of intent to initiate closure of the CCR surface impoundment. The notification must state that the CCR surface impoundment is an inactive CCR surface impoundment closing under the requirements of paragraph (b) of this section. The notification must also include a narrative description of how the CCR surface impoundment will be closed, a schedule for completing closure activities, and the required certifications under paragraphs (b)(4) and (6) of this section, if applicable.

(2) The owner or operator must prepare periodic progress reports summarizing the progress of closure implementation, including a description of the actions completed to date, any problems encountered and a description of the actions taken to resolve the

problems, and projected closure activities for the upcoming year. The annual progress reports must be completed according to the following schedule:

(i) The first annual progress report must be prepared no later than 13 months after completing the notification of intent to initiate closure required by paragraph (c)(1) of this section.

(ii) The second annual progress report must be prepared no later than 12 months after completing the first progress report required by paragraph (c)(2)(i) of this section.

(iii) The owner or operator has completed the progress reports specified in paragraph (c)(2) of this section when the reports are placed in the facility's operating record as required by §257.105(i)(2).

(3) The owner or operator must prepare and place in the facility's operating record a notification of completion of closure of the CCR surface impoundment. The notification must be submitted within 60 days of completing closure of the CCR surface impoundment and must include a written certification from a qualified professional engineer stating that the CCR surface impoundment was closed in accordance with the requirements of either paragraph (b)(1) through (4) or (b)(5) of this section.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in §257.105(i), the notification requirements specified in §257.106(i), and the internet requirements specified in §257.107(i).

§257.101 Closure or retrofit of CCR units.

(a) The owner or operator of an existing unlined CCR surface impoundment, as determined under §257.71(a), is subject to the requirements of paragraph (a)(1) of this section.

(1) Except as provided by paragraph (a)(3) of this section, if at any time after October 19, 2015 an owner or operator of an existing unlined CCR surface impoundment determines in any sampling event that the concentrations of one or more constituents listed in appendix IV to this part are detected at statistically significant levels above the groundwater protection standard established under §257.95(h) for such CCR unit, within six months of making such determination, the owner or operator of the existing unlined CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR surface impoundment and either retrofit or close the CCR unit in accordance with the requirements of §257.102.

(2) An owner or operator of an existing unlined CCR surface impoundment that closes in accordance with paragraph (a)(1) of this section must include a statement in the notification required under §257.102(g) or (k)(5) that the CCR surface impoundment is closing or retrofitting under the requirements of paragraph (a)(1) of this section.

(3) The timeframe specified in paragraph (a)(1) of this section does not apply if the owner or operator complies with the alternative closure procedures specified in §257.103.

(4) At any time after the initiation of closure under paragraph (a)(1) of this section, the owner or operator may cease closure activities and initiate a retrofit of the CCR unit in accordance with the requirements of §257.102(k).

(b) The owner or operator of an existing CCR surface impoundment is subject to the requirements of paragraph (b)(1) of this section.

(1) Except as provided by paragraph (b)(4) of this section, within six months of determining that an existing CCR surface impoundment has not demonstrated compliance with any location standard specified in §§257.60(a), 257.61(a), 257.62(a), 257.63(a), and 257.64(a), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of §257.102.

(2) Within six months of either failing to complete the initial or any subsequent periodic safety factor assessment required by §257.73(e) by the deadlines specified in §257.73(f)(1) through (3) or failing to document that the calculated factors of safety for the existing CCR surface impoundment achieve the minimum safety factors specified in §257.73(e)(1)(i) through (iv),

the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of § 257.102.

(3) An owner or operator of an existing CCR surface impoundment that closes in accordance with paragraphs (b)(1) or (2) of this section must include a statement in the notification required under § 257.102(g) that the CCR surface impoundment is closing under the requirements of paragraphs (b)(1) or (2) of this section.

(4) The timeframe specified in paragraph (b)(1) of this section does not apply if the owner or operator complies with the alternative closure procedures specified in § 257.103.

(c) The owner or operator of a new CCR surface impoundment is subject to the requirements of paragraph (c)(1) of this section.

(1) Within six months of either failing to complete the initial or any subsequent periodic safety factor assessment required by § 257.74(e) by the deadlines specified in § 257.74(f)(1) through (3) or failing to document that the calculated factors of safety for the new CCR surface impoundment achieve the minimum safety factors specified in § 257.74(e)(1)(i) through (v), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of § 257.102.

(2) An owner or operator of an new CCR surface impoundment that closes in accordance with paragraph (c)(1) of this section must include a statement in the notification required under § 257.102(g) that the CCR surface impoundment is closing under the requirements of paragraph (c)(1) of this section.

(d) The owner or operator of an existing CCR landfill is subject to the requirements of paragraph (d)(1) of this section.

(1) Except as provided by paragraph (d)(3) of this section, within six months of determining that an existing CCR landfill has not demonstrated compliance with the location restriction for unstable areas specified in § 257.64(a), the owner or operator of the CCR unit must cease placing CCR and non-CCR waste streams into such CCR landfill and close the CCR unit in accordance with the requirements of § 257.102.

(2) An owner or operator of an existing CCR landfill that closes in accordance with paragraph (d)(1) of this section must include a statement in the notification required under § 257.102(g) that the CCR landfill is closing under the requirements of paragraph (d)(1) of this section.

(3) The timeframe specified in paragraph (d)(1) of this section does not apply if the owner or operator complies with the alternative closure procedures specified in § 257.103.

§ 257.102 Criteria for conducting the closure or retrofit of CCR units.

(a) Closure of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must be completed either by leaving the CCR in place and installing a final cover system or through removal of the CCR and decontamination of the CCR unit, as described in paragraphs (b) through (j) of this section. Retrofit of a CCR surface impoundment must be completed in accordance with the requirements in paragraph (k) of this section.

(b) *Written closure plan*—(1) *Content of the plan.* The owner or operator of a CCR unit must prepare a written closure plan that describes the steps necessary to close the CCR unit at any point during the active life of the CCR unit consistent with recognized and generally accepted good engineering practices. The written closure plan must include, at a minimum, the information specified in paragraphs (b)(1)(i) through (vi) of this section.

(i) A narrative description of how the CCR unit will be closed in accordance with this section.

(ii) If closure of the CCR unit will be accomplished through removal of CCR from the CCR unit, a description of the procedures to remove the CCR and decontaminate the CCR unit in accordance with paragraph (c) of this section.

(iii) If closure of the CCR unit will be accomplished by leaving CCR in place, a description of the final cover system, designed in accordance with paragraph (d) of this section, and the methods and

procedures to be used to install the final cover. The closure plan must also discuss how the final cover system will achieve the performance standards specified in paragraph (d) of this section.

(iv) An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.

(v) An estimate of the largest area of the CCR unit ever requiring a final cover as required by paragraph (d) of this section at any time during the CCR unit's active life.

(vi) A schedule for completing all activities necessary to satisfy the closure criteria in this section, including an estimate of the year in which all closure activities for the CCR unit will be completed. The schedule should provide sufficient information to describe the sequential steps that will be taken to close the CCR unit, including identification of major milestones such as coordinating with and obtaining necessary approvals and permits from other agencies, the dewatering and stabilization phases of CCR surface impoundment closure, or installation of the final cover system, and the estimated timeframes to complete each step or phase of CCR unit closure. When preparing the written closure plan, if the owner or operator of a CCR unit estimates that the time required to complete closure will exceed the timeframes specified in paragraph (f)(1) of this section, the written closure plan must include the site-specific information, factors and considerations that would support any time extension sought under paragraph (f)(2) of this section.

(2) *Timeframes for preparing the initial written closure plan*—(i) *Existing CCR landfills and existing CCR surface impoundments.* No later than October 17, 2016, the owner or operator of the CCR unit must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this section.

(ii) *New CCR landfills and new CCR surface impoundments, and any lateral expansion of a CCR unit.* No later than the date of the initial receipt of CCR in the CCR unit, the owner or operator must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this section.

(iii) The owner or operator has completed the written closure plan when the plan, including the certification required by paragraph (b)(4) of this section, has been placed in the facility's operating record as required by § 257.105(i)(4).

(3) *Amendment of a written closure plan.* (i) The owner or operator may amend the initial or any subsequent written closure plan developed pursuant to paragraph (b)(1) of this section at any time.

(ii) The owner or operator must amend the written closure plan whenever:

(A) There is a change in the operation of the CCR unit that would substantially affect the written closure plan in effect; or

(B) Before or after closure activities have commenced, unanticipated events necessitate a revision of the written closure plan.

(iii) The owner or operator must amend the closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written closure plan. If a written closure plan is revised after closure activities have commenced for a CCR unit, the owner or operator must amend the current closure plan no later than 30 days following the triggering event.

(4) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written closure plan meets the requirements of this section.

(c) *Closure by removal of CCR.* An owner or operator may elect to close a CCR unit by removing and decontaminating all areas affected by releases from the CCR unit. CCR removal and decontamination of the CCR unit are complete when constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit have been removed and groundwater monitoring concentrations do not exceed the groundwater

protection standard established pursuant to § 257.95(h) for constituents listed in appendix IV to this part.

(d) *Closure performance standard when leaving CCR in place*—(1) The owner or operator of a CCR unit must ensure that, at a minimum, the CCR unit is closed in a manner that will:

(i) Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;

(ii) Preclude the probability of future impoundment of water, sediment, or slurry;

(iii) Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;

(iv) Minimize the need for further maintenance of the CCR unit; and

(v) Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

(2) *Drainage and stabilization of CCR surface impoundments.* The owner or operator of a CCR surface impoundment or any lateral expansion of a CCR surface impoundment must meet the requirements of paragraphs (d)(2)(i) and (ii) of this section prior to installing the final cover system required under paragraph (d)(3) of this section.

(i) Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.

(ii) Remaining wastes must be stabilized sufficient to support the final cover system.

(3) *Final cover system.* If a CCR unit is closed by leaving CCR in place, the owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (d)(3)(i) of this section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(ii) of this section.

(i) The final cover system must be designed and constructed to meet the criteria in paragraphs (d)(3)(i)(A) through (D) of this section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.

(A) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1×10^{-5} cm/sec, whichever is less.

(B) The infiltration of liquids through the closed CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.

(C) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.

(D) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(ii) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (f)(3)(ii)(A) through (D) of this section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.

(A) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (d)(3)(i)(A) and (B) of this section.

(B) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (d)(3)(i)(C) of this section.

(C) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(iii) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the design of the final cover system meets the requirements of this section.

(e) *Initiation of closure activities.* Except as provided for in paragraph (e)(4) of this section and § 257.103, the owner

or operator of a CCR unit must commence closure of the CCR unit no later than the applicable timeframes specified in either paragraph (e)(1) or (2) of this section.

(1) The owner or operator must commence closure of the CCR unit no later than 30 days after the date on which the CCR unit either:

(i) Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or

(ii) Removes the known final volume of CCR from the CCR unit for the purpose of beneficial use of CCR.

(2)(i) Except as provided by paragraph (e)(2)(ii) of this section, the owner or operator must commence closure of a CCR unit that has not received CCR or any non-CCR waste stream or is no longer removing CCR for the purpose of beneficial use within two years of the last receipt of waste or within two years of the last removal of CCR material for the purpose of beneficial use.

(ii) Notwithstanding paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit may secure an additional two years to initiate closure of the idle unit provided the owner or operator provides written documentation that the CCR unit will continue to accept wastes or will start removing CCR for the purpose of beneficial use. The documentation must be supported by, at a minimum, the information specified in paragraphs (e)(2)(ii)(A) and (B) of this section. The owner or operator may obtain two-year extensions provided the owner or operator continues to be able to demonstrate that there is reasonable likelihood that the CCR unit will accept wastes in the foreseeable future or will remove CCR from the unit for the purpose of beneficial use. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by § 257.105(i)(5) prior to the end of any two-year period.

(A) Information documenting that the CCR unit has remaining storage or disposal capacity or that the CCR unit can have CCR removed for the purpose of beneficial use; and

(B) Information demonstrating that that there is a reasonable likelihood that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future or that CCR can be removed for the purpose of beneficial use. The narrative must include a best estimate as to when the CCR unit will resume receiving CCR or non-CCR waste streams. The situations listed in paragraphs (e)(2)(ii)(B)(*1*) through (*4*) of this section are examples of situations that would support a determination that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future.

(*1*) Normal plant operations include periods during which the CCR unit does not receive CCR or non-CCR waste streams, such as the alternating use of two or more CCR units whereby at any point in time one CCR unit is receiving CCR while CCR is being removed from a second CCR unit after its dewatering.

(*2*) The CCR unit is dedicated to a coal-fired boiler unit that is temporarily idled (*e.g.*, CCR is not being generated) and there is a reasonable likelihood that the coal-fired boiler will resume operations in the future.

(*3*) The CCR unit is dedicated to an operating coal-fired boiler (*i.e.*, CCR is being generated); however, no CCR are being placed in the CCR unit because the CCR are being entirely diverted to beneficial uses, but there is a reasonable likelihood that the CCR unit will again be used in the foreseeable future.

(*4*) The CCR unit currently receives only non-CCR waste streams and those non-CCR waste streams are not generated for an extended period of time, but there is a reasonable likelihood that the CCR unit will again receive non-CCR waste streams in the future.

(iii) In order to obtain additional time extension(s) to initiate closure of a CCR unit beyond the two years provided by paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (e)(2)(ii) of this section the following statement signed by the owner or operator or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining

the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(3) For purposes of this subpart, closure of the CCR unit has commenced if the owner or operator has ceased placing waste and completes any of the following actions or activities:

(i) Taken any steps necessary to implement the written closure plan required by paragraph (b) of this section;

(ii) Submitted a completed application for any required state or agency permit or permit modification; or

(iii) Taken any steps necessary to comply with any state or other agency standards that are a prerequisite, or are otherwise applicable, to initiating or completing the closure of a CCR unit.

(4) The timeframes specified in paragraphs (e)(1) and (2) of this section do not apply to any of the following owners or operators:

(i) An owner or operator of an inactive CCR surface impoundment closing the CCR unit as required by §257.100(b);

(ii) An owner or operator of an existing unlined CCR surface impoundment closing the CCR unit as required by §257.101(a);

(iii) An owner or operator of an existing CCR surface impoundment closing the CCR unit as required by §257.101(b);

(iv) An owner or operator of a new CCR surface impoundment closing the CCR unit as required by §257.101(c); or

(v) An owner or operator of an existing CCR landfill closing the CCR unit as required by §257.101(d).

(f) *Completion of closure activities.* (1) Except as provided for in paragraph (f)(2) of this section, the owner or operator must complete closure of the CCR unit:

(i) For existing and new CCR landfills and any lateral expansion of a CCR landfill, within six months of commencing closure activities.

(ii) For existing and new CCR surface impoundments and any lateral expansion of a CCR surface impoundment, within five years of commencing closure activities.

(2)(i) *Extensions of closure timeframes.* The timeframes for completing closure of a CCR unit specified under paragraphs (f)(1) of this section may be extended if the owner or operator can demonstrate that it was not feasible to complete closure of the CCR unit within the required timeframes due to factors beyond the facility's control. If the owner or operator is seeking a time extension beyond the time specified in the written closure plan as required by paragraph (b)(1) of this section, the demonstration must include a narrative discussion providing the basis for additional time beyond that specified in the closure plan. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by §257.105(i)(6) prior to the end of any two-year period. Factors that may support such a demonstration include:

(A) Complications stemming from the climate and weather, such as unusual amounts of precipitation or a significantly shortened construction season;

(B) Time required to dewater a surface impoundment due to the volume of CCR contained in the CCR unit or the characteristics of the CCR in the unit;

(C) The geology and terrain surrounding the CCR unit will affect the amount of material needed to close the CCR unit; or

(D) Time required or delays caused by the need to coordinate with and obtain necessary approvals and permits from a state or other agency.

(ii) *Maximum time extensions.* (A) CCR surface impoundments of 40 acres or smaller may extend the time to complete closure by no longer than two years.

(B) CCR surface impoundments larger than 40 acres may extend the timeframe to complete closure of the CCR unit multiple times, in two-year increments. For each two-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of five two-year extensions may be obtained for any CCR surface impoundment.

(C) CCR landfills may extend the timeframe to complete closure of the CCR unit multiple times, in one-year

increments. For each one-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of two one-year extensions may be obtained for any CCR landfill.

(iii) In order to obtain additional time extension(s) to complete closure of a CCR unit beyond the times provided by paragraph (f)(1) of this section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (f)(2)(i) of this section the following statement signed by the owner or operator or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(3) Upon completion, the owner or operator of the CCR unit must obtain a certification from a qualified professional engineer verifying that closure has been completed in accordance with the closure plan specified in paragraph (b) of this section and the requirements of this section.

(g) No later than the date the owner or operator initiates closure of a CCR unit, the owner or operator must prepare a notification of intent to close a CCR unit. The notification must include the certification by a qualified professional engineer for the design of the final cover system as required by §257.102(d)(3)(iii), if applicable. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by §257.105(i)(7).

(h) Within 30 days of completion of closure of the CCR unit, the owner or operator must prepare a notification of closure of a CCR unit. The notification must include the certification by a qualified professional engineer as required by §257.102(f)(3). The owner or operator has completed the notification when it has been placed in the facility's operating record as required by §257.105(i)(8).

(i) *Deed notations.* (1) Except as provided by paragraph (i)(4) of this section, following closure of a CCR unit, the owner or operator must record a notation on the deed to the property, or some other instrument that is normally examined during title search.

(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 CCR unit; and

(ii) Its use is restricted under the post-closure care requirements as provided by §257.104(d)(1)(iii).

(3) Within 30 days of recording a notation on the deed to the property, the owner or operator must prepare a notification stating that the notation has been recorded. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by §257.105(i)(9).

(4) An owner or operator that closes a CCR unit in accordance with paragraph (c) of this section is not subject to the requirements of paragraphs (i)(1) through (3) of this section.

(j) The owner or operator of the CCR unit must comply with the closure recordkeeping requirements specified in §257.105(i), the closure notification requirements specified in §257.106(i), and the closure Internet requirements specified in §257.107(i).

(k) *Criteria to retrofit an existing CCR surface impoundment.* (1) To retrofit an existing CCR surface impoundment, the owner or operator must:

(i) First remove all CCR, including any contaminated soils and sediments from the CCR unit; and

(ii) Comply with the requirements in §257.72.

(iii) A CCR surface impoundment undergoing a retrofit remains subject to all other requirements of this subpart, including the requirement to conduct any necessary corrective action.

(2) *Written retrofit plan*—(i) *Content of the plan.* The owner or operator must prepare a written retrofit plan that describes the steps necessary to retrofit the CCR unit consistent with recognized and generally accepted good engineering practices. The written retrofit

plan must include, at a minimum, all of the following information:

(A) A narrative description of the specific measures that will be taken to retrofit the CCR unit in accordance with this section.

(B) A description of the procedures to remove all CCR and contaminated soils and sediments from the CCR unit.

(C) An estimate of the maximum amount of CCR that will be removed as part of the retrofit operation.

(D) An estimate of the largest area of the CCR unit that will be affected by the retrofit operation.

(E) A schedule for completing all activities necessary to satisfy the retrofit criteria in this section, including an estimate of the year in which retrofit activities of the CCR unit will be completed.

(ii) *Timeframes for preparing the initial written retrofit plan.* (A) No later than 60 days prior to date of initiating retrofit activities, the owner or operator must prepare an initial written retrofit plan consistent with the requirements specified in paragraph (k)(2) of this section. For purposes of this subpart, initiation of retrofit activities has commenced if the owner or operator has ceased placing waste in the unit and completes any of the following actions or activities:

(*1*) Taken any steps necessary to implement the written retrofit plan;

(*2*) Submitted a completed application for any required state or agency permit or permit modification; or

(*3*) Taken any steps necessary to comply with any state or other agency standards that are a prerequisite, or are otherwise applicable, to initiating or completing the retrofit of a CCR unit.

(B) The owner or operator has completed the written retrofit plan when the plan, including the certification required by paragraph (k)(2)(iv) of this section, has been placed in the facility's operating record as required by § 257.105(j)(1).

(iii) *Amendment of a written retrofit plan.* (A) The owner or operator may amend the initial or any subsequent written retrofit plan at any time.

(B) The owner or operator must amend the written retrofit plan whenever:

(*1*) There is a change in the operation of the CCR unit that would substantially affect the written retrofit plan in effect; or

(*2*) Before or after retrofit activities have commenced, unanticipated events necessitate a revision of the written retrofit plan.

(C) The owner or operator must amend the retrofit plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the revision of an existing written retrofit plan. If a written retrofit plan is revised after retrofit activities have commenced for a CCR unit, the owner or operator must amend the current retrofit plan no later than 30 days following the triggering event.

(iv) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the activities outlined in the written retrofit plan, including any amendment of the plan, meet the requirements of this section.

(3) *Deadline for completion of activities related to the retrofit of a CCR unit.* Any CCR surface impoundment that is being retrofitted must complete all retrofit activities within the same time frames and procedures specified for the closure of a CCR surface impoundment in § 257.102(f) or, where applicable, § 257.103.

(4) Upon completion, the owner or operator must obtain a certification from a qualified professional engineer verifying that the retrofit activities have been completed in accordance with the retrofit plan specified in paragraph (k)(2) of this section and the requirements of this section.

(5) No later than the date the owner or operator initiates the retrofit of a CCR unit, the owner or operator must prepare a notification of intent to retrofit a CCR unit. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(j)(5).

(6) Within 30 days of completing the retrofit activities specified in paragraph (k)(1) of this section, the owner or operator must prepare a notification of completion of retrofit activities. The

notification must include the certification by a qualified professional engineer as required by paragraph (k)(4) of this section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by §257.105(j)(6).

(7) At any time after the initiation of a CCR unit retrofit, the owner or operator may cease the retrofit and initiate closure of the CCR unit in accordance with the requirements of §257.102.

(8) The owner or operator of the CCR unit must comply with the retrofit recordkeeping requirements specified in §257.105(j), the retrofit notification requirements specified in §257.106(j), and the retrofit Internet requirements specified in §257.107(j).

§257.103 Alternative closure requirements.

The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit that is subject to closure pursuant to §257.101(a), (b)(1), or (d) may continue to receive CCR in the unit provided the owner or operator meets the requirements of either paragraph (a) or (b) of this section.

(a)(1) *No alternative CCR disposal capacity.* Notwithstanding the provisions of §257.101(a), (b)(1), or (d), a CCR unit may continue to receive CCR if the owner or operator of the CCR unit certifies that the CCR must continue to be managed in that CCR unit due to the absence of alternative disposal capacity both on-site and off-site of the facility. To qualify under this paragraph (a)(1), the owner or operator of the CCR unit must document that all of the following conditions have been met:

(i) No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section;

(ii) The owner or operator has made, and continues to make, efforts to obtain additional capacity. Qualification under this subsection lasts only as long as no alternative capacity is available. Once alternative capacity is identified, the owner or operator must arrange to use such capacity as soon as feasible;

(iii) The owner or operator must remain in compliance with all other requirements of this subpart, including the requirement to conduct any necessary corrective action; and

(iv) The owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the development of alternative CCR disposal capacity.

(2) Once alternative capacity is available, the CCR unit must cease receiving CCR and initiate closure following the timeframes in §257.102(e) and (f).

(3) If no alternative capacity is identified within five years after the initial certification, the CCR unit must cease receiving CCR and close in accordance with the timeframes in §257.102(e) and (f).

(b)(1) *Permanent cessation of a coal-fired boiler(s) by a date certain.* Notwithstanding the provisions of §257.101(a), (b)(1), and (d), a CCR unit may continue to receive CCR if the owner or operator certifies that the facility will cease operation of the coal-fired boilers within the timeframes specified in paragraphs (b)(2) through (4) of this section, but in the interim period (prior to closure of the coal-fired boiler), the facility must continue to use the CCR unit due to the absence of alternative disposal capacity both on-site and off-site of the facility. To qualify under this paragraph (b)(1), the owner or operator of the CCR unit must document that all of the following conditions have been met:

(i) No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section.

(ii) The owner or operator must remain in compliance with all other requirements of this subpart, including the requirement to conduct any necessary corrective action; and

(iii) The owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the closure of the coal-fired boiler.

(2) For a CCR surface impoundment that is 40 acres or smaller, the coal-

fired boiler must cease operation and the CCR surface impoundment must have completed closure no later than October 17, 2023.

(3) For a CCR surface impoundment that is larger than 40 acres, the coal-fired boiler must cease operation, and the CCR surface impoundment must complete closure no later than October 17, 2028.

(4) For a CCR landfill, the coal-fired boiler must cease operation, and the CCR landfill must complete closure no later than April 19, 2021.

(c) Required notices and progress reports. An owner or operator of a CCR unit that closes in accordance with paragraphs (a) or (b) of this section must complete the notices and progress reports specified in paragraphs (c)(1) through (3) of this section.

(1) Within six months of becoming subject to closure pursuant to §257.101(a), (b)(1), or (d), the owner or operator must prepare and place in the facility's operating record a notification of intent to comply with the alternative closure requirements of this section. The notification must describe why the CCR unit qualifies for the alternative closure provisions under either paragraph (a) or (b) of this section, in addition to providing the documentation and certifications required by paragraph (a) or (b) of this section.

(2) The owner or operator must prepare the periodic progress reports required by paragraphs (a)(1)(iv) or (b)(1)(iii), in addition to describing any problems encountered and a description of the actions taken to resolve the problems. The annual progress reports must be completed according to the following schedule:

(i) The first annual progress report must be prepared no later than 13 months after completing the notification of intent to comply with the alternative closure requirements required by paragraph (c)(1) of this section.

(ii) The second annual progress report must be prepared no later than 12 months after completing the first annual progress report. Additional annual progress reports must be prepared within 12 months of completing the previous annual progress report.

(iii) The owner or operator has completed the progress reports specified in paragraph (c)(2) of this section when the reports are placed in the facility's operating record as required by §257.105(i)(10).

(3) An owner or operator of a CCR unit must also prepare the notification of intent to close a CCR unit as required by §257.102(g).

(d) The owner or operator of the CCR unit must comply with the record-keeping requirements specified in §257.105(i), the notification requirements specified in §257.106(i), and the Internet requirements specified in §257.107(i).

§257.104 Post-closure care requirements.

(a) *Applicability.* (1) Except as provided by either paragraph (a)(2) or (3) of this section, §257.104 applies to the owners or operators of CCR landfills, CCR surface impoundments, and all lateral expansions of CCR units that are subject to the closure criteria under §257.102.

(2) An owner or operator of a CCR unit that elects to close a CCR unit by removing CCR as provided by §257.102(c) is not subject to the post-closure care criteria under this section.

(3) An owner or operator of an inactive CCR surface impoundment that elects to close a CCR unit pursuant to the requirements under §257.100(b) is not subject to the post-closure care criteria under this section.

(b) *Post-closure care maintenance requirements.* Following closure of the CCR unit, the owner or operator must conduct post-closure care for the CCR unit, which must consist of at least the following:

(1) Maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;

(2) If the CCR unit is subject to the design criteria under §257.70, maintaining the integrity and effectiveness of the leachate collection and removal system and operating the leachate collection and removal system in accordance with the requirements of §257.70; and

(3) Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §§ 257.90 through 257.98.

(c) *Post-closure care period.* (1) Except as provided by paragraph (c)(2) of this section, the owner or operator of the CCR unit must conduct post-closure care for 30 years.

(2) If at the end of the post-closure care period the owner or operator of the CCR unit is operating under assessment monitoring in accordance with § 257.95, the owner or operator must continue to conduct post-closure care until the owner or operator returns to detection monitoring in accordance with § 257.95.

(d) *Written post-closure plan*—(1) *Content of the plan.* The owner or operator of a CCR unit must prepare a written post-closure plan that includes, at a minimum, the information specified in paragraphs (d)(1)(i) through (iii) of this section.

(i) A description of the monitoring and maintenance activities required in paragraph (b) of this section for the CCR unit, and the frequency at which these activities will be performed;

(ii) The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period; and

(iii) 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 component of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in this subpart. Any other disturbance is allowed if the owner or operator of the CCR unit demonstrates that disturbance of the final cover, liner, or other component of the containment system, including any removal of CCR, will not increase the potential threat to human health or the environment. The demonstration must be certified by a qualified professional engineer, and notification shall be provided to the State Director that the demonstration has been placed in the operating record and on the owners or operator's publicly accessible Internet site.

(2) *Deadline to prepare the initial written post-closure plan*—(i) *Existing CCR landfills and existing CCR surface impoundments.* No later than October 17, 2016, the owner or operator of the CCR unit must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this section.

(ii) *New CCR landfills, new CCR surface impoundments, and any lateral expansion of a CCR unit.* No later than the date of the initial receipt of CCR in the CCR unit, the owner or operator must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this section.

(iii) The owner or operator has completed the written post-closure plan when the plan, including the certification required by paragraph (d)(4) of this section, has been placed in the facility's operating record as required by § 257.105(i)(4).

(3) *Amendment of a written post-closure plan.* (i) The owner or operator may amend the initial or any subsequent written post-closure plan developed pursuant to paragraph (d)(1) of this section at any time.

(ii) The owner or operator must amend the written closure plan whenever:

(A) There is a change in the operation of the CCR unit that would substantially affect the written post-closure plan in effect; or

(B) After post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.

(iii) The owner or operator must amend the written post-closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written post-closure plan. If a written post-closure plan is revised after post-closure activities have commenced for a CCR unit, the owner or operator must amend the written post-closure plan no later than 30 days following the triggering event.

(4) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of this section.

(e) *Notification of completion of post-closure care period.* No later than 60 days following the completion of the post-closure care period, the owner or operator of the CCR unit must prepare a notification verifying that post-closure care has been completed. The notification must include the certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with the closure plan specified in paragraph (d) of this section and the requirements of this section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(13).

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(i), the notification requirements specified in § 257.106(i), and the Internet requirements specified in § 257.107(i).

RECORDKEEPING, NOTIFICATION, AND POSTING OF INFORMATION TO THE INTERNET

§ 257.105 Recordkeeping requirements.

(a) Each owner or operator of a CCR unit subject to the requirements of this subpart must maintain files of all information required by this section in a written operating record at their facility.

(b) Unless specified otherwise, each file must be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, record, or study.

(c) An owner or operator of more than one CCR unit subject to the provisions of this subpart may comply with the requirements of this section in one recordkeeping system provided the system identifies each file by the name of each CCR unit. The files may be maintained on microfilm, on a computer, on computer disks, on a storage system accessible by a computer, on magnetic tape disks, or on microfiche.

(d) The owner or operator of a CCR unit must submit to the State Director and/or appropriate Tribal authority any demonstration or documentation required by this subpart, if requested, when such information is not otherwise available on the owner or operator's publicly accessible Internet site.

(e) *Location restrictions.* The owner or operator of a CCR unit subject to this subpart must place the demonstrations documenting whether or not the CCR unit is in compliance with the requirements under §§ 257.60(a), 257.61(a), 257.62(a), 257.63(a), and 257.64(a), as it becomes available, in the facility's operating record.

(f) *Design criteria.* The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record:

(1) The design and construction certifications as required by § 257.70(e) and (f).

(2) The documentation of liner type as required by § 257.71(a).

(3) The design and construction certifications as required by § 257.72(c) and (d).

(4) Documentation prepared by the owner or operator stating that the permanent identification marker was installed as required by §§ 257.73(a)(1) and 257.74(a)(1).

(5) The initial and periodic hazard potential classification assessments as required by §§ 257.73(a)(2) and 257.74(a)(2).

(6) The emergency action plan (EAP), and any amendment of the EAP, as required by §§ 257.73(a)(3) and 257.74(a)(3), except that only the most recent EAP must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(7) Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders as required by §§ 257.73(a)(3)(i)(E) and 257.74(a)(3)(i)(E).

(8) Documentation prepared by the owner or operator recording all activations of the emergency action plan as required by §§ 257.73(a)(3)(v) and 257.74(a)(3)(v).

(9) The history of construction, and any revisions of it, as required by § 257.73(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with § 257.102.

(10) The initial and periodic structural stability assessments as required by §§ 257.73(d) and 257.74(d).

(11) Documentation detailing the corrective measures taken to remedy the deficiency or release as required by §§ 257.73(d)(2) and 257.74(d)(2).

(12) The initial and periodic safety factor assessments as required by §§ 257.73(e) and 257.74(e).

(13) The design and construction plans, and any revisions of it, as required by § 257.74(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with § 257.102.

(g) *Operating criteria.* The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record:

(1) The CCR fugitive dust control plan, and any subsequent amendment of the plan, required by § 257.80(b), except that only the most recent control plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(2) The annual CCR fugitive dust control report required by § 257.80(c).

(3) The initial and periodic run-on and run-off control system plans as required by § 257.81(c).

(4) The initial and periodic inflow design flood control system plan as required by § 257.82(c).

(5) Documentation recording the results of each inspection and instrumentation monitoring by a qualified person as required by § 257.83(a).

(6) The periodic inspection report as required by § 257.83(b)(2).

(7) Documentation detailing the corrective measures taken to remedy the deficiency or release as required by §§ 257.83(b)(5) and 257.84(b)(5).

(8) Documentation recording the results of the weekly inspection by a qualified person as required by § 257.84(a).

(9) The periodic inspection report as required by § 257.84(b)(2).

(h) *Groundwater monitoring and corrective action.* The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record:

(1) The annual groundwater monitoring and corrective action report as required by § 257.90(e).

(2) Documentation of the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices as required by § 257.91(e)(1).

(3) The groundwater monitoring system certification as required by § 257.91(f).

(4) The selection of a statistical method certification as required by § 257.93(f)(6).

(5) Within 30 days of establishing an assessment monitoring program, the notification as required by § 257.94(e)(3).

(6) The results of appendices III and IV to this part constituent concentrations as required by § 257.95(d)(1).

(7) Within 30 days of returning to a detection monitoring program, the notification as required by § 257.95(e).

(8) Within 30 days of detecting one or more constituents in appendix IV to this part at statistically significant levels above the groundwater protection standard, the notifications as required by § 257.95(g).

(9) Within 30 days of initiating the assessment of corrective measures requirements, the notification as required by § 257.95(g)(5).

(10) The completed assessment of corrective measures as required by § 257.96(d).

(11) Documentation prepared by the owner or operator recording the public meeting for the corrective measures assessment as required by § 257.96(e).

(12) The semiannual report describing the progress in selecting and designing the remedy and the selection of remedy report as required by § 257.97(a), except that the selection of remedy report must be maintained until the remedy has been completed.

(13) Within 30 days of completing the remedy, the notification as required by § 257.98(e).

(i) *Closure and post-closure care.* The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record:

(1) The notification of intent to initiate closure of the CCR unit as required by § 257.100(c)(1).

(2) The annual progress reports of closure implementation as required by § 257.100(c)(2)(i) and (ii).

(3) The notification of closure completion as required by § 257.100(c)(3).

(4) The written closure plan, and any amendment of the plan, as required by § 257.102(b), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(5) The written demonstration(s), including the certification required by § 257.102(e)(2)(iii), for a time extension for initiating closure as required by § 257.102(e)(2)(ii).

(6) The written demonstration(s), including the certification required by § 257.102(f)(2)(iii), for a time extension for completing closure as required by § 257.102(f)(2)(i).

(7) The notification of intent to close a CCR unit as required by § 257.102(g).

(8) The notification of completion of closure of a CCR unit as required by § 257.102(h).

(9) The notification recording a notation on the deed as required by § 257.102(i).

(10) The notification of intent to comply with the alternative closure requirements as required by § 257.103(c)(1).

(11) The annual progress reports under the alternative closure requirements as required by § 257.103(c)(2).

(12) The written post-closure plan, and any amendment of the plan, as required by § 257.104(d), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(13) The notification of completion of post-closure care period as required by § 257.104(e).

(j) *Retrofit criteria.* The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record:

(1) The written retrofit plan, and any amendment of the plan, as required by § 257.102(k)(2), except that only the most recent retrofit plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(2) The notification of intent that the retrofit activities will proceed in accordance with the alternative procedures in § 257.103.

(3) The annual progress reports required under the alternative requirements as required by § 257.103.

(4) The written demonstration(s), including the certification in § 257.102(f)(2)(iii), for a time extension for completing retrofit activities as required by § 257.102(k)(3).

(5) The notification of intent to initiate retrofit of a CCR unit as required by § 257.102(k)(5).

(6) The notification of completion of retrofit activities as required by § 257.102(k)(6).

§ 257.106 Notification requirements.

(a) The notifications required under paragraphs (e) through (i) of this section must be sent to the relevant State Director and/or appropriate Tribal authority before the close of business on the day the notification is required to be completed. For purposes of this section, *before the close of business* means the notification must be postmarked or sent by electronic mail (email). If a notification deadline falls on a weekend or federal holiday, the notification deadline is automatically extended to the next business day.

(b) If any CCR unit is located in its entirety within Indian Country, the notifications of this section must be sent to the appropriate Tribal authority. If any CCR unit is located in part within Indian Country, the notifications of this section must be sent both to the appropriate State Director and Tribal authority.

(c) Notifications may be combined as long as the deadline requirement for each notification is met.

(d) Unless otherwise required in this section, the notifications specified in

this section must be sent to the State Director and/or appropriate Tribal authority within 30 days of placing in the operating record the information required by § 257.105.

(e) *Location restrictions.* The owner or operator of a CCR unit subject to the requirements of this subpart must notify the State Director and/or appropriate Tribal authority that each demonstration specified under § 257.105(e) has been placed in the operating record and on the owner or operator's publicly accessible internet site.

(f) *Design criteria.* The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must:

(1) Within 60 days of commencing construction of a new CCR unit, provide notification of the availability of the design certification specified under § 257.105(f)(1) or (3). If the owner or operator of the CCR unit elects to install an alternative composite liner, the owner or operator must also submit to the State Director and/or appropriate Tribal authority a copy of the alternative composite liner design.

(2) No later than the date of initial receipt of CCR by a new CCR unit, provide notification of the availability of the construction certification specified under § 257.105(f)(1) or (3).

(3) Provide notification of the availability of the documentation of liner type specified under § 257.105(f)(2).

(4) Provide notification of the availability of the initial and periodic hazard potential classification assessments specified under § 257.105(f)(5).

(5) Provide notification of the availability of emergency action plan (EAP), and any revisions of the EAP, specified under § 257.105(f)(6).

(6) Provide notification of the availability of documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders specified under § 257.105(f)(7).

(7) Provide notification of documentation prepared by the owner or operator recording all activations of the emergency action plan specified under § 257.105(f)(8).

(8) Provide notification of the availability of the history of construction, and any revision of it, specified under § 257.105(f)(9).

(9) Provide notification of the availability of the initial and periodic structural stability assessments specified under § 257.105(f)(10).

(10) Provide notification of the availability of the documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(f)(11).

(11) Provide notification of the availability of the initial and periodic safety factor assessments specified under § 257.105(f)(12).

(12) Provide notification of the availability of the design and construction plans, and any revision of them, specified under § 257.105(f)(13).

(g) *Operating criteria.* The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must:

(1) Provide notification of the availability of the CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under § 257.105(g)(1).

(2) Provide notification of the availability of the annual CCR fugitive dust control report specified under § 257.105(g)(2).

(3) Provide notification of the availability of the initial and periodic run-on and run-off control system plans specified under § 257.105(g)(3).

(4) Provide notification of the availability of the initial and periodic inflow design flood control system plans specified under § 257.105(g)(4).

(5) Provide notification of the availability of the periodic inspection reports specified under § 257.105(g)(6).

(6) Provide notification of the availability of the documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(g)(7).

(7) Provide notification of the availability of the periodic inspection reports specified under § 257.105(g)(9).

(h) *Groundwater monitoring and corrective action.* The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must:

(1) Provide notification of the availability of the annual groundwater monitoring and corrective action report specified under § 257.105(h)(1).

(2) Provide notification of the availability of the groundwater monitoring system certification specified under § 257.105(h)(3).

(3) Provide notification of the availability of the selection of a statistical method certification specified under § 257.105(h)(4).

(4) Provide notification that an assessment monitoring programs has been established specified under § 257.105(h)(5).

(5) Provide notification that the CCR unit is returning to a detection monitoring program specified under § 257.105(h)(7).

(6) Provide notification that one or more constituents in appendix IV to this part have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under § 257.105(h)(8).

(7) Provide notification that an assessment of corrective measures has been initiated specified under § 257.105(h)(9).

(8) Provide notification of the availability of assessment of corrective measures specified under § 257.105(h)(10).

(9) Provide notification of the availability of the semiannual report describing the progress in selecting and designing the remedy and the selection of remedy report specified under § 257.105(h)(12).

(10) Provide notification of the completion of the remedy specified under § 257.105(h)(13).

(i) *Closure and post-closure care.* The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible Internet site. The owner or operator must:

(1) Provide notification of the intent to initiate closure of the CCR unit specified under § 257.105(i)(1).

(2) Provide notification of the availability of the annual progress reports of closure implementation specified under § 257.105(i)(2).

(3) Provide notification of closure completion specified under § 257.105(i)(3).

(4) Provide notification of the availability of the written closure plan, and any amendment of the plan, specified under § 257.105(i)(4).

(5) Provide notification of the availability of the demonstration(s) for a time extension for initiating closure specified under § 257.105(i)(5).

(6) Provide notification of the availability of the demonstration(s) for a time extension for completing closure specified under § 257.105(i)(6).

(7) Provide notification of intent to close a CCR unit specified under § 257.105(i)(7).

(8) Provide notification of completion of closure of a CCR unit specified under § 257.105(i)(8).

(9) Provide notification of the deed notation as required by § 257.105(i)(9).

(10) Provide notification of intent to comply with the alternative closure requirements specified under § 257.105(i)(10).

(11) The annual progress reports under the alternative closure requirements as required by § 257.105(i)(11).

(12) Provide notification of the availability of the written post-closure plan, and any amendment of the plan, specified under § 257.105(i)(12).

(13) Provide notification of completion of post-closure care specified under § 257.105(i)(13).

(j) *Retrofit criteria.* The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible Internet site. The owner or operator must:

(1) Provide notification of the availability of the written retrofit plan, and any amendment of the plan, specified under § 257.105(j)(1).

(2) Provide notification of intent to comply with the alternative retrofit requirements specified under § 257.105(j)(2).

(3) The annual progress reports under the alternative retrofit requirements as required by § 257.105(j)(3).

(4) Provide notification of the availability of the demonstration(s) for a time extension for completing retrofit activities specified under § 257.105(j)(4).

(5) Provide notification of intent to initiate retrofit of a CCR unit specified under § 257.105(j)(5).

(6) Provide notification of completion of retrofit activities specified under § 257.105(j)(6).

§ 257.107 Publicly accessible Internet site requirements.

(a) Each owner or operator of a CCR unit subject to the requirements of this subpart must maintain a publicly accessible Internet site (CCR Web site) containing the information specified in this section. The owner or operator's Web site must be titled ''CCR Rule Compliance Data and Information.''

(b) An owner or operator of more than one CCR unit subject to the provisions of this subpart may comply with the requirements of this section by using the same Internet site for multiple CCR units provided the CCR Web site clearly delineates information by the name or identification number of each unit.

(c) Unless otherwise required in this section, the information required to be posted to the CCR Web site must be made available to the public for at least five years following the date on which the information was first posted to the CCR Web site.

(d) Unless otherwise required in this section, the information must be posted to the CCR Web site within 30 days of placing the pertinent information required by § 257.105 in the operating record.

(e) *Location restrictions.* The owner or operator of a CCR unit subject to this subpart must place each demonstration specified under § 257.105(e) on the owner or operator's CCR Web site.

(f) *Design criteria.* The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:

(1) Within 60 days of commencing construction of a new unit, the design certification specified under § 257.105(f)(1) or (3).

(2) No later than the date of initial receipt of CCR by a new CCR unit, the construction certification specified under § 257.105(f)(1) or (3).

(3) The documentation of liner type specified under § 257.105(f)(2).

(4) The initial and periodic hazard potential classification assessments specified under § 257.105(f)(5).

(5) The emergency action plan (EAP) specified under § 257.105(f)(6), except that only the most recent EAP must be maintained on the CCR Web site irrespective of the time requirement specified in paragraph (c) of this section.

(6) Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders specified under § 257.105(f)(7).

(7) Documentation prepared by the owner or operator recording any activation of the emergency action plan specified under § 257.105(f)(8).

(8) The history of construction, and any revisions of it, specified under § 257.105(f)(9).

(9) The initial and periodic structural stability assessments specified under § 257.105(f)(10).

(10) The documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(f)(11).

(11) The initial and periodic safety factor assessments specified under § 257.105(f)(12).

(12) The design and construction plans, and any revisions of them, specified under § 257.105(f)(13).

(g) *Operating criteria.* The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:

(1) The CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under § 257.105(g)(1) except that only the most recent plan must be maintained on the CCR Web

site irrespective of the time requirement specified in paragraph (c) of this section.

(2) The annual CCR fugitive dust control report specified under § 257.105(g)(2).

(3) The initial and periodic run-on and run-off control system plans specified under § 257.105(g)(3).

(4) The initial and periodic inflow design flood control system plans specified under § 257.105(g)(4).

(5) The periodic inspection reports specified under § 257.105(g)(6).

(6) The documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(g)(7).

(7) The periodic inspection reports specified under § 257.105(g)(9).

(h) *Groundwater monitoring and corrective action.* The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:

(1) The annual groundwater monitoring and corrective action report specified under § 257.105(h)(1).

(2) The groundwater monitoring system certification specified under § 257.105(h)(3).

(3) The selection of a statistical method certification specified under § 257.105(h)(4).

(4) The notification that an assessment monitoring programs has been established specified under § 257.105(h)(5).

(5) The notification that the CCR unit is returning to a detection monitoring program specified under § 257.105(h)(7).

(6) The notification that one or more constituents in appendix IV to this part have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under § 257.105(h)(8).

(7) The notification that an assessment of corrective measures has been initiated specified under § 257.105(h)(9).

(8) The assessment of corrective measures specified under § 257.105(h)(10).

(9) The semiannual reports describing the progress in selecting and designing remedy and the selection of remedy report specified under § 257.105(h)(12), except that the selection of the remedy report must be maintained until the remedy has been completed.

(10) The notification that the remedy has been completed specified under § 257.105(h)(13).

(i) *Closure and post-closure care.* The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:

(1) The notification of intent to initiate closure of the CCR unit specified under § 257.105(i)(1).

(2) The annual progress reports of closure implementation specified under § 257.105(i)(2).

(3) The notification of closure completion specified under § 257.105(i)(3).

(4) The written closure plan, and any amendment of the plan, specified under § 257.105(i)(4).

(5) The demonstration(s) for a time extension for initiating closure specified under § 257.105(i)(5).

(6) The demonstration(s) for a time extension for completing closure specified under § 257.105(i)(6).

(7) The notification of intent to close a CCR unit specified under § 257.105(i)(7).

(8) The notification of completion of closure of a CCR unit specified under § 257.105(i)(8).

(9) The notification recording a notation on the deed as required by § 257.105(i)(9).

(10) The notification of intent to comply with the alternative closure requirements as required by § 257.105(i)(10).

(11) The annual progress reports under the alternative closure requirements as required by § 257.105(i)(11).

(12) The written post-closure plan, and any amendment of the plan, specified under § 257.105(i)(12).

(13) The notification of completion of post-closure care specified under § 257.105(i)(13).

(j) *Retrofit criteria.* The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site:

(1) The written retrofit plan, and any amendment of the plan, specified under § 257.105(j)(1).

(2) The notification of intent to comply with the alternative retrofit requirements as required by §257.105(j)(2).

(3) The annual progress reports under the alternative retrofit requirements as required by §257.105(j)(3).

(4) The demonstration(s) for a time extension for completing retrofit activities specified under §257.105(j)(4).

(5) The notification of intent to retrofit a CCR unit specified under §257.105(j)(5).

(6) The notification of completion of retrofit activities specified under §257.105(j)(6).

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.

APPENDIX III TO PART 257—CONSTITUENTS FOR DETECTION MONITORING

Common name [1]
Boron
Calcium
Chloride
Fluoride
pH
Sulfate
Total Dissolved Solids (TDS)

[1] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[80 FR 21500, Apr. 17, 2015]

APPENDIX IV TO PART 257—CONSTITUENTS FOR ASSESSMENT MONITORING

Common name [1]
Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cobalt
Fluoride
Lead
Lithium
Mercury
Molybdenum
Selenium
Thallium
Radium 226 and 228 combined

[1] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[80 FR 21500, Apr. 17, 2015]

PART 258—CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS

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APPENDIX II TO PART 258—LIST OF HAZARDOUS INORGANIC 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), 6981(a).

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.

Construction and demolition (C&D) landfill means a solid waste disposal facility subject to the requirements in part 257, subparts A or B of this chapter that receives construction and demolition waste and does not receive hazardous waste (defined in § 261.3 of this chapter) or industrial solid waste (defined in § 258.2 of this chapter). Only a C&D landfill that meets the requirements of 40 CFR part 257, subpart B may receive conditionally exempt small quantity generator waste (defined in § 261.5 of this chapter). A C&D landfill typically receives any one or more of the following types of solid wastes: roadwork material, excavated material, demolition waste, construction/renovation waste, and site clearance waste.

Director of an Approved State means the chief administrative officer of a state agency responsible for implementing the state permit program 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 (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 under § 257.2 of this chapter. 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. A construction and demolition landfill that receives residential lead-based paint waste and does not receive any other household waste is not a MSWLF unit.

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.

Residential lead-based paint waste means waste containing lead-based paint, which is generated as a result of activities such as abatement, rehabilitation, renovation and remodeling in homes and other residences. The term residential lead-based paint waste includes, but is not limited to, lead-based paint debris, chips, dust, and sludges.

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 lead state agency responsible for implementing the

state permit program for 40 CFR part 257, subpart B and 40 CFR part 258 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.

[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; 63 FR 57044, Oct. 23, 1998; 68 FR 36495, June 18, 2003]

§ 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 Research, development, and demonstration permits.

(a) Except as provided in paragraph (f) of this section, the Director of an approved State may issue a research, development, and demonstration permit for a new MSWLF unit, existing MSWLF unit, or lateral expansion, for which the owner or operator proposes to utilize innovative and new methods which vary from either or both of the following criteria provided that the MSWLF unit has a leachate collection system designed and constructed to maintain less than a 30-cm depth of leachate on the liner:

(1) The run-on control systems in § 258.26(a)(1); and

(2) The liquids restrictions in § 258.28(a).

(b) The Director of an approved State may issue a research, development, and demonstration permit for a new MSWLF unit, existing MSWLF unit, or lateral expansion, for which the owner or operator proposes to utilize innovative and new methods which vary from the final cover criteria of § 258.60(a)(1), (a)(2) and (b)(1), provided the MSWLF unit owner/operator demonstrates that the infiltration of liquid through the alternative cover system will not cause contamination of groundwater or surface water, or cause leachate depth on the liner to exceed 30-cm.

(c) Any permit issued under this section must include such terms and conditions at least as protective as the criteria for municipal solid waste landfills to assure protection of human health and the environment. Such permits shall:

(1) Provide for the construction and operation of such facilities as necessary, for not longer than three years, unless renewed as provided in paragraph (e) of this section;

(2) Provide that the MSWLF unit must receive only those types and quantities of municipal solid waste and non-hazardous wastes which the State Director deems appropriate for the purposes of determining the efficacy and performance capabilities of the technology or process;

(3) Include such requirements as necessary to protect human health and the environment, including such requirements as necessary for testing and providing information to the State Director with respect to the operation of the facility;

(4) Require the owner or operator of a MSWLF unit permitted under this section to submit an annual report to the State Director showing whether and to what extent the site is progressing in attaining project goals. The report will also include a summary of all monitoring and testing results, as well as any other operating information specified by the State Director in the permit; and

(5) Require compliance with all criteria in this part, except as permitted under this section.

(d) The Director of an approved State may order an immediate termination of all operations at the facility allowed under this section or other corrective measures at any time the State Director determines that the overall goals of the project are not being attained, including protection of human health or the environment.

(e) Any permit issued under this section shall not exceed three years and each renewal of a permit may not exceed three years.

(1) The total term for a permit for a project including renewals may not exceed twelve years; and

(2) During permit renewal, the applicant shall provide a detailed assessment of the project showing the status with respect to achieving project goals, a list of problems and status with respect to problem resolutions, and other any other requirements that the Director determines necessary for permit renewal.

(f) *Small MSWLF units.* (1) An owner or operator of a MSWLF unit operating under an exemption set forth in § 258.1(f)(1) is not eligible for any variance from §§ 258.26(a)(1) and 258.28(a) of the operating criteria in subpart C of this part.

(2) An owner or operator of a MSWLF unit that disposes of 20 tons of municipal solid waste per day or less, based on an annual average, is not eligible for a variance from § 258.60 (b)(1),except in accordance with § 258.60(b)(3).

[69 FR 13255, Mar. 22, 2004]

EFFECTIVE DATE NOTE: At 81 FR 28724, May 10, 2016, § 258.4(e)(1) was revised, effective Nov. 10, 2016. For the convenience of the user, the revised text is set forth as follows:

§ 258.4 Research, development, and demonstration permits.

* * * * *

(e) * * *

(1) The total term for a permit for a project including renewals may not exceed twenty-one (21) years; and

* * * * *

§§ 258.5–258.9 [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.

NOTE TO § 258.10: A prohibition on locating a new MSWLF near certain airports was enacted in Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (Ford Act), Pub. L. 106–181 (49 U.S.C. 44718 note). Section 503 prohibits the ''construction or establishment'' of new MSWLFs after April 5, 2000 within six miles of certain smaller public airports. The Federal Aviation Administration (FAA) administers the Ford Act and has issued guidance in FAA Advisory Circular 150/5200–34, dated August 26, 2000. For further information, please contact the FAA.

[56 FR 51016, Oct. 9, 1991, as amended at 68 FR 59335, Oct. 15, 2003]

§ 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 area-wide 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;

(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; or

(3) The MSWLF unit is a Project XL MSWLF and meets the applicable requirements of § 258.41. The owner or operator must place documentation of the landfill design 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 9095B (Paint Filter Liquids Test), included in ''Test Methods for Evaluating Solid Waste, Physical/Chemical Methods'' (EPA Publication SW–846) which is incorporated by reference. A suffix of ''B'' in the method number indicates revision two (the method has been revised twice). Method 9095B is dated November 2004. This incorporation by reference was approved by the Director of the Federal Register pursuant to 5 U.S.C. 552(a) and 1 CFR part 51. This material is incorporated as it exists on the date of approval and a notice of any change in this material will be published in the FEDERAL REGISTER. A copy may be inspected at the Library, U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW. (3403T), Washington, DC 20460, *libraryhq@epa.gov;* or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

(2) *Gas condensate* means the liquid generated as a result of gas recovery process(es) at the MSWLF unit.

[56 FR 51016, Oct. 9, 1991, as amended at 66 FR 42449, Aug. 13, 2001; 70 FR 34555, June 14, 2005]

§ 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).

(d) The Director of an approved state program may receive electronic documents only if the state program includes the requirements of 40 CFR Part 3—(Electronic reporting).

[56 FR 51016, Oct. 9, 1991, as amended at 70 FR 59888, Oct. 13, 2005]

§§ 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 1×10^{-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
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 Project XL Bioreactor Landfill Projects.

(a) Buncombe County, North Carolina Project XL Bioreactor Landfill Requirements. Paragraph (a) of this section applies to Cells 1, 2, 3, 4, and 5 of the Buncombe County Solid Waste Management Facility located in the County of Buncombe, North Carolina, owned and operated by the Buncombe County Solid Waste Authority, or its successors. This paragraph (a) will also apply to Cells 6, 7, 8, 9, and 10, provided that the EPA Regional Administrator for Region 4 and the State Director determine that the pilot project in Cells 3, 4, and 5 is performing as expected and that the pilot project has not exhibited detrimental environmental results.

(1) The Buncombe County Solid Waste Authority is allowed to place liquid waste in the Buncombe County Solid Waste Management Facility, provided that the provisions of paragraphs (a)(2) through (9) of this section are met.

(2) The only liquid waste allowed under this section is leachate or gas condensate derived from the MSWLF, which may be supplemented with water from the French Broad River. The owner or operator shall control any liquids to the landfill to assure that the

average moisture content of the landfill does not exceed 50% by weight. Liquid addition and recirculation is allowed only to the extent that the integrity of the landfill including its liner system is maintained, as determined by the State Director.

(3) The MSWLF unit shall be designed and constructed with a liner and leachate collection system as described in §258.40(a)(2) or paragraphs (a)(4) and (5) of this section. The owner or operator must place documentation of the landfill design in the operating record and notify the State Director that it has been placed in operating record;

(4) Cells 3–10 shall be constructed with a liner system consisting of the components described in paragraphs (a)(4)(i) through (v) of this section, or an equivalent or superior liner system as determined by the State Director:

(i) A lower component consisting of at least 18 inches of compacted soil with a hydraulic conductivity of no more than 1×10^{-5} cm/sec., and

(ii) An upper component consisting of a minimum 30-millimeter (''mil'') flexible membrane liner (FML) or 60-mil if High Density Polyethylene (''HDPE'') is used, and

(iii) A geosynthetic clay liner (GCL) overlaying and in direct contact with the 18 inches of compacted soil in paragraph (a)(4) of this section and having the following properties:

(A) The GCL shall be formulated and manufactured from polypropylene geotextiles and high swelling containment resistant sodium bentonite. The bentonite-geotextile liner shall be manufactured using a minimum of one pound per square foot as determined using the Standard Test Method for Measuring Mass per Unit Area of Geotextiles, ASTM D–5261–92 (reapproved in 1996). The high swelling sodium montmorillonite clay shall be at 12% moisture content as determined by the Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass, ASTM D2216–98. The Director of the Federal Register approves this incorporation by reference with 5 U.S.C. 552(a) and 1 CFR part 51. These methods are available from The American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959. These methods may be inspected at EPA's docket office located at Crystal Gateway, 1235 Jefferson Davis Highway, First Floor, Arlington, Virginia, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

(B) The encapsulating geotextile shall be polypropylene and shall have a minimum weight of 6 oz./square yard.

(iv) The upper component shall be installed in direct and uniform contact with an overlaying soil cushioning component.

(v) Underlying the above liner system, there shall also be installed a leak detection system consisting of a 60-mil HDPE liner placed on a prepared subgrade.

(A) A 4 inch capped pipe will drain liquid collected in the sump out beyond the footprint of the landfill cell.

(B) Water collected on the leak detection liner shall be monitored at least semi-annually as directed by the State Director to determine whether any leachate escaped the liner system.

(5) Cells 3–10 shall be designed and constructed with a leachate collection system to maintain less than 30 centimeters depth of leachate is present at the sump location. The leachate collection system shall include a continuous monitoring system to monitor depth of leachate.

(6) The owner/operator shall keep the Federally Enforceable State Operating Permit (FESOP) issued by the Western North Carolina Air Quality Agency for the Buncombe County Solid Waste Management Facility in effect, and shall comply with the provisions of the FESOP, during the entire period of leachate recirculation and the post closure period. The FESOP was issued on November 13, 2000 and contains the air quality requirements for the Buncombe County Landfill XL project.

(7) *Monitoring and reporting requirements.* The owner or operator of the Buncombe County Solid Waste Management Facility shall monitor for the parameters listed in paragraphs (a)(7)(i) through (xiii) of this section

and submit an annual report on the XL project to the EPA Regional Administrator for Region 4 and the State Director. The first report is due coincident with the October 2001 report to the state. The report should state what progress has been made toward the superior environmental performance and other commitments as stated in the Final Project Agreement. The report shall include, at a minimum, the following data:

(i) Amount of landfill gas generated;

(ii) Percent capture of landfill gas, if known;

(iii) Quality of the landfill gas, amount and type of liquids applied to the landfill;

(iv) Method of liquids application to the landfill;

(v) Quantity of waste placed in the landfill;

(vi) Quantity and quality of leachate collected;

(vii) Quantity of leachate recirculated back into the landfill;

(viii) Information on the pretreatment of waste applied to the landfill;

(ix) Data collected on landfill temperature and moisture content;

(x) Data on the leachate pressure (head) on the liner;

(xi) Observations, information, and studies made on the physical stability of the MSWLF units that are developed during the project term, if any.

(xii) The above data may be summarized, and, at a minimum shall contain, the minimum, maximum, median, and average data points as well as the frequency of monitoring as applicable.

(xiii) The method and frequency of monitoring shall be specified by the State Director.

(8) *Termination and withdrawal.* (i) Paragraph (a) of this section will terminate August 22, 2026, unless a subsequent rulemaking is issued or terminated earlier pursuant to paragraph (a)(8)(ii) of this section.

(ii) In the event of noncompliance with paragraph (a) of this section, EPA may terminate the authority under paragraph (a) of this section and the authority to add liquid wastes to all or part of cells 3–10 under §258.28(a)(3). The EPA Regional Administrator will provide written notice of intent to terminate to the Buncombe County Solid Waste Authority with a copy to the State Director. The notice will state EPA's intent to terminate under the rules and will include a brief statement of EPA's reasons for its action. The termination will take effect 60 days from the date of the notice, unless the EPA Regional Administrator for Region 4 issues a written notice rescinding the termination.

(9) *Compliance requirements in the event of termination or withdrawal.* The Buncombe County Solid Waste Management Facility will be subject to all regulatory provisions applicable to MSWLFs upon termination of authority under this section. In the event of early termination of this section, the EPA Regional Administrator for Region 4 may provide an interim period of compliance to allow Buncombe County a reasonable period of time for transition following cessation of liquids addition.

(b) This section applies solely to Module D of the Yolo County Central Landfill owned and operated by the County of Yolo, California, or its successors. It allows the Yolo County Central Landfill to add bulk or noncontainerized liquid wastes to Module D under the following conditions:

(1) Module D shall be designed and constructed with a composite liner as defined in §258.40(b) and a leachate collection system that functions and continuously monitors to ensure that less than 30 centimeters depth of leachate is maintained over the liner.

(2) The owner or operator of the Yolo County Central Landfill must ensure that the concentration values listed in Table 1 of §258.40 are not exceeded in the uppermost aquifer at the relevant point of compliance for the landfill as specified by the State Director under §258.40(d).

(3) The owner or operator of the Yolo County Central Landfill shall demonstrate that the addition of any liquids to Module D does not result in an increased leakage rate, and does not result in liner slippage, or otherwise compromise the integrity of the landfill and its liner system, as determined by the State Director.

(4) The owner or operator of the Yolo County Central Landfill must ensure

that Module D is operated in such a manner so as to prevent any landfill fires from occurring.

(5) The owner or operator of the Yolo County Central Landfill shall submit an annual report to the EPA Regional Administrator and the State Director. The first report is due within 18 months after August 13, 2001. The report shall state what progress the Project is making towards the superior environmental performance as stated in the Final Project Agreement. The data in paragraphs (b)(5)(i) through (xvi) of this section may be summarized, but, at a minimum, shall contain the minimum, maximum, median, and average data points as well as the frequency of monitoring, as applicable. These reporting provisions shall remain in effect for as long as the owner or operator of the Yolo County Central Landfill continues to add liquid waste to Module D. Additional monitoring, record keeping and reporting requirements related to landfill gas will be contained in a permit executed by the local air quality management district pursuant to the Clean Air Act, 42 U.S.C. 7401 *et seq*. Application of this site-specific rule to the Yolo County Central Landfill is conditioned upon the issuance of such permit. The annual report will include, at a minimum, the following data:

(i) Amount of landfill gas generated;

(ii) Percent capture of landfill gas;

(iii) Quality of the landfill gas;

(iv) Amount and type of liquids applied to the landfill;

(v) Method of liquids application to the landfill;

(vi) Quantity of waste placed in the landfill;

(vii) Quantity and quality of leachate collected, including at least the following parameters, monitored, at a minimum, on an annual basis:

(A) pH;

(B) Conductivity;

(C) Dissolved oxygen;

(D) Dissolved solids;

(E) Biochemical oxygen demand;

(F) Chemical oxygen demand;

(G) Organic carbon;

(H) Nutrients, (including ammonia [''NH_3''], total kjeldahl nitrogen [''TKN''], and total phosphorus [''TP'']);

(I) Common ions;

(J) Heavy metals;

(K) Organic priority pollutants; and

(L) Flow rate;

(viii) Quantity of leachate recirculated back into the landfill;

(ix) Information on the pretreatment of solid and liquid waste applied to the landfill;

(x) Landfill temperature;

(xi) Landfill moisture content;

(xii) Data on the leachate pressure (head) on the liner;

(xiii) The amount of aeration of the waste;

(xiv) Data on landfill settlement;

(xv) Any information on the performance of the landfill cover; and

(xvi) Observations, information, or studies made on the physical stability of the landfill.

(6) This section will remain in effect until August 13, 2006. By August 13, 2006, Yolo County Central Landfill shall return to compliance with the regulatory requirements which would have been in effect absent the flexibility provided through this Project XL site-specific rule. This section applies to Phase I of Module D. This section also will apply to any phase of Module D beyond Phase I only if a second Final Project Agreement that describes the additional phase has been signed by representatives of EPA Region 9, Yolo County, and the State of California. Phase I of Module D is defined as the operation of twelve acres of the twenty acre Module D.

(c) *Virginia Landfills XL Project Requirements*. Paragraph (c) of this section applies solely to two Virginia landfills operated by the Waste Management, Inc. or its successors: The Maplewood Recycling and Waste Disposal Facility, located in Amelia County, Virginia (''Maplewood Landfill''); and the King George County Landfill and Recycling Facility, located in King George County, Virginia (''King George Landfill'') collectively hereinafter, ''the VA Project XL Landfills or landfill.'' The VA Project XL Landfills are allowed to add non-hazardous bulk or non-containerized liquids including, leachate, storm water and truck wash water, hereinafter, ''liquid or liquids'', to Cell 3 of the King George Landfill (hereinafter ''Cell 3'') and Phases 1 and

2 of the Maplewood Landfill (hereinafter ''Phases 1 and 2'') under the following conditions:

(1) The operator of the landfill shall maintain the liners underlying Cell 3 and Phases 1 and 2, which were designed and constructed with an alternative liner as defined in §258.40(a)(1) in accord with their current installed design in order to maintain the integrity of the liner system and keep it and the leachate collection system in good operating order. The operator of the landfill shall ensure that the addition of any liquids does not result in an increased leakage rate, and does not result in liner slippage, or otherwise compromise the integrity of the landfill and its liner system, as determined by the State Director. In addition, the leachate collection system shall be operated, monitored and maintained to ensure that less than 30 cm depth of leachate is maintained over the liner.

(2) The operator of the landfill shall ensure that the concentration values listed in Table 1 of §258.40 are not exceeded in the uppermost aquifer at the relevant point of compliance for the landfill, as specified by the State Director, under §258.40(d).

(3) The operator of the landfill shall monitor and report whether surface seeps are occurring and determine whether they are attributable to operation of the liquid application system. EPA and VADEQ shall be notified in the semi-annual report of the occurrence of any seeps.

(4) The operator of the landfill shall determine on a monthly basis the leachate quality in test and control areas with and without liquid addition. The operator of the landfill shall collect monthly samples of the landfill leachate and analyze them for the following parameters: pH, Conductivity, Dissolved Oxygen, Dissolved Solids, Biochemical Oxygen Demand, Chemical Oxygen Demand, Organic Carbon, Nutrients (ammonia, total kjeldahl nitrogen, total phosphorus), Common Ions, Heavy Metals and Organic Priority Pollutants.

(5) The operator of the landfill shall determine on a semi-annual basis the total quantity of leachate collected in test and control areas; the total quantity of liquids applied in the test areas and determination of any changes in this quantity over time; the total quantity of leachate in on-site storage structures and any leachate taken for offsite disposal.

(6) Prior to the addition of any liquid to the landfill, the operator of the landfill shall perform an initial characterization of the liquid and notify EPA and VADEQ of the liquid proposed to be added. The parameters for the initial characterization of liquids shall be the same as the monthly parameters for the landfill leachate specified in paragraph (c)(4) of this section. The operator shall annually test all liquids added to the landfill and compare these results to the initial characterization.

(7) The operator of the landfill shall ensure that Cell 3 and Phases 1 and 2 are operated in such a manner so as to prevent any landfill fires from occurring. The operator of the landfill shall monitor the gas temperature at well heads, at a minimum, on a monthly basis.

(8) The operator of the landfill shall perform an annual surface topographic survey to determine the rate of the settlement of the waste in the test and control areas.

(9) The operator of the landfill shall monitor and record the frequency of odor complaints during and after liquid application events. EPA and VADEQ shall be notified of the occurrence of any odor complaints in the semi-annual report.

(10) The operator of the landfill shall collect representative samples of the landfill waste in the test areas on an annual basis and analyze the samples for the following solid waste stabilization and decomposition parameters: Moisture Content, Biochemical Methane Potential, Cellulose, Lignin, Hemicellulose, Volatile Solids and pH.

(11) The operator of the landfill shall report to the EPA Regional Administrator and the State Director on the information described in paragraphs (c)(1) through (10) of this section on a semi-annual basis. The first report is due within 6 months after the effective date of this section. These reporting provisions shall remain in effect for the duration of the project term.

(12) Additional monitoring, record keeping and reporting requirements related to landfill gas will be contained in a Federally Enforceable State Operating Permit (''FESOP'') for the VA Project XL Landfills issued pursuant to the Clean Air Act, 42 U.S.C. 7401 *et seq*. Application of this site-specific rule to the VA Project XL Landfills is conditioned upon the issuance of such a FESOP.

(13) This section applies until July 18, 2012. By July 18, 2012, the VA Project XL Landfills must return to compliance with the regulatory requirements which would have been in effect absent the flexibility provided through this section. If EPA Region 3's Regional Administrator, the Commonwealth of Virginia and Waste Management agree to an amendment of the project term, the parties must enter into an amended or new Final Project Agreement for any such amendment.

(14) The authority provided by this section may be terminated before the end of the 10 year period in the event of noncompliance with the requirements of paragraph (c) of this section, the determination by the EPA Region 3's Regional Administrator that the project has failed to achieve the expected level of environmental performance, or the promulgation of generally applicable requirements that would apply to all landfills that meet or exceed the performance standard set forth in § 258.40(a)(1). In the event of early termination EPA in consultation with the Commonwealth of Virginia will determine an interim compliance period to provide sufficient time for the operator to return the landfills to compliance with the regulatory requirements which would have been in effect absent the authority provided by this section. The interim compliance period shall not exceed six months.

[66 FR 42449, Aug. 13, 2001, as amended at 66 FR 44069, Aug. 22, 2001; 67 FR 47319, July 18, 2002; 69 FR 18803, Apr. 9, 2004]

§ 258.42 Approval of site-specific flexibility requests in Indian country.

(a) Salt River Pima-Maricopa Indian Community (SRPMIC), Salt River Landfill Research, Development, and Demonstration Project Requirements. Paragraph (a) of this section applies to the Salt River Landfill, a municipal solid waste landfill owned and operated by the SPRMIC on the SRPMIC's reservation in Arizona, which includes waste disposal areas identified as ''Phases I–VI.'' The application submitted by SRPMIC, ''Research, Development, and Demonstration Permit Application Salt River Landfill,'' dated September 24, 2007 and amended on April 8, 2008 is hereby incorporated by reference. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may inspect or obtain a copy at the Environmental Protection Agency Region IX, 75 Hawthorne Street, San Francisco, CA, or by calling the Docket Facility at (415) 947–4406, or go to *http://www.regulations.gov*, Docket ID No. EPA–R09–RCRA–2008–0354. You may also inspect a copy at the National Archives and Records Administration (NARA). For information on the availability at NARA, call (202) 741–6030 or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*. The facility owner and/or operator may operate the facility in accordance with this application, including the following activities more generally described as follows:

(1) The owner and/or operator may install a geosynthetic clay liner as an alternative bottom liner system in Phase VI.

(2) The owner and/or operator may operate Phase VI as a bioreactor by recirculating leachate and landfill gas condensate, and by adding storm water and groundwater, to the below grade portions of Phase VI.

(3) The owner and/or operator may increase the moisture content of the waste mass in Phases IIIB and IVA by recirculating leachate and landfill gas condensate, and by adding storm water and groundwater, to the below grade portions of Phases IIIB and IVA.

(4) The owner and/or operator shall maintain less than a 30-cm depth of leachate on the liner.

(5) The owner and/or operator shall submit reports to the Director of the Waste Management Division at EPA Region 9 as specified in ''Research, Development, and Demonstration Permit

Application Salt River Landfill,'' dated September 24, 2007 and amended on April 8, 2008 including an annual report showing whether and to what extent the site is progressing in attaining project goals. The annual report will also include a summary of all monitoring and testing results, as specified in the application.

(6) The owner and/or operator may not operate the facility pursuant to the authority granted by this section if there is any deviation from the terms, conditions, and requirements of this section unless the operation of the facility will continue to conform to the standards set forth in §258.4 of this chapter and the owner and/or operator has obtained the prior written approval of the Director of the Waste Management Division at EPA Region 9 or his or her designee to implement corrective measures or otherwise operate the facility subject to such deviation. The Director of the Waste Management Division or designee shall provide an opportunity for the public to comment on any significant deviation prior to providing his or her written approval of the deviation.

(7) Paragraphs (a)(2), (3), (5), (6) and (9) of this section will terminate 36 months after date of publication in the FEDERAL REGISTER unless the Director of the Waste Management Division at EPA Region 9 or his or her designee renews this authority in writing. Any such renewal may extend the authority granted under paragraphs (a)(2), (3), (5), (6) and (9) of this section for up to an additional three years, and multiple renewals (up to a total of 12 years) may be provided. The Director of the Waste Management Division or designee shall provide an opportunity for the public to comment on any renewal request prior to providing his or her written approval or disapproval of such request.

(8) In no event will the provisions of paragraphs (a)(2), (3), (5), (6) or (9) of this section remain in effect after 12 years after date of publication in the FEDERAL REGISTER. Upon termination of paragraphs (a)(2), (3), (5), (6) and (9) of this section, and except with respect to paragraphs (a)(1) and (4) of this section, the owner and/or operator shall return to compliance with the regulatory requirements which would have been in effect absent the flexibility provided through this site-specific rule.

(9) In seeking any renewal of the authority granted under or other requirements of paragraphs (a)(2), (3), (5) and (6) of this section, the owner and/or operator shall provide a detailed assessment of the project showing the status with respect to achieving project goals, a list of problems and status with respect to problem resolutions, and any other requirements that the Director of the Waste Management Division at EPA Region 9 or his or her designee has determined are necessary for the approval of any renewal and has communicated in writing to the owner and operator.

(10) The owner and/or operator's authority to operate the landfill in accordance with paragraphs (a)(2), (3), (5), (6) and (9) of this section shall terminate if the Director of the Waste Management Division at EPA Region 9 or his or her designee determines that the overall goals of the project are not being attained, including protection of human health or the environment. Any such determination shall be communicated in writing to the owner and operator.

(b) [Reserved]

[74 FR 11680, Mar. 19, 2009]

§§ 258.43–258.49 [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 ground-water 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 downgradient 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 groundwater 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 groundwater 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 1×10^{-4} to 1×10^{-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 groundwater;

(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 groundwater.

(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 groundwater 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 1×10^{-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 Approval of site-specific flexibility requests in Indian country.

(a) *Lake County Municipal Landfill final cover requirements.* Paragraph (a) of this section applies to the Lake County Landfill, a municipal solid waste landfill owned and operated by Lake County on the Confederated Salish and Kootenai Tribes' Flathead Reservation in Montana. The alternative final cover request submitted by Lake County, Montana, consisting of the ''Lake County Landfill Alternative Cover,'' dated May 2007, the ''Construction Quality Assurance & Control Plan for the Lake County Class II Landfill Unit Landfill Closure Project'' and the ''Lake County Landfill Plans for Final Closure January 2009,'' dated January 2009, is hereby incorporated by reference. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may inspect or obtain a copy at the Environmental Protection Agency, Region VIII, Montana Office, 10 West 15th St., Suite 3200, Helena, MT or by calling 406–457–5000. You may also inspect a copy at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.* The facility owner and/or operator may close the facility in accordance with this application, including the following activities more generally described as follows:

(1) The owner and operator may install an evapotranspiration system as an alternative final cover for the 15.4 acre active area.

(2) The final cover system shall consist of a 5.5-feet-thick multi-layer cover system comprised, from bottom to top, of an 18-inch intermediate and gas vent layer, a 24-inch native sand layer, an 18-inch imported silt layer and a 6-inch topsoil layer, as well as seeding and erosion control.

(3) The final cover system shall be constructed to achieve an equivalent reduction in infiltration as the infiltration layer specified in §258.60(a)(1) and (a)(2), and provide an equivalent protection from wind and water erosion as the erosion layer specified in paragraph (a)(3) of this section.

(4) In addition to meeting the specifications of the ''Lake County Landfill Alternative Cover'' dated May 2007, and the ''Construction Quality Assurance & Control Plan for the Lake County Class II Landfill Unit Landfill Closure Project'' dated January 2009, the owner and operator shall:

(i) At 50% final design, submit to EPA for approval an Operations and Maintenance Plan that includes an inspection schedule (at least quarterly) and remediation plan to address any potential rodent damage to the final cover; and

(ii) Achieve re-vegetation rates greater than 50% by the end of the first season and a complete stand of native grasses by the end of the third season.

(5) The owner and operator shall place documentation demonstrating compliance with the provisions of this Section in the operating record.

(6) All other applicable provisions of 40 CFR part 258 remain in effect.

[Reserved]

[75 FR 50932, Aug. 18, 2010]

§§ 258.63–258.69 [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:

$$\text{Next Payment} = [CE - CV]/Y$$

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:

$$\text{Next Payment} = [RB - CV]/Y$$

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 record-keeping 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(1).

(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

Common name [1]	CAS RN [2]
Inorganic Constituents:	
(1) Antimony	(Total)
(2) Arsenic	(Total)
(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-Dichlorethane; Ethylidene chloride	75–34–3
(34) 1,2-Dichlorethane; 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; Idomethane	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

Common name [1]	CAS RN [2]
(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] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.
[2] Chemical Abstract Service registry number. Where ''Total'' is entered, all species in the ground water that contain this element are included.

[70 FR 34555, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

APPENDIX II TO PART 258—LIST OF HAZARDOUS INORGANIC AND ORGANIC CONSTITUENTS

Common name [1]	CAS RN [2]	Chemical abstracts service index name [3]
Acenaphthene	83–32–9	Acenaphthylene, 1,2-dihydro-
Acenaphthylene	208–96–8	Acenaphthylene
Acetone	67–64–1	2-Propanone
Acetonitrile; Methyl cyanide	75–05–8	Acetonitrile
Acetophenone	98–86–2	Ethanone, 1-phenyl-
2-Acetylaminofluorene; 2-AAF	53–96–3	Acetamide, N–9H-fluoren-2-yl-
Acrolein	107–02–8	2-Propenal
Acrylonitrile	107–13–1	2-Propenenitrile
Aldrin	309–00–2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1,4,4a,5,8,8a)-
Allyl chloride	107–05–1	1-Propene, 3-chloro-
4-Aminobiphenyl	92–67–1	[1,1′-Biphenyl]-4-amine
Anthracene	120–12–7	Anthracene
Antimony	(Total)	Antimony
Arsenic	(Total)	Arsenic
Barium	(Total)	Barium
Benzene	71–43–2	Benzene
Benzo[a]anthracene; Benzanthracene	56–55–3	Benz[a]anthracene
Benzo[b]fluoranthene	205–99–2	Benz[e]acephenanthrylene
Benzo[k]fluoranthene	207–08–9	Benzo[k]fluoranthene
Benzo[ghi]perylene	191–24–2	Benzo[ghi]perylene
Benzo[a]pyrene	50–32–8	Benzo[a]pyrene
Benzyl alcohol	100–51–6	Benzenemethanol
Beryllium	(Total)	Beryllium
alpha-BHC	319–84–6	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3β,4α,5β,6β)-
beta-BHC	319–85–7	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2β,3α,4β,5α,6β)-
delta-BHC	319–86–8	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3α,4β,5α,6β)-
gamma-BHC; Lindane	58–89–9	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α, 3β, 4α,5α,6β)-
Bis(2-chloroethoxy)methane	111–91–1	Ethane, 1,1′-[methylenebis (oxy)]bis [2-chloro-
Bis(2-chloroethyl)ether; Dichloroethyl ether	111–44–4	Ethane, 1,1′-oxybis[2-chloro-
Bis(2-chloro-1-methylethyl) ether; 2,2′-Dichlorodiisopropyl ether; DCIP, See footnote 4.	108–60–1	Propane, 2,2′-oxybis[1-chloro-
Bis(2-ethylhexyl) phthalate	117–81–7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)ester
Bromochloromethane; Chlorobromethane	74–97–5	Methane, bromochloro-
Bromodichloromethane; Dibromochloromethane	75–27–4	Methane, bromodichloro-
Bromoform; Tribromomethane	75–25–2	Methane, tribromo-
4-Bromophenyl phenyl ether	101–55–3	Benzene, 1-bromo-4-phenoxy-
Butyl benzyl phthalate; Benzyl butyl phthalate	85–68–7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester
Cadmium	(Total)	Cadmium
Carbon disulfide	75–15–0	Carbon disulfide
Carbon tetrachloride	56–23–5	Methane, tetrachloro-
Chlordane	See footnote 5.	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
p-Chloroaniline	106–47–8	Benzenamine, 4-chloro-
Chlorobenzene	108–90–7	Benzene, chloro-
Chlorobenzilate	510–15–6	Benzeneacetic acid, 4-chloro- -(4-chlorophenyl)- -hydroxy-, ethyl ester.
p-Chloro-m-cresol; 4-Chloro-3-methylphenol	59–50–7	Phenol, 4-chloro-3-methyl-
Chloroethane; Ethyl chloride	75–00–3	Ethane, chloro-
Chloroform; Trichloromethane	67–66–3	Methane, trichloro-

Common name [1]	CAS RN [2]	Chemical abstracts service index name [3]
2-Chloronaphthalene	91–58–7	Naphthalene, 2-chloro-
2-Chlorophenol	95–57–8	Phenol, 2-chloro-
4-Chlorophenyl phenyl ether	7005–72–3	Benzene, 1-chloro-4-phenoxy-
Chloroprene	126–99–8	1,3-Butadiene, 2-chloro-
Chromium	(Total)	Chromium
Chrysene	218–01–9	Chrysene
Cobalt	(Total)	Cobalt
Copper	(Total)	Copper
m-Cresol; 3-Methylphenol	108–39–4	Phenol, 3-methyl-
o-Cresol; 2-Methylphenol	95–48–7	Phenol, 2-methyl-
p-Cresol; 4-Methylphenol	106–44–5	Phenol, 4-methyl-
Cyanide	57–12–5	Cyanide
2,4-D; 2,4-Dichlorophenoxyacetic acid	94–75–7	Acetic acid, (2,4-dichlorophenoxy)-
4,4′-DDD	72–54–8	Benzene 1,1′-(2,2-dichloroethylidene) bis[4-chloro-
4,4′-DDE	72–55–9	Benzene, 1,1′-(dichloroethenylidene) bis[4-chloro-
4,4′-DDT	50–29–3	Benzene, 1,1′-(2,2,2-trichloroethylidene) bis[4-chloro-
Diallate	2303–16–4	Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester.
Dibenz[a,h]anthracene	53–70–3	Dibenz[a,h]anthracene
Dibenzofuran	132–64–9	Dibenzofuran
Dibromochloromethane; Chlorodibromomethane	124–48–1	Methane, dibromochloro-
1,2-Dibromo-3-chloropropane; DBCP	96–12–8	Propane, 1,2-dibromo-3-chloro-
1,2-Dibromoethane; Ethylene dibromide; EDB	106–93–4	Ethane, 1,2-dibromo-
Di-n-butyl phthalate	84–74–2	1,2-Benzenedicarboxylic acid, dibutyl ester
o-Dichlorobenzene; 1,2-Dichlorobenzene	95–50–1	Benzene, 1,2-dichloro-
m-Dichlorobenzene; 1,3-Dichlorobenzene	541–73–1	Benzene, 1,3-dichloro-
p-Dichlorobenzene; 1,4-Dichlorobenzene	106–46–7	Benzene, 1,4-dichloro-
3,3′-Dichlorobenzidine	91–94–1	[1,1′-Biphenyl]-4,4′-diamine, 3,3′-dichloro-
trans-1,4-Dichloro-2-butene	110–57–6	2-Butene, 1,4-dichloro-, (E)-
Dichlorodifluoromethane; CFC 12	75–71–8	Methane, dichlorodifluoro-
1,1-Dichloroethane; Ethyldidene chloride	75–34–3	Ethane, 1,1-dichloro-
1,2-Dichloroethane; Ethylene dichloride	107–06–2	Ethane, 1,2-dichloro-
1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene.	75–35–4 156–59–2	Ethene, 1,1-dichloro- Ethene, 1,2-dichloro-(Z)-
trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene	156–60–5	Ethene, 1,2-dichloro-, (E)-
2,4-Dichlorophenol	120–83–2	Phenol, 2,4-dichloro-
2,6-Dichlorophenol	87–65–0	Phenol, 2,6-dichloro-
1,2-Dichloropropane	78–87–5	Propane, 1,2-dichloro-
1,3-Dichloropropane; Trimethylene dichloride	142–28–9	Propane, 1,3-dichloro-
2,2-Dichloropropane; Isopropylidene chloride	594–20–7	Propane, 2,2-dichloro-
1,1-Dichloropropene	563–58–6	1-Propene, 1,1-dichloro-
cis-1,3-Dichloropropene	10061–01–5.	1-Propene, 1,3-dichloro-, (Z)-
trans-1,3-Dichloropropene	10061–02–6.	1-Propene, 1,3-dichloro-, (E)-
Dieldrin	60–57–1	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)-
Diethyl phthalate	84–66–2	1,2-Benzenedicarboxylic acid, diethyl ester
O,O-Diethyl O–2-pyrazinyl phosphorothioate; Thionazin	297–97–2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester.
Dimethoate	60–51–5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
p-(Dimethylamino)azobenzene	60–11–7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
7,12-Dimethylbenz[a]anthracene	57–97–6	Benz[a]anthracene, 7,12-dimethyl-
3,3′-Dimethylbenzidine	119–93–7	[1,1′-Biphenyl]-4,4′-diamine, 3,3′-dimethyl-
alpha, alpha-Dimethylphenethylamine	122–09–8	Benzeneethanamine, α,α-dimethyl-
2,4-Dimethylphenol; m-Xylenol	105–67–9	Phenol, 2,4-dimethyl-
Dimethyl phthalate	131–11–3	1,2-Benzenedicarboxylic acid, dimethyl ester
m-Dinitrobenzene	99–65–0	Benzene, 1,3-dinitro-
4,6-Dinitro-o-cresol; 4,6-Dinitro-2-methylphenol	534–52–1	Phenol, 2-methyl-4,6-dinitro-
2,4-Dinitrophenol	51–28–5	Phenol, 2,4-dinitro-
2,4-Dinitrotoluene	121–14–2	Benzene, 1-methyl-2,4-dinitro-
2,6-Dinitrotoluene	606–20–2	Benzene, 2-methyl-1,3-dinitro-
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88–85–7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
Di-n-octyl phthalate	117–84–0	1,2-Benzenedicarboxylic acid, dioctyl ester
Diphenylamine	122–39–4	Benzenamine, N-phenyl-
Disulfoton	298–04–4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
Endosulfan I	959–98–8	6,9-Methano-2,4,3-benzodiox-athiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide,
Endosulfan II	33213–65–9.	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro- 1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα,6β,9β, 9aα)-

Common name [1]	CAS RN [2]	Chemical abstracts service index name [3]
Endosulfan sulfate	1031–07–8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3,3-dioxide
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)-
Endrin aldehyde	7421–93–4	1,2,4-Methenocyclo-penta[cd]pentalene-5-carboxaldehyde,2,2a,3,3,4,7-hexachlorodecahydro-(1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R*)-
Ethylbenzene	100–41–4	Benzene, ethyl-
Ethyl methacrylate	97–63–2	2-Propenoic acid, 2-methyl-, ethyl ester
Ethyl methanesulfonate	62–50–0	Methanesulfonic acid, ethyl ester
Famphur	52–85–7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl]-O,O-dimethyl ester
Fluoranthene	206–44–0	Fluoranthene
Fluorene	86–73–7	9H-Fluorene
Heptachlor	76–44–8	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
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)
Hexachlorobenzene	118–74–1	Benzene, hexachloro-
Hexachlorobutadiene	87–68–3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
Hexachlorocyclopentadiene	77–47–4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
Hexachloroethane	67–72–1	Ethane, hexachloro-
Hexachloropropene	1888–71–7	1-Propene, 1,1,2,3,3,3-hexachloro-
2-Hexanone; Methyl butyl ketone	591–78–6	2-Hexanone
Indeno(1,2,3-cd)pyrene	193–39–5	Indeno[1,2,3-cd]pyrene
Isobutyl alcohol	78–83–1	1-Propanol, 2-methyl-
Isodrin	465–73–6	1,4,5,8-Dimethanonaphthalene,1,2,3,4,1 0,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1α, 4α, 4aβ,5β,8β,8aβ)-
Isophorone	78–59–1	2-Cyclohexen-1-one, 3,5,5-trimethyl-
Isosafrole	120–58–1	1,3-Benzodioxole, 5-(1-propenyl)-
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-
Lead	(Total)	Lead
Mercury	(Total)	Mercury
Methacrylonitrile	126–98–7	2-Propenenitrile, 2-methyl-
Methapyrilene	91–80–5	1,2,Ethanediamine, N,N-dimethyl-N′-2-pyridinyl-N′-(2-thienylmethyl)-
Methoxychlor	72–43–5	Benzene, 1,1′-(2,2,2,trichloroethylidene)bis [4-methoxy-
Methyl bromide; Bromomethane	74–83–9	Methane, bromo-
Methyl chloride; Chloromethane	74–87–3	Methane, chloro-
3-Methylcholanthrene	56–49–5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
Methyl ethyl ketone; MEK; 2-Butanone	78–93–3	2-Butanone
Methyl iodide; Iodomethane	74–88–4	Methane, iodo-
Methyl methacrylate	80–62–6	2-Propenoic acid, 2-methyl-, methyl ester
Methyl methanesulfonate	66–27–3	Methanesulfonic acid, methyl ester
2-Methylnaphthalene	91–57–6	Naphthalene, 2-methyl-
Methyl parathion; Parathion methyl	298–00–0	Phosphorothioic acid, O,O-dimethyl
4-Methyl-2-pentanone; Methyl isobutyl ketone	108–10–1	2-Pentanone, 4-methyl-
Methylene bromide; Dibromomethane	74–95–3	Methane, dibromo-
Methylene chloride; Dichloromethane	75–09–2	Methane, dichloro-
Naphthalene	91–20–3	Naphthalene
1,4-Naphthoquinone	130–15–4	1,4-Naphthalenedione
1-Naphthylamine	134–32–7	1-Naphthalenamine
2-Naphthylamine	91–59–8	2-Naphthalenamine
Nickel	(Total)	Nickel
o-Nitroaniline; 2-Nitroaniline	88–74–4	Benzenamine, 2-nitro-
m-Nitroaniline; 3-Nitroaniline	99–09–2	Benzenamine, 3-nitro-
p-Nitroaniline; 4-Nitroaniline	100–01–6	Benzenamine, 4-nitro-
Nitrobenzene	98–95–3	Benzene, nitro-
o-Nitrophenol; 2-Nitrophenol	88–75–5	Phenol, 2-nitro-
p-Nitrophenol; 4-Nitrophenol	100–02–7	Phenol, 4-nitro-
N-Nitrosodi-n-butylamine	924–16–3	1-Butanamine, N-butyl-N-nitroso-
N-Nitrosodiethylamine	55–18–5	Ethanamine, N-ethyl-N-nitroso-
N-Nitrosodimethylamine	62–75–9	Methanamine, N-methyl-N-nitroso-
N-Nitrosodiphenylamine	86–30–6	Benzenamine, N-nitroso-N-phenyl-
N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine.	621–64–7	1-Propanamine, N-nitroso-N-propyl-
N-Nitrosomethylethalamine	10595–95–6.	Ethanamine, N-methyl-N-nitroso-
N-Nitrosopiperidine	100–75–4	Piperidine, 1-nitroso-

Common name [1]	CAS RN [2]	Chemical abstracts service index name [3]
N-Nitrosopyrrolidine	930–55–2	Pyrrolidine, 1-nitroso-
5-Nitro-o-toluidine	99–55–8	Benzenamine, 2-methyl-5-nitro-
Parathion	56–38–2	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester
Pentachlorobenzene	608–93–5	Benzene, pentachloro-
Pentachloronitrobenzene	82–68–8	Benzene, pentachloronitro-
Pentachlorophenol	87–86–5	Phenol, pentachloro-
Phenacetin	62–44–2	Acetamide, N-(4-ethoxyphenyl)
Phenanthrene	85–01–8	Phenanthrene
Phenol	108–95–2	Phenol
p-Phenylenediamine	106–50–3	1,4-Benzenediamine
Phorate	298–02–2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
Polychlorinated biphenyls; PCBs	See footnote 6.	1,1′-Biphenyl, chloro derivatives
Pronamide	23950–58–5.	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
Propionitrile; Ethyl cyanide	107–12–0	Propanenitrile
Pyrene	129–00–0	Pyrene
Safrole	94–59–7	1,3-Benzodioxole, 5-(2- propenyl)-
Selenium	(Total)	Selenium
Silver	(Total)	Silver
Silvex; 2,4,5-TP	93–72–1	Propanoic acid, 2-(2,4,5- trichlorophenoxy)-
Styrene	100–42–5	Benzene, ethenyl-
Sulfide	18496–25–8.	Sulfide
2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid	93–76–5	Acetic acid, (2,4,5- trichlorophenoxy)-
2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo- p-dioxin	1746–01–6	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-
1,2,4,5-Tetrachlorobenzene	95–94–3	Benzene, 1,2,4,5-tetrachloro-
1,1,1,2-Tetrachloroethane	630–20–6	Ethane, 1,1,1,2-tetrachloro-
1,1,2,2-Tetrachloroethane	79–34–5	Ethane, 1,1,2,2-tetrachloro-
Tetrachloroethylene; Tetrachloroethene; Perchloroethylene.	127–18–4	Ethene, tetrachloro-
2,3,4,6-Tetrachlorophenol	58–90–2	Phenol, 2,3,4,6-tetrachloro-
Thallium	(Total)	Thallium
Tin	(Total)	Tin
Toluene	108–88–3	Benzene, methyl-
o-Toluidine	95–53–4	Benzenamine, 2-methyl-
Toxaphene	See footnote 7.	Toxaphene
1,2,4-Trichlorobenzene	120–82–1	Benzene, 1,2,4-trichloro-
1,1,1-Trichloroethane; Methylchloroform	71–55–6	Ethane, 1,1,1-trichloro-
1,1,2-Trichloroethane	79–00–5	Ethane, 1,1,2-trichloro-
Trichloroethylene; Trichloroethene	79–01–6	Ethene, trichloro-
Trichlorofluoromethane; CFC–11	75–69–4	Methane, trichlorofluoro-
2,4,5-Trichlorophenol	95–95–4	Phenol, 2,4,5-trichloro-
2,4,6-Trichlorophenol	88–06–2	Phenol, 2,4,6-trichloro-
1,2,3-Trichloropropane	96–18–4	Propane, 1,2,3-trichloro-
O,O,O-Triethyl phosphorothioate	126–68–1	Phosphorothioic acid, O,O,O-triethyl ester
sym-Trinitrobenzene	99–35–4	Benzene, 1,3,5-trinitro-
Vanadium	(Total)	Vanadium
Vinyl acetate	108–05–4	Acetic acid, ethenyl ester
Vinyl chloride; Chloroethene	75–01–4	Ethene, chloro-
Xylene (total)	See footnote 8.	Benzene, dimethyl-
Zinc	(Total)	Zinc

[1] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[2] Chemical Abstracts Service registry number. Where ''Total'' is entered, all species in the ground water that contain this element are included.

[3] CAS index names are those used in the 9th Cumulative Index.

[4] 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).

[5] 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).

[6] 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).

[7] Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001–35–2), i.e., chlorinated camphene.

[8] 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).

[70 FR 34556, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

PART 259 [RESERVED]