WEST VIRGINIA
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OFFICE OF WEST VIRGINIA SECRETARY OF STATE

NOTICE OF FINAL FILING AND ADOPTION OF A LEGISLATIVE RULE AUTHORIZED BY THE WEST VIRGINIA LEGISLATURE.

AGENCY: WV Air Pollution Control Commission TITLE NUMBER: 45CSR15,

AMENDMENT TO AN EXISTING RULE: YES X, NO ___

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 45CSR15

TITLE OF RULE BEING AMENDED: "Emission Standards for Hazardous Air Pollutants"

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED: ___

TITLE OF RULE BEING PROPOSED: ___

THE ABOVE RULE HAS BEEN AUTHORIZED BY THE WEST VIRGINIA LEGISLATURE.

AUTHORIZATION IS CITED IN (house or senate bill number) S.B. 1005

SECTION 64-3-1(aa), PASSED ON March 16, 1994.

THIS RULE IS FILED WITH THE SECRETARY OF STATE. THIS RULE BECOMES EFFECTIVE ON THE FOLLOWING DATE: April 27 1994

Authorized Signature

L-60

LEGISLATIVE HISTORY ABSTRACT
45CSR15

EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Division of Environmental Protection
Office of Air Quality
West Virginia Air Pollution Control Commission
Senate Bill 1005, Section 64-3-1(aa)

June 02, 1993	Initial Filing with Secretary of State
June 03, 1993	Initial Filing with Legislative Rule-Making Review Committee
July 06, 1993	Held Public Hearing
Aug 09, 1993	Public Hearing and Agency Approval
Aug 13, 1993	Agency Approved Rule Filed with Secretary of State
Aug 13, 1993	Agency Approved Rule Filed with Legislative Rule-Making Review Committee
Nov 16, 1993	45 CSR 15 was on Agenda for Legislative Rule-Making Review Committee
Nov 16, 1993	The Legislative Rule-Making Review Committee recommended that the West Virginia Legislature Authorize the Agency to Promulgate Legislative Rule 45 CSR 15 as Originally Filed.
March 16, 1994	Passed the West Virginia Legislature
April 06, 1994	Governor Signed Senate Bill 1005
April 26, 1994	Public Hearing for Final Filing of Legislative Rule
April 26, 1994	Final Filing with Secretary of State
April 26, 1994	Effective Date of Rule

45CSR15

TITLE 45
LEGISLATIVE RULES
WEST VIRGINIA AIR POLLUTION CONTROL COMMISSION

SERIES 15
EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

§45-15-1. General.

1.1. Scope. -- This ~~regulation~~rule adopts emission standards for hazardous air pollutants promulgated by the United States Environmental Protection Agency under the Federal Clean Air Act. It is the intent of the Commission to adopt these standards by reference. It is also the intent of the Commission to adopt associated reference methods, performance specifications and other test methods which are appended to such standards.

1.2. Authority. -- ~~This regulation is issued under the authority of the West Virginia Code, Chapter 16, Article 20, Section 5. This regulation relates to West Virginia Code, Chapter 16, Article 20, Sections 1 through 13 inclusive~~W. Va. Code §16-20-5.

1.3. Filing Date. -- ~~April 25, 1990~~August 13, 1993.

1.4. Effective Date. -- ~~April 25, 1990~~

~~1.5. Type. -- This regulation is a legislative rule as defined in West Virginia Code, Chapter 29A, Article 2.~~

§45-15-2. Requirements.

2.1. No person may construct, modify, or operate, or cause to be constructed, modified, or operated any National Emission Standards for Hazardous Air Pollutants (NESHAP) source which results, or will result, in a violation of this regulation.

§45-15-3. Adoption of Standards.

3.1. Standards. -- Emission standards for hazardous air pollutants including associated reference methods, performance specifications and other test methods which are appended to such standards promulgated by the United States Environmental Protection Agency pursuant to ~~Section 112(b)~~42 U.S.C. 7412 (C.A.A. §112) of the Federal Clean Air Act as of ~~July 1, 1988~~May 1, 1993, and contained in 40 CFR ~~Part~~ 61 are hereby adopted in their entirety and incorporated herein by reference, except as follows:

a. Part 61.6 is amended to provide that information shall be available to the public in accordance with ~~Chapter 16, Article 20, and Chapter 29B, Article 1 of the Code of West Virginia~~W. Va. Code §16-20-1, et seq., W. Va. Code §29B-1-1, et seq., and 45CSR31.

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b. Sub-parts B, H, I, K, W Q, R, and T; Methods 111, 114, 115 and Appendix D and E of 40CFR61 shall be excluded.

§45-15-4. ~~Director~~Chief.

4.1. Any and all references in said 40 CFR ~~Part~~ 61 to the "Administrator" is amended to be the "~~Director of the West Virginia Air Pollution Control Commission~~"Chief" of the Office of Air Quality of the Division of Environmental Protection except in the following references which such references shall remain "Administrator of the United States Environmental Protection Agency":

a. Part 61.02.

b. Part 61.04

c. Part 61.11.

d. Part 61.14.

§45-15-5. Permits.

5.1. Nothing contained in this adoption by reference shall be construed or inferred to mean that permit requirements in accordance with applicable ~~regulations~~rules shall in any way be limited or inapplicable.

§45-15-6. Inconsistency Between Regulations.

6.1. In the event of any inconsistency between this ~~regulation~~rule and any other existing ~~regulation~~rule of the Commission, such inconsistency shall be resolved by the determination of the ~~Director~~Chief and such determination shall be based upon the application of the more stringent provision, term, condition, method, or rule ~~or regulation~~.

code of federal regulations

Protection of Environment

40

PARTS 61 TO 80

Revised as of July 1, 1992

SUBCHAPTER C—AIR PROGRAMS (Continued)

PART 61—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Subpart A—General Provisions

Sec.

Subpart B—National Emission Standards for Radon Emissions From Underground Uranium Mines

Subpart C—National Emission Standard for Beryllium

Subpart D—National Emission Standard for Beryllium Rocket Motor Firing

Subpart E—National Emission Standard for Mercury

Subpart F—National Emission Standard for Vinyl Chloride

Subpart G—[Reserved]

Subpart H—National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities

Sec.

Subpart I—National Emission Standards for Radionuclide Emissions From Facilities Licensed by the Nuclear Regulatory Commission and Federal Facilities Not Covered by subpart H

Subpart J—National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene

Subpart K—National Emission Standards for Radionuclide Emissions From Elemental Phosphorus Plants

Subpart L—National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants

Sec.

Subpart M—National Emission Standard for Asbestos

Subpart N—National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants

Subpart O—National Emission Standard for Inorganic Arsenic Emissions from Primary Copper Smelters

Sec.

Sec.

Sec.

AUTHORITY: Secs. 101, 112, 114, 116, 301, Clean Air Act as amended (42 U.S.C. 7401, 7412, 7414, 7416, 7601).

SOURCE: 38 FR 8826, Apr. 6, 1973, unless otherwise noted.

Subpart A—General Provisions

§ 61.01 Lists of pollutants and applicability of part 61.

(a) The following list presents the substances that, pursuant to section 112 of the Act, have been designated as hazardous air pollutants. The FEDERAL REGISTER citations and dates refer to the publication in which the listing decision was originally published.

Asbestos (36 FR 5931; Mar. 31, 1971)
Benzene (42 FR 29332; June 8, 1977)
Beryllium (36 FR 5931; Mar. 31, 1971)
Coke Oven Emissions (49 FR 36560; Sept. 18, 1984)
Inorganic Arsenic (45 FR 37886; June 5, 1980)
Mercury (36 FR 5931; Mar. 31, 1971)
Radionuclides (44 FR 76738; Dec. 27, 1979)
Vinyl Chloride (40 FR 59532; Dec. 24, 1975)

(b) The following list presents other substances for which a FEDERAL REGISTER notice has been published that included consideration of the serious health effects, including cancer, from ambient air exposure to the substance.

Acrylonitrile (50 FR 24319; June 10, 1985)
1,3-Butadiene (50 FR 41466; Oct. 10, 1985)
Cadmium (50 FR 42000; Oct. 16, 1985)
Carbon Tetrachloride (50 FR 32621; Aug. 13, 1985)
Chlorinated Benzenes (50 FR 32628; Aug. 13, 1985)
Chlorofluorocarbon—113 (50 FR 24313; June 10, 1985)
Chloroform (50 FR 39626; Sept. 27, 1985)
Chloroprene (50 FR 39632; Sept. 27, 1985)
Chromium (50 FR 24317; June 10, 1985)
Copper (52 FR 5496; Feb. 23, 1987)
Epichlorohydrin (50 FR 24575; June 11, 1985)
Ethylene Dichloride (50 FR 41994; Oct. 16, 1985)
Ethylene Oxide (50 FR 40286; Oct. 2, 1985)
Hexachlorocyclopentadiene (50 FR 40164; Oct. 1, 1985)
Manganese (50 FR 32627; Aug. 13, 1985)
Methyl Chloroform (50 FR 24314; June 10, 1985)
Methylene Chloride (50 FR 42037; Oct. 17, 1985)
Nickel (51 FR 34135; Sept. 25, 1986)
Perchloroethylene (50 FR 52800; Dec. 26, 1985)
Phenol (51 FR 22854; June 23, 1986)
Polycyclic Organic Matter (49 FR 31680; Aug. 8, 1984)
Toluene (49 FR 22195; May 25, 1984)
Trichloroethylene (50 FR 52422; Dec. 23, 1985)

phate rock processing rate in metric tons. In determining the annual phosphate rock processing rate, the values used for operating hours and operating capacity shall be values that will maximize the expected processing rate. For determining compliance with the emission standard of § 61.122, the total annual emission rate is the sum of the annual emission rates for all operating calciners and nodulizing kilns.

(e) If the owner or operator changes his operation in such a way as to increase his emissions of polonium-210, such as changing the type of rock processed, the temperature of the calciners or kilns, or increasing the annual phosphate rock processing rate, then a new emission test, meeting the requirements of this section, shall be conducted within 45 days under these conditions.

(f) Each owner or operator of an elemental phosphorus plant shall furnish the Administrator with a written report of the results of the emission test within 60 days of conducting the test. The report must provide the following information:

(1) The name and location of the facility.

(2) The name of the person responsible for the operation of the facility and the name of the person preparing the report (if different).

(3) A description of the effluent controls that are used on each stack, vent, or other release point and an estimate of the efficiency of each device.

(4) The results of the testing, including the results of each sampling run completed.

(5) The values used in calculating the emissions and the source of these data.

(6) Each report shall be signed and dated by a corporate officer in charge of the facility and contain the following declaration immediately above the signature line: "I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and 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. See, 18 U.S.C. 1001."

(Approved by the Office of Management and Budget under control number 2060-0191)

§ 61.124 Recordkeeping requirements.

The owner or operator of any plant must maintain records documenting the source of input parameters including the results of all measurements upon which they are based, the calculations and/or analytical methods used to derive values for input parameters, and the procedure used in emission testing. This documentation should be sufficient to allow an independent auditor to verify the accuracy of the results of the emission testing. These records must be kept at the site of the plant for at least five years and, upon request, be made available for inspection by the Administrator, or his authorized representative.

§ 61.125 Test methods and procedures.

(a) Each owner or operator of a source required to test emissions under § 61.123, unless an equivalent or alternate method has been approved by the Administrator, shall use the following test methods:

(1) Test Method 1 of Appendix A to 40 CFR part 60 shall be used to determine sample and velocity traverses;

(2) Test Method 2 of Appendix A to 40 CFR part 60 shall be used to determine velocity and volumetric flow rate;

(3) Test Method 3 of Appendix A to 40 CFR part 60 shall be used for gas analysis;

(4) Test Method 5 of Appendix A to 40 CFR part 60 shall be used to collect particulate matter containing the polonium-210; and

(5) Test Method 111 of Appendix B to 40 CFR part 61 shall be used to determine the polonium-210 emissions.

§ 61.126 Monitoring of operations.

(a) The owner or operator of any source subject to this subpart using a wet-scrubbing emission control device shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement and recording of the pressure drop of the gas stream across each scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±250 pascal (±1 inch of water). The owner or operator of any source subject to this subpart using a wet-scrubbing emission control device shall also install, calibrate, maintain, and operate a monitoring device for the continuous measurement and recording of the scrubber fluid flow rate. These continuous measurement recordings shall be maintained at the source and made available for inspection by the Administrator, or his authorized representative, for a minimum of 5 years.

(b) The owner or operator of any source subject to this subpart using an electrostatic precipitator control device shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement and recording of the primary and secondary current and the voltage in each electric field. These continuous measurement recordings shall be maintained at the source and made available for inspection by the Administrator, or his authorized representative, for a minimum of 5 years.

[56 FR 65943, Dec. 19, 1991]

§ 61.127 Exemption from the reporting and testing requirements of 40 CFR 61.10.

All facilities designated under this subpart are exempt from the reporting requirements of 40 CFR 61.10.

Subpart L—National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants

SOURCE: 54 FR 38073, Sept. 14, 1989, unless otherwise noted.

§ 61.130 Applicability, designation of sources, and delegation of authority.

(a) The provisions of this subpart apply to each of the following sources at furnace and foundry coke by-product recovery plants: tar decanters, tar storage tanks, tar-intercepting sumps, flushing-liquor circulation tanks, light-oil sumps, light-oil condensers, light-oil decanters, wash-oil decanters, wash-oil circulation tanks, naphthalene processing, final coolers, final-cooler cooling towers, and the following equipment that are intended to operate in benzene service: pumps, valves, exhausters, pressure relief devices, sampling connection systems, open-ended valves or lines, flanges or other connectors, and control devices or systems required by § 61.135.

(b) The provisions of this subpart also apply to benzene storage tanks, BTX storage tanks, light-oil storage tanks, and excess ammonia-liquor storage tanks at furnace coke by-product recovery plants.

(c) In delegating implementation and enforcement authority to a State under section 112 of the Act, the authorities contained in paragraph (d) of this section shall be retained by the Administrator and not transferred to a State.

(d) Authorities that will not be delegated to States: § 61.136(d).

[54 FR 51699, Dec. 15, 1989, as amended at 56 FR 47406, Sept. 19, 1991]

§ 61.131 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, in subpart A of part 61, and in subpart V of part 61. The following terms shall have the specific meanings given them:

Annual coke production means the coke produced in the batteries connected to the coke by-product recovery plant over a 12-month period. The first 12-month period concludes on the first December 31 that comes at least 12 months after the effective date or after the date of initial startup if initial startup is after the effective date.

Benzene storage tank means any tank, reservoir, or container used to collect or store refined benzene.

BTX storage tank means any tank, reservoir, or container used to collect or store benzene-toluene-xylene or other light-oil fractions.

Car seal means a seal that is placed on the device used to change the position of a valve (e.g., from open to closed) such that the position of the valve cannot be changed without breaking the seal and requiring the replacement of the old seal, once broken, with a new seal.

Coke by-product recovery plant means any plant designed and operated for the separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery.

Equipment means each pump, valve, exhauster, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in benzene service.

Excess ammonia-liquor storage tank means any tank, reservoir, or container used to collect or store a flushing liquor solution prior to ammonia or phenol recovery.

Exhauster means a fan located between the inlet gas flange and outlet gas flange of the coke oven gas line that provides motive power for coke oven gases.

Foundry coke means coke that is produced from raw materials with less than 26 percent volatile material by weight and that is subject to a coking period of 24 hours or more. Percent volatile material of the raw materials (by weight) is the weighted average percent volatile material of all raw materials (by weight) charged to the coke oven per coking cycle.

Foundry coke by-product recovery plant means a coke by-product recovery plant connected to coke batteries whose annual coke production is at least 75 percent foundry coke.

Flushing-liquor circulation tank means any vessel that functions to store or contain flushing liquor that is separated from the tar in the tar decanter and is recirculated as the cooled liquor to the gas collection system.

Furnace coke means coke produced in by-product ovens that is not foundry coke.

Furnace coke by-product recovery plant means a coke by-product recovery plant that is not a foundry coke by-product recovery plant.

In benzene service means a piece of equipment, other than an exhauster, that either contains or contacts a fluid (liquid or gas) that is at least 10 percent benzene by weight or any exhauster that either contains or contacts a fluid (liquid or gas) at least 1 percent benzene by weight as determined by the provisions of § 61.137(b). The provisions of § 61.137(b) also specify how to determine that a piece of equipment is not in benzene service.

Light-oil condenser means any unit in the light-oil recovery operation that functions to condense benzene-containing vapors.

Light-oil decanter means any vessel, tank, or other type of device in the light-oil recovery operation that functions to separate light oil from water downstream of the light-oil condenser. A light-oil decanter also may be known as a light-oil separator.

Light-oil storage tank means any tank, reservoir, or container used to collect or store crude or refined light-oil.

Light-oil sump means any tank, pit, enclosure, or slop tank in light-oil recovery operations that functions as a wastewater separation device for hydrocarbon liquids on the surface of the water.

Naphthalene processing means any operations required to recover naphthalene including the separation, refining, and drying of crude or refined naphthalene.

Non-regenerative carbon adsorber means a series, over time, of non-regenerative carbon beds applied to a single source or group of sources, where non-regenerative carbon beds are carbon beds that are either never regenerated or are moved from their location for regeneration.

Process vessel means each tar decanter, flushing-liquor circulation tank, light-oil condenser, light-oil decanter, wash-oil decanter, or wash-oil circulation tank.

Regenerative carbon adsorber means a carbon adsorber applied to a single source or group of sources, in which the carbon beds are regenerated without being moved from their location.

Semiannual means a 6-month period; the first semiannual period concludes on the last day of the last full month during the 180 days following initial startup for new sources; the first semiannual period concludes on the last day of the last full month during the 180 days after the effective date of the regulation for existing sources.

Tar decanter means any vessel, tank, or container that functions to separate heavy tar and sludge from flushing liquor by means of gravity, heat, or chemical emulsion breakers. A tar decanter also may be known as a flushing-liquor decanter.

Tar storage tank means any vessel, tank, reservoir, or other type of container used to collect or store crude tar or tar-entrained naphthalene, except for tar products obtained by distillation, such as coal tar pitch, creosotes, or carbolic oil. This definition also includes any vessel, tank, reservoir, or container used to reduce the water content of the tar by means of heat, residence time, chemical emulsion breakers, or centrifugal separation. A tar storage tank also may be known as a tar-dewatering tank.

Tar-intercepting sump means any tank, pit, or enclosure that serves to receive or separate tars and aqueous condensate discharged from the primary cooler. A tar-intercepting sump also may be known as a primary-cooler decanter.

Vapor incinerator means any enclosed combustion device that is used for destroying organic compounds and does not necessarily extract energy in the form of steam or process heat.

Wash-oil circulation tank means any vessel that functions to hold the wash oil used in light-oil recovery operations or the wash oil used in the wash-oil final cooler.

Wash-oil decanter means any vessel that functions to separate, by gravity, the condensed water from the wash oil received from a wash-oil final cooler or from a light-oil scrubber.

[54 FR 38073, Sept. 14, 1989, as amended at 56 FR 47406, Sept. 19, 1991]

§ 61.132 Standard: Process vessels, storage tanks, and tar-intercepting sumps.

(a)(1) Each owner or operator of a furnace or a foundry coke byproduct recovery plant shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

(2) The owner or operator shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in § 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

(i) Except, the owner or operator may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

(ii) The owner or operator may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the owner or operator elects to maintain an opening on part of the liquid surface of the tar decanter, the owner or operator shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

(b) Following the installation of any control equipment used to meet the requirements of paragraph (a) of this section, the owner or operator shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR part 60, appendix A) and procedures specified in § 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

(1) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a back-

ground concentration, as measured by Reference Method 21, a leak is detected.

(2) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

(3) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

(4) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

(c) Following the installation of any control system used to meet the requirements of paragraph (a) of this section, the owner or operator shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

(d) Each owner or operator of a furnace coke by-product recovery plant also shall comply with the requirements of paragraphs (a)–(c) of this section for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

§ 61.133 Standard: Light-oil sumps.

(a) Each owner or operator of a light-oil sump shall enclose and seal the liquid surface in the sump to form a closed system to contain the emissions.

(1) Except, the owner or operator may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

(2) Except, the owner or operator may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

(3) The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.

(b) The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.

(c) Following the installation of any control equipment used to meet the requirements of paragraph (a) of this section, the owner or operator shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR part 60, appendix A) and the procedures specified in § 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

(1) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.

(2) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

(3) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

(4) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

§ 61.134 Standard: Naphthalene processing, final coolers, and final-cooler cooling towers.

(a) No ("zero") emissions are allowed from naphthalene processing, final coolers and final-cooler cooling towers at coke by-product recovery plants.

§ 61.135 Standard: Equipment leaks.

(a) Each owner or operator of equipment in benzene service shall comply with the requirements of 40 CFR 61, subpart V, except as provided in this section.

(b) The provisions of § 61.242-3 and § 61.242-9 of subpart V do not apply to this subpart.

(c) Each piece of equipment in benzene service to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service.

(d) Each exhauster shall be monitored quarterly to detect leaks by the methods specified in § 61.245(b) except as provided in § 61.136(d) and paragraphs (e)–(g) of this section.

(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in § 61.242-10 (a) and (b). A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) Each exhauster equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluids to the atmosphere is exempt from the requirements of paragraph (d) of this section provided the following requirements are met:

(1) Each exhauster seal system is:

(i) Operated with the barrier fluid at a pressure that is greater than the exhauster stuffing box pressure; or

(ii) Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of § 61.242-11; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero benzene emissions to the atmosphere.

(2) The barrier fluid is not in benzene service.

(3) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(4)(i) Each sensor as described in paragraph (e)(3) of this section shall be checked daily or shall be equipped with an audible alarm.

(ii) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(5) If the sensor indicates failure of the seal system, the barrier system, or both (based on the criterion determined under paragraph (e)(4)(ii) of this section), a leak is detected.

(6)(i) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 61.242-10.

(ii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(f) An exhauster is exempt from the requirements of paragraph (d) of this section if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of § 61.242-11 except as provided in paragraph (g) of this section.

(g) Any exhauster that is designated, as described in § 61.246(e) for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (d) of this section if the exhauster:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in § 61.245(c); and

(2) Is tested for compliance with paragraph (g)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

(h) Any exhauster that is in vacuum service is excluded from the requirements of this subpart if it is identified as required in § 61.246(e)(5).

§ 61.136 Compliance provisions and alternative means of emission limitation.

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§ 61.132 through 61.135 for each new and existing source, except as provided under §§ 61.243-1 and 61.243-2.

(b) Compliance with this subpart shall be determined by a review of records, review of performance test results, inspections, or any combination

thereof, using the methods and procedures specified in § 61.137.

(c) On the first January 1 after the first year that a plant's annual coke production is less than 75 percent foundry coke, the coke by-product recovery plant becomes a furnace coke by-product recovery plant and shall comply with 61.132(d). Once a plant becomes a furnace coke by-product recovery plant, it will continue to be considered a furnace coke by-product recovery plant, regardless of the coke production in subsequent years.

(d)(1) An owner or operator may request permission to use an alternative means of emission limitation to meet the requirements in §§ 61.132, 61.133, and 61.135 of this subpart and §§ 61.242-2, -5, -6, -7, -8, and -11 of subpart V. Permission to use an alternative means of emission limitation shall be requested as specified in § 61.12(d).

(2) When the Administrator evaluates requests for permission to use alternative means of emission limitation for sources subject to §§ 61.132 and 61.133 (except tar decanters) the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 98 percent. For tar decanters, the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 95 percent.

(3) For any requests for permission to use an alternative to the work practices required under § 61.135, the provisions of § 61.244(c) shall apply.

§ 61.137 Test methods and procedures.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the requirements in § 61.245 of 40 CFR part 61, subpart V.

(b) To determine whether or not a piece of equipment is in benzene service, the methods in § 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in § 61.245(d).

§ 61.138 Recordkeeping and reporting requirements.

(a) The following information pertaining to the design of control equipment installed to comply with §§ 61.132 through 61.134 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(b) The following information pertaining to sources subject to § 61.132 and sources subject to § 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

(1) The date of the inspection and the name of the inspector.

(2) A brief description of each visible defect in the source or control equipment and the method and date of repair of the defect.

(3) The presence of a leak, as measured using the method described in § 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak.

(4) A brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

(c) Each owner or operator of a source subject to § 61.135 shall comply with § 61.246.

(d) For foundry coke by-product recovery plants, the annual coke production of both furnace and foundry coke shall be recorded and maintained for 2 years following each determination.

(e)(1) An owner or operator of any source to which this subpart applies shall submit a statement in writing notifying the Administrator that the requirements of this subpart and 40 CFR 61, subpart V, have been implemented.

(2) In the case of an existing source or a new source that has an initial startup date preceding the effective date, the statement is to be submitted within 90 days of the effective date, unless a waiver of compliance is granted under § 61.11, along with the information required under § 61.10. If a waiver of compliance is granted, the statement is to be submitted on a date scheduled by the Administrator.

(3) In the case of a new source that did not have an initial startup date preceding the effective date, the statement shall be submitted with the application for approval of construction, as described under § 61.07.

(4) The statement is to contain the following information for each source:

(i) Type of source (e.g., a light-oil sump or pump).

(ii) For equipment in benzene service, equipment identification number and process unit identification: percent by weight benzene in the fluid at the equipment; and process fluid state in the equipment (gas/vapor or liquid).

(iii) Method of compliance with the standard (e.g., "gas blanketing," "monthly leak detection and repair," or "equipped with dual mechanical seals"). This includes whether the plant plans to be a furnace or foundry coke by-product recovery plant for the purposes of § 61.132(d).

(f) A report shall be submitted to the Administrator semiannually starting 6 months after the initial reports required in § 61.138(e) and § 61.10, which includes the following information:

(1) For sources subject to § 61.132 and sources subject to § 61.133,

(i) A brief description of any visible defect in the source or ductwork,

(ii) The number of leaks detected and repaired, and

(iii) A brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.

(2) For equipment in benzene service subject to § 61.135(a), information required by § 61.247(b).

(3) For each exhauster subject to § 61.135 for each quarter during the semiannual reporting period,

(i) The number of exhausters for which leaks were detected as described in § 61.135 (d) and (e)(5),

(ii) The number of exhausters for which leaks were repaired as required in § 61.135 (d) and (e)(6),

(iii) The results of performance tests to determine compliance with § 61.135(g) conducted within the semiannual reporting period.

(4) A statement signed by the owner or operator stating whether all provisions of 40 CFR part 61, subpart L, have been fulfilled during the semiannual reporting period.

(5) For foundry coke by-product recovery plants, the annual coke production of both furnace and foundry coke, if determined during the reporting period.

(6) Revisions to items reported according to paragraph (e) of this section if changes have occurred since the initial report or subsequent revisions to the initial report.

NOTE: Compliance with the requirements of § 61.10(c) is not required for revisions documented under this paragraph.

(g) In the first report submitted as required in § 61.138(e), the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule unless a revised schedule has been submitted in a previous semiannual report.

(h) An owner or operator electing to comply with the provisions of §§ 61.243-1 and 61.243-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

(i) An application for approval of construction or modification, as required under §§ 61.05(a) and 61.07, will not be required for sources subject to 61.135 if:

(1) The new source complies with § 61.135, and

(2) In the next semiannual report required by § 61.138(f), the information described in § 61.138(e)(4) is reported.

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[55 FR 38073, Sept. 14, 1990; 55 FR 14037, Apr. 13, 1990]

§ 61.139 Provisions for alternative means for process vessels, storage tanks, and tar-intercepting sumps.

(a) As an alternative means of emission limitation for a source subject to § 61.132(a)(2) or § 61.132(d), the owner or operator may route gases from the source through a closed vent system to

a carbon adsorber or vapor incinerator that is at least 98 percent efficient at removing benzene from the gas stream.

(1) The provisions of § 61.132(a)(1) and § 61.132(a) (2)(i) and (ii) shall apply to the source.

(2) The seals on the source and closed vent system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in § 61.245(c).

(3) The provisions of § 61.132(b) shall apply to the seals and closed vent system.

(b) For each carbon adsorber, the owner or operator shall adhere to the following practices:

(1) Benzene captured by each carbon adsorber shall be recycled or destroyed in a manner that prevents benzene from being emitted to the atmosphere.

(2) Carbon removed from each carbon adsorber shall be regenerated or destroyed in a manner that prevents benzene from being emitted to the atmosphere.

(3) For each regenerative carbon adsorber, the owner or operator shall initiate regeneration of the spent carbon bed and vent the emissions from the source to a regenerated carbon bed no later than when the benzene concentration or organic vapor concentration level in the adsorber outlet vent reaches the maximum concentration point, as determined in § 61.139(h).

(4) For each non-regenerative carbon adsorber, the owner or operator shall replace the carbon at the scheduled replacement time, or as soon as practicable (but not later than 16 hours) after an exceedance of the maximum concentration point is detected, whichever is sooner.

(i) For each non-regenerative carbon adsorber, the scheduled replacement time means the day that is estimated to be 90 percent of the demonstrated bed life, as defined in § 61.139(h)(5).

(ii) For each non-regenerative carbon adsorber, an exceedance of the maximum concentration point shall mean any concentration greater than or equal to the maximum concentration point as determined in § 61.139(h).

(c) Compliance with the provisions of this section shall be determined as follows:

(1) For each carbon adsorber and vapor incinerator, the owner or operator shall demonstrate compliance with the efficiency limit by a compliance test as specified in § 61.13 and § 61.139(g). If a waiver of compliance has been granted under § 61.11, the deadline for conducting the initial compliance test shall be incorporated into the terms of the waiver. The benzene removal efficiency rate for each carbon adsorber and vapor incinerator shall be calculated as in the following equation:

$$E = \frac{\sum_{i=1}^{n} Q_{bi}C_{bi} - \sum_{j=1}^{m} Q_{aj}C_{aj}}{\sum_{i=1}^{n} Q_{bi}C_{bi}} \times 100$$

Where:

E=percent removal of benzene.

C_{aj}=concentration of benzene in vents after the control device, parts per million (ppm).

C_{bi}=concentration of benzene in vents before the control device, ppm.

Q_{aj}=volumetric flow rate in vents after the control device, standard cubic meters/minute (scm/min).

Q_{bi}=volumetric flow rate in vents before the control device, scm/min.

m=number of vents after the control device.

n=number of vents after the control device.

(c) Compliance with all other provisions in this section shall be determined by inspections or the review of records and reports.

(d) For each regenerative carbon adsorber, the owner or operator shall install and operate a monitoring device that continuously indicates and records either the concentration of benzene or the concentration level of organic compounds in the outlet vent of the carbon adsorber. The monitoring device shall be installed, calibrated, maintained and operated in accordance with the manufacturer's specifications.

(1) Measurement of benzene concentration shall be made according to § 61.139(g)(2).

(2) All measurements of organic compound concentration levels shall be reasonable indicators of benzene concentration.

(i) The monitoring device for measuring organic compound concentration levels shall be based on one of the following detection principles: Infrared absorption, flame ionization, catalytic oxidation, photoionization, or thermal conductivity.

(ii) The monitoring device shall meet the requirements of part 60, appendix A, method 21, sections 2, 3, 4.1, 4.2, and 4.4. For the purpose of the application of method 21 to this section, the words "leak definition" shall be the maximum concentration point, which would be estimated until it is established under § 61.139(h). The calibration gas shall either be benzene or methane and shall be at a concentration associated with 125 percent of the expected organic compound concentration level for the carbon adsorber outlet vent.

(e) For each non-regenerative carbon adsorber, the owner or operator shall monitor either the concentration of benzene or the concentration level of organic compounds at the outlet vent of the adsorber. The monitoring device shall be calibrated, operated and maintained in accordance with the manufacturer's specifications.

(1) Measurements of benzene concentration shall be made according to § 61.139(g)(2). The measurement shall be conducted over at least one 5-minute interval during which flow into the carbon adsorber is expected to occur.

(2) All measurements of organic compound concentration levels shall be reasonable indicators of benzene concentration.

(i) The monitoring device for measuring organic compound concentration levels shall meet the requirements of paragraphs § 61.139(d)(2) (i) and (ii).

(ii) The probe inlet of the monitoring device shall be placed at approximately the center of the carbon adsorber outlet vent. The probe shall be held there for at least 5 minutes during which flow into the carbon adsorber is expected to occur. The maximum reading during that period shall be used as the measurement.

(3) Monitoring shall be performed at least once within the first 7 days after replacement of the carbon bed occurs, and monthly thereafter until 10 days before the scheduled replacement time, at which point monitoring shall be done daily, except as specified in paragraphs (e)(4) and (e)(5) of this section.

(4) If an owner or operator detects an exceedance of the maximum concentration point during the monthly monitoring or on the first day of daily monitoring as prescribed in paragraph (e)(3) of this section, then, after replacing the bed, the owner or operator shall begin the daily monitoring of the replacement carbon bed on the day after the last scheduled monthly monitoring before the exceedance was detected, or 10 days before the exceedance was detected, whichever is longer.

(5) If an owner or operator detects an exceedance of the maximum concentration point during the daily monitoring as prescribed in paragraph (e)(3) of this section, except on the first day, then, after replacing the bed, the owner or operator shall begin the daily monitoring of the replacement carbon bed 10 days before the exceedance was detected.

(6) If the owner or operator is monitoring on the schedule required in paragraph (e)(4) or paragraph (e)(5) of this section, and the scheduled replacement time is reached without exceeding the maximum concentration point, the owner or operator may return to the monitoring schedule in paragraph (e)(3) of this section for subsequent carbon beds.

NOTE: This note provides an example of the monitoring schedules in paragraphs (e)(3), (e)(4) and (e)(5) of this section. Assume that the scheduled replacement time for a non-regenerative carbon adsorber is the 105th day after installation. According to the monitoring schedule in paragraph (e)(3) of this section, initial monitoring would be done within 7 days after installation, monthly monitoring would be done on the 30th, 60th and 90th days, and daily monitoring would begin on the 95th day after installation. Now assume that an exceedance of the maximum concentration

point is detected on the 90th day after installation. On the replacement carbon bed, the owner or operator would begin daily monitoring on the 61st day after installation (i.e., the day after the last scheduled monthly monitoring before the exceedance was detected), according to the requirements in paragraph (e)(4) of this section. If, instead, the exceedance were detected on the first bed on the 95th day, the daily monitoring of the replacement bed would begin on the 85th day after installation (i.e., 10 days before the point in the cycle where the exceedance was detected); this is a second example of the requirements in paragraph (e)(4) of this section. Finally, assume that an exceedance of the maximum concentration point is detected on the 100th day after the first carbon adsorber was installed. According to paragraph (e)(5) of this section, daily monitoring of the replacement bed would begin on the 90th day after installation (i.e., 10 days earlier than when the exceedance was detected on the previous bed). In all of these examples, the initial monitoring of the replacement bed within 7 days of installation and the monthly monitoring would proceed as set out in paragraph (e)(3) of this section until daily monitoring was required.

(f) For each vapor incinerator, the owner or operator shall comply with the monitoring requirements specified below:

(1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a temperature monitoring device equipped with a continuous recorder and having an accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius or ±0.5° C, whichever is greater.

(i) Where a vapor incinerator other than a catalytic incinerator is used, the temperature monitoring device shall be installed in the firebox.

(ii) Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(2) Comply with paragraph (f)(2)(i), paragraph (f)(2)(ii), or paragraph (f)(3)(iii) of this section.

(i) Install, calibrate, maintain and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow to the incinerator at least once every hour for each source. The flow indicator shall be installed in the vent stream from each source at a point closest to the inlet of each vapor incinerator and before being joined with any other vent stream.

(ii) Install, calibrate, maintain and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow away from the vapor incinerator at least once every 15 minutes. The flow indicator shall be installed in each bypass line, immediately downstream of the valve that, if opened, would divert the vent stream away from the vapor incinerator.

(iii) Where a valve that opens a bypass line is secured in the closed position with a car seal or a lock-and-key configuration, a flow indicator is not required. The owner or operator shall perform a visual inspection at least once every month to check the position of the valve and the condition of the car seal or lock-and-key configuration. The owner or operator shall also record the date and duration of each time that the valve was opened and the vent stream diverted away from the vapor incinerator.

(g) In conducting the compliance tests required in § 61.139(c), and measurements specified in § 61.139(d)(1), (e)(1) and (h)(3)(ii), the owner or operator shall use as reference methods the test methods and procedures in appendix A to 40 CFR part 60, or other methods as specified in this paragraph, except as specified in § 61.13.

(1) For compliance tests, as described in § 61.139(c)(1), the following provisions apply.

(i) All tests shall be run under representative emission concentration and vent flow rate conditions. For sources with intermittent flow rates, representative conditions shall include typical emission surges (for example, during the loading of a storage tank).

(ii) Each test shall consist of three separate runs. These runs will be averaged to yield the volumetric flow rates and benzene concentrations in the equation in § 61.139(c)(1). Each run shall be a minimum of 1 hour.

(A) For each regenerative carbon adsorber, each run shall take place in one adsorption cycle, to include a minimum of 1 hour of sampling immediately preceding the initiation of carbon bed regeneration.

(B) For each non-regenerative carbon adsorber, all runs can occur during one adsorption cycle.

(iii) The measurements during the runs shall be paired so that the inlet and outlet to the control device are measured simultaneously.

(iv) Method 1 or 1A shall be used as applicable for locating measurement sites.

(v) Method 2, 2A, or 2D shall be used as applicable for measuring vent flow rates.

(vi) Method 18 shall be used for determining the benzene concentrations (C_{ai} and C_{bi}). Either follow section 7.1, "Integrated Bag Sampling and Analysis," or section 7.2, "Direct Interface Sampling and Analysis Procedure." A separation column constructed of stainless steel, 1.83 m by 3.2 mm, containing 10 percent 1,2,3-tris (2-cyanoethoxy) propane (TECP) on 80/100 mesh Chromosorb P AW, with a column temperature of 80° C, a detector temperature of 225° C, and a flow rate of approximately 20 ml/min, may produce adequate separations. The analyst can use other columns, provided that the precision and accuracy of the analysis of benzene standards is not impaired. The analyst shall have available for review information confirming that there is adequate resolution of the benzene peak.

(A) If section 7.1 is used, the sample rate shall be adjusted to maintain a constant proportion to vent flow rate.

(B) If section 7.2 is used, then each performance test run shall be conducted in intervals of 5 minutes. For each interval "t_i" readings from each measurement shall be recorded, and the flow rate (Q_{si} or Q_{wi}) and the corresponding benzene concentration (C_{ai} or C_{bi}) shall be determined. The sampling system shall be constructed to include a mixing chamber of a volume equal to 5 times the sampling flow rate per minute. Each analysis performed by the chromatograph will then represent an averaged emission value for a 5-minute time period. The vent flow rate readings shall be timed to account for the total sample system residence time. A dual column, dual detector chromatograph can be used to achieve an analysis interval of 5 minutes. The individual benzene concentrations shall be vent flow rate weighted to determine sample run average concentrations. The individual vent flow rates shall be time averaged to determine sample run average flow rates.

(2) For testing the benzene concentration at the outlet vent of the carbon adsorber as specified under §§ 61.139(d)(1), (e)(1) and (h)(3)(ii), the following provisions apply.

(i) The measurement shall be conducted over one 5-minute period.

(ii) The requirements in § 61.139(g)(1)(i) shall apply to the extent practicable.

(iii) The requirements in § 61.139(g)(1)(vi) shall apply. Section 7.2 of method 18 shall be used as described in § 61.139(g)(1)(vi)(B) for benzene concentration measurements.

(h) For each carbon adsorber, the maximum concentration point shall be expressed either as a benzene concentration or organic compound concentration level, whichever is to be indicated by the monitoring device chosen under § 61.139 (d) or (e).

(1) For each regenerative carbon adsorber, the owner or operator shall determine the maximum concentration point at the following times:

(i) No later than the deadline for the initial compliance test as specified in § 61.139(c)(1);

(ii) At the request of the Administrator; and

(iii) At any time chosen by the owner or operator.

(2) For each non-regenerative carbon adsorber, the owner or operator shall determine the maximum concentration point at the following times:

(i) On the first carbon bed to be installed in the adsorber;

(ii) At the request of the Administrator;

(iii) On the next carbon bed after the maximum concentration point has been exceeded (before the scheduled replacement time) for each of three previous carbon beds in the adsorber since the most recent determination; and

(iv) At any other time chosen by the owner or operator.

(3) The maximum concentration point for each carbon adsorber shall

be determined through the simultaneous measurement of the outlet of the carbon adsorber with the monitoring device and method 18, except as allowed in paragraph (h)(4) of this section.

(i) Several data points shall be collected according to a schedule determined by the owner or operator. The schedule shall be designed to take frequent samples near the expected maximum concentration point.

(ii) Each data point shall consist of one 5-minute benzene concentration measurement using method 18 as specified in § 61.139(g)(2), and of a simultaneous measurement by the monitoring device. The monitoring device measurement shall be conducted according to § 61.139 (d) or (e), whichever is applicable.

(iii) The maximum concentration point shall be the concentration level, as indicated by the monitoring device, for the last data point at which the benzene concentration is less than 2 percent of the average value of the benzene concentration at the inlet to the carbon adsorber during the most recent compliance test.

(4) If the maximum concentration point is expressed as a benzene concentration, the owner or operator may determine it by calibrating the monitoring device with benzene at a concentration that is 2 percent of the average benzene concentration measured at the inlet to the carbon adsorber during the most recent compliance test. The reading on the monitoring device corresponding to the calibration concentration shall be the maximum concentration point. This method of determination would affect the owner or operator as follows:

(i) For a regenerative carbon adsorber, the owner or operator is exempt from the provisions in paragraph (h)(3) of this section.

(ii) For a non-regenerative carbon adsorber, the owner or operator is required to collect the data points in paragraph (h)(3) of this section with only the monitoring device, and is exempt from the simultaneous method 18 measurement.

(5) For each non-regenerative carbon adsorber, the demonstrated bed life shall be the carbon bed life, measured in days from the time the bed is installed until the maximum concentration point is reached, for the carbon bed that is used to determine the maximum concentration point.

(i) The following recordkeeping requirements are applicable to owners and operators of control devices subject to § 61.139. All records shall be kept updated and in a readily accessible location.

(1) The following information shall be recorded for each control device for the life of the control device:

(i) The design characteristics of the control device and a list of the source or sources vented to it.

(ii) A plan for proper operation, maintenance, and corrective action to achieve at least 98 percent control of benzene emissions.

(iii) The dates and descriptions of any changes in the design specifications or plan.

(iv) For each carbon adsorber, the plan in paragraph (i)(1)(ii) of this section shall include the method for handling captured benzene and removed carbon to comply with § 61.139(b) (1) and (2).

(v) For each carbon adsorber for which organic compounds are monitored as provided under § 61.139 (d) and (e), documentation to show that the measurements of organic compound concentrations are reasonable indicators of benzene concentrations.

(2) For each compliance test as specified in § 61.139(c)(1), the date of the test, the results of the test, and other data needed to determine emissions shall be recorded as specified in § 61.13(g) for at least 2 years or until the next compliance test on the control device, whichever is longer.

(3) For each vapor incinerator, the average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator), measured and averaged over the most recent compliance test shall be recorded for at least 2 years or until the next compliance test on the incinerator, whichever is longer.

(4) For each carbon adsorber, for each determination of a maximum concentration point as specified in § 61.139(h), the date of the determination, the maximum concentration point, and data needed to make the determination shall be recorded for at least 2 years or until the next maximum concentration point determination on the carbon adsorber, whichever is longer.

(5) For each carbon absorber, the dates of and data from the monitoring required in § 61.139(d) and (e), the date and time of replacement of each carbon bed, the date of each exceedance of the maximum concentration point, and a brief description of the corrective action taken shall be recorded for at least 2 years. Also, the occurrences when the captured benzene or spent carbon are not handled as required in § 61.139(b)(1) and (2) shall be recorded for at least 2 years.

(6) For each vapor incinerator, the data from the monitoring required in § 61.139(f)(1), the dates of all periods of operation during which the parameter boundaries established during the most recent compliance test are exceeded, and a brief description of the corrective action taken shall be recorded for at least 2 years. A period of operation during which the parameter boundaries are exceeded is a 3-hour period of operation during which:

(i) For each vapor incinerator other than a catalytic incinerator, the average combustion temperature is more than 28°C (50°F) below the average combustion temperature during the most recent performance test.

(ii) For each catalytic incinerator, the average temperature of the vent stream immediately before the catalyst bed is more than 28°C (50°F) below the average temperature of the vent stream during the most recent performance test, or the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference across the catalyst bed during the most recent performance test.

(7) For each vapor incinerator, the following shall be recorded for at least 2 years:

(i) If subject to § 61.139(f)(2)(i), records of the flow indication, and of all periods when the vent stream is diverted from the vapor incinerator or has no flow rate.

(ii) If subject to § 61.139(f)(2)(ii), records of the flow indication, and of all periods when the vent stream is diverted from the vapor incinerator.

(iii) If subject to § 61.139(f)(2)(iii), records of the conditions found during each monthly inspection, and of each period when the car seal is broken, when the valve position is changed, or when maintenance on the bypass line valve is performed.

(j) The following reporting requirements are applicable to owners or operators of control devices subject to § 61.139:

(1) Compliance tests shall be reported as specified in § 61.13(f).

(2) The following information shall be reported on a quarterly basis. Two of the quarterly reports shall be submitted as part of the semiannual reports required in § 61.138(f).

(i) For each carbon adsorber:

(A) The date and time of detection of each exceedance of the maximum concentration point and a brief description of the time and nature of the corrective action taken.

(B) The date of each time that the captured benzene or removed carbon was not handled as required in § 61.139 (b)(1) and (2), and a brief description of the corrective action taken.

(C) The date of each determination of the maximum concentration point, as described in § 61.139(h), and a brief reason for the determination.

(ii) For each vapor incinerator, the date and duration of each exceedance of the boundary parameters recorded under § 61.139(i)(6) and a brief description of the corrective action taken.

(iii) For each vapor incinerator, the date and duration of each period specified as follows:

(A) Each period recorded under § 61.139(i)(7)(i) when the vent stream is diverted from the control device or has no flow rate;

(B) Each period recorded under § 61.139(i)(7)(ii) when the vent stream is diverted from the control device; and

(C) Each period recorded under § 61.139(i)(7)(iii) when the vent stream is diverted from the control device, when the car seal is broken, when the

valve is unlocked, or when the valve position has changed.

(iv) For each vapor incinerator, the owner or operator shall specify the method of monitoring chosen under § 61.139(f)(2) in the first quarterly report. Any time the owner or operator changes that choice, he shall specify the change in the first quarterly report following the change.

(3) If, for a given quarter in which no semiannual report is due under § 61.138(f), there is no information to report under § 61.139(j)(2)(i)(A), (j)(2)(i)(B), (j)(2)(ii)(A), and (j)(2)(ii)(B), then the owner or operator may submit a statement to that effect along with the information to be reported under § 61.139(j)(2)(i)(C) in the next semiannual report, rather than submitting a report at the end of the quarter.

(Approved by the Office of Management and Budget under control number 2060-0185)

[56 FR 47407, Sept. 19, 1991]

Subpart M—National Emission Standard for Asbestos

AUTHORITY: 42 U.S.C. 7401, 7412, 7414, 7416, 7601.

SOURCE: 49 FR 13661, Apr. 5, 1984, unless otherwise noted.

§ 61.140 Applicability.

The provisions of this subpart are applicable to those sources specified in § 61.142 through 61.151, 61.154, and 61.155.

[55 FR 48414, Nov. 20, 1990]

§ 61.141 Definitions.

All terms that are used in this subpart and are not defined below are given the same meaning as in the Act and in subpart A of this part.

Active waste disposal site means any disposal site other than an inactive site.

Adequately wet means sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

Asbestos means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite.

Asbestos-containing waste material means mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this subpart. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos including disposable equipment and clothing.

Asbestos mill means any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos material is not considered a part of the asbestos mill.

Asbestos tailings means any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

Asbestos waste from control device means any waste material that contains asbestos and is collected by a pollution control device.

Category I nonfriable asbestos-containing material (ACM) means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy.

Category II nonfriable ACM means any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Commercial asbestos means any material containing asbestos that is extracted from ore and has value because of its asbestos content.

Cutting means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching.

Demolition means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

Emergency renovation operation means a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

Fabricating means any processing (*e.g.*, cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.

Facility means any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation or building that was previously subject to this subpart is not excluded, regardless of its current use or function.

Facility component means any part of a facility including equipment.

Friable asbestos material means any material containing more than 1 percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763 section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

Fugitive source means any source of emissions not controlled by an air pollution control device.

Glove bag means a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove-bag installation, equipment and supplies, and work practices is contained in the Occupational Safety and Health Administration's (OSHA's) final rule on occupational exposure to asbestos (appendix G to 29 CFR 1926.58).

Grinding means to reduce to powder or small fragments and includes mechanical chipping or drilling.

In poor condition means the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

Inactive waste disposal site means any disposal site or portion of it where additional asbestos-containing waste material has not been deposited within the past year.

Installation means any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).

Leak-tight means that solids or liquids cannot escape or spill out. It also means dust-tight.

Malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other prevent-

§ 61.256 Exemption from the reporting and testing requirements of 40 CFR 61.10.

All facilities designated under this subpart are exempt from the reporting requirements of 40 CFR 61.10.

Subpart X—[Reserved]

Subpart Y—National Emission Standard for Benzene Emissions from Benzene Storage Vessels

SOURCE: 54 FR 38077, Sept. 14, 1989, unless otherwise noted.

§ 61.270 Applicability and designation of sources.

(a) The source to which this subpart applies is each storage vessel that is storing benzene having a specific gravity within the range of specific gravities specified in ASTM D 836-84 for Industrial Grade Benzene, ASTM D 835-85 for Refined Benzene-485, ASTM D 2359-85a for Refined Benzene-535, and ASTM D 4734-87 for Refined Benzene-545. These specifications are incorporated by reference as specified in § 61.18.

(b) Except for paragraph (b) in § 61.276, storage vessels with a design storage capacity less than 38 cubic meters (10,000 gallons) are exempt from the provisions of this subpart.

(c) This subpart does not apply to storage vessels used for storing benzene at coke by-product facilities.

(d) This subpart does not apply to vessels permanently attached to motor vehicles such as trucks, rail cars, barges, or ships.

(e) This subpart does not apply to pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.

(f) A designated source subject to the provisions of this subpart that is also subject to applicable provisions of 40 CFR part 60 subparts K, Ka, and Kb shall be required to comply only with the subpart that contains the most stringent requirements for that source.

§ 61.271 Emission standard.

The owner or operator of each storage vessel with a design storage capacity greater than or equal to 38 cubic meters (10,000 gallons) to which this subpart applies shall comply with the requirements in paragraph (d) of this section and with the requirements either in paragraph (a), (b), or (c) of this section, or equivalent as provided in § 61.273.

(a) The storage vessel shall be equipped with a fixed roof and an internal floating roof.

(1) An internal floating roof means a cover that rests on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a permanently affixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

(2) Each internal floating roof shall be equipped with one of the closure devices listed in paragraphs (a)(2) (i), (ii), or (iii) of this section between the wall of the storage vessel and the edge of the internal floating roof. This requirement does not apply to each existing storage vessel for which construction of an internal floating roof equipped with a continuous seal commenced on or before July 28, 1988. A continuous seal means a seal that forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof.

(i) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the vessel.

(ii) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(iii) A metallic shoe seal. A metallic shoe seal (also referred to as a mechanical shoe seal) is, but is not limited to, a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(3) Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

(4) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(5) Each internal floating roof shall meet the specifications listed below. If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first.

(i) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

(ii) Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

(iii) Each automatic bleeder vent shall be gasketed.

(iv) Rim space vents shall be equipped with a gasket.

(v) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(vi) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(6) Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use. Rim space vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

(b) The storage vessel shall have an external floating roof.

(1) An external floating roof means a pontoon-type or double-deck-type cover that rests on the liquid surface in a vessel with no fixed roof.

(2) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph (b)(5) of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

(i) The primary seal shall be either a metallic shoe seal or a liquid-mounted seal. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the vessel. A metallic shoe seal (which can also be referred to as a mechanical shoe seal) is, but is not limited to, a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. Except as provided in § 61.272(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and the vessel wall.

(ii) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in § 61.272(b)(4).

(3) Except for automatic bleeder vents and rim space vents, each opening in the noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(4) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the vessel is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(5) The requirement for a secondary seal does not apply to each existing storage vessel that was equipped with a liquid-mounted primary seal as of July 28, 1988, until after the first time after September 14, 1989, when the vessel is emptied and degassed or 10 years from September 14, 1989, whichever occurs first.

(c) The storage vessel shall be equipped with a closed vent system and a control device.

(1) The closed vent system shall be designed to collect all benzene vapors and gases discharged from the storage vessel and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in § 61.242-11 (subpart V).

(2) The control device shall be designed and operated to reduce inlet benzene emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18.

(3) The specifications and requirements listed in paragraphs (c)(1) and (c)(2) of this section for closed vent systems and control devices do not apply during periods of routine maintenance. During periods of routine maintenance, the benzene level in the storage vessel(s) serviced by the control device subject to the provisions of § 61.271(c) may be lowered but not raised. Periods of routine maintenance shall not exceed 72 hours as outlined in the maintenance plan required by § 61.272(c)(1)(iii).

(4) The specifications and requirements listed in paragraphs (c)(1) and (c)(2) of this section for closed vents and control devices do not apply during a control system malfunction. A control system malfunction means any sudden and unavoidable failure of air pollution control equipment. A failure caused entirely or in part by design deficiencies, poor maintenance, careless operation, or other preventable upset condition or equipment breakdown is not considered a malfunction.

(d) The owner or operator of each affected storage vessel shall meet the requirements of paragraph (a), (b), or (c) of this section as follows:

(1) The owner or operator of each existing benzene storage vessel shall meet the requirements of paragraph (a), (b), or (c) of this section no later than 90 days after September 14, 1989, with the exceptions noted in paragraphs (a)(5) and (b)(5), unless a waiver of compliance has been approved by the Administrator in accordance with § 61.11.

(2) The owner or operator of each benzene storage vessel upon which construction commenced after September 14, 1989, shall meet the requirements of paragraph (a), (b), or (c) of this section prior to filling (i.e., roof is lifted off leg supports) the storage vessel with benzene.

(3) The owner or operator of each benzene storage vessel upon which construction commenced on or after July 28, 1988, and before September

14, 1989, shall meet the requirements of paragraph (a), (b), or (c) of this section on September 14, 1989.

[54 FR 38077, Sept. 14, 1989; 54 FR 50887, Dec. 11, 1989]

§ 61.272 Compliance provisions.

(a) For each vessel complying with § 61.271(a) (fixed roof and internal floating roof) each owner or operator shall:

(1) After installing the control equipment required to comply with § 61.271(a), visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with benzene. If there are holes, tears or other openings in the primary seal, the secondary seal, or the seal fabric, or defects in the internal floating roof, the owner or operator shall repair the items before filling the storage vessel.

(2) Visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after September 14, 1989, except as provided in paragraph (a)(4)(i) of this section. If the internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, an extension of up to 30 additional days may be requested from the Administrator in the inspection report required in § 61.275(a). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspections as specified in paragraph (a)(2) of this section and at intervals greater than 5 years in the case of vessels specified in paragraph (a)(4)(i) of this section.

(i) For all the inspections required by paragraphs (a)(1) and (a)(3) of this section, the owner or operator shall notify the Administrator in writing at least 30 days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(3) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the vessel, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to refilling.

(ii) If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with benzene.

(4) For vessels equipped with a double-seal system as specified in § 61.271(a)(2)(ii):

(i) Visually inspect the vessel as specified in paragraph (a)(3) of this section at least every 5 years; or

(ii) Visually inspect the vessel annually as specified in paragraph (a)(2) of

this section, and at least every 10 years as specified in paragraph (a)(3) of this section.

(b) For each vessel complying with § 61.271(b) (external floating roof) the owner or operator shall:

(1) Determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the following frequency.

(i) For an external floating roof vessel equipped with primary and secondary seals, measurements of gaps between the vessel wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 90 days of the initial fill with benzene or within 90 days of September 14, 1989, whichever occurs last, and at least once every 5 years thereafter, except as provided in paragraph (b)(1)(ii) of this section.

(ii) For an external floating roof vessel equipped with a liquid-mounted primary seal and without a secondary seal as provided for in § 61.271(b)(5), measurement of gaps between the vessel wall and the primary seal (seal gaps) shall be performed within 90 days of September 14, 1989, and at least once per year thereafter. When a secondary seal is installed over the primary seal, measurement of primary seal gaps shall be performed within 90 days of installation and at least once every 5 years thereafter.

(iii) For an external floating roof vessel equipped with primary and secondary seals, measurements of gaps between the vessel wall and the secondary seal shall be performed within 90 days of the initial fill with benzene, within 90 days of installation of the secondary seal, or within 90 days after September 14, 1989, whichever occurs last, and at least once per year thereafter.

(iv) If any source ceases to store benzene for a period of 1 year or more, subsequent introduction of benzene into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i), (b)(1)(ii), and (b)(1)(iii) of this section.

(2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

(i) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

(ii) Measure seal gaps around the entire circumference of the vessel in each place where a 0.32 centimeter (cm) (1/8 in) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

(iii) The total surface area of each gap described in paragraph (b)(2)(ii) of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the vessel and compare each ratio to the respective standards in § 61.272(b)(4) and § 61.272(b)(5).

(4) Repair conditions that do not meet requirements listed in paragraph (b)(4) (i) and (ii) within 45 days of identification in any inspection or empty and remove the storage vessel from service within 45 days.

(i) The accumulated area of gaps between the vessel wall and the metallic shoe seal or the liquid-mounted primary seal shall not exceed 212 cm^2 per meter of vessel diameter (10.0 in^2 per foot of vessel diameter) and the width of any portion of any gap shall not exceed 3.81 cm (1½ in).

(A) One end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 61 cm (24 in) above the stored liquid surface.

(B) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in paragraph (b)(4)(ii)(B) of this section.

(B) The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 cm^2 per meter of vessel diameter (1.0 in^2 per foot of vessel diameter) or the width of any portion of any gap shall not exceed 1.27 cm (½ in). These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by paragraph (b)(1)(i) or (b)(1)(ii) of this section.

(C) There are to be no holes, tears, or other openings in the seal or seal fabric.

(iii) If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, an extension of up to 30 additional days may be requested from the Administrator in the inspection report required in § 61.275(d). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(5) The owner or operator shall notify the Administrator 30 days in advance of any gap measurements required by paragraph (b)(1) of this section to afford the Administrator the opportunity to have an observer present.

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(i) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with benzene.

(ii) For all the inspections required by paragraph (b)(6) of this section, the owner or operator shall notify the Administrator in writing at least 30 days prior to filling or refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the vessel, the owner or operator shall notify the Administrator at least 7 days prior to refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(c) The owner or operator of each source that is equipped with a closed vent system and control device as required in § 60.271(c), other than a flare, shall meet the following requirements.

(1) Within 90 days after initial fill or after September 14, 1989, whichever comes last, submit for approval by the Administrator, an operating plan containing the information listed below.

(i) Documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and benzene content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases or liquids, other than fuels, from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions exist is sufficient to meet the requirements of this paragraph.

(ii) A description of the parameter or parameters to be monitored to ensure that the control device is oper-

ated and maintained in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(iii) A maintenance plan for the system including the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods for those operations that would require the closed vent system or the control device to be out of compliance with § 61.271(c). The maintenance plan shall require that the system be out of compliance with § 61.271(c) for no more than 72 hours per year.

(2) Operate, monitor the parameters, and maintain the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the approval process. In this case, the modified plan applies.

(d) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in § 61.271(c) shall meet the requirements as specified in the general control device requirements in 40 CFR 60.18 (e) and (f).

§ 61.273 Alternative means of emission limitation.

(a) Upon written application from any person, the Administrator may approve the use of alternative means of emission limitation which have been demonstrated to his satisfaction to achieve a reduction in benzene emissions at least equivalent to the reduction in emissions achieved by any requirement in § 61.271 (a), (b), or (c) of this subpart.

(b) Determination of equivalence to the reduction in emissions achieved by the requirements of § 61.271 (a), (b), or (c) will be evaluated using the following information to be included in the written application to the Administrator:

(1) Actual emissions tests that use full-size or scale-model storage vessels that accurately collect and measure all benzene emissions from a given control device, and that accurately simulate wind and account for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

(c) The Administrator may condition approval of equivalency on requirements that may be necessary to ensure operation and maintenance to achieve the same emission reduction as the requirements of § 61.271 (a), (b), or (c).

(d) If, in the Administrator's judgment, an application for equivalence may be approvable, the Administrator will publish a notice of preliminary determination in the FEDERAL REGISTER and provide the opportunity for public hearing. After notice and opportunity for public hearing, the Administrator will determine the equivalence of the alternative means of emission limitation and will publish the final determination in the FEDERAL REGISTER.

§ 61.274 Initial report.

(a) The owner or operator of each storage vessel to which this subpart applies and which has a design capacity greater than or equal to 38 cubic meters (10,000 gallons) shall submit an initial report describing the controls which will be applied to meet the equipment requirements in § 61.271. For an existing storage vessel or a new storage vessel for which construction and operation commenced prior to September 14, 1989, this report shall be submitted within 90 days of September 14, 1989, and can be combined with the report required by § 61.10. For a new storage vessel for which construction or operation commenced on or after September 14, 1989, the report shall be combined with the report required by § 61.07. In the case where the owner or operator seeks to comply with § 61.271(c) with a control device other than a flare, this information may consist of the information required by 61.272(c)(1).

(b) The owner or operator of each storage vessel seeking to comply with § 61.271(c) with a flare, shall submit a report containing the measurements required by 40 CFR 60.18(f) (1), (2), (3), (4), (5), and (6). For the owner or operator of an existing storage vessel

not seeking to obtain a waiver or a new storage vessel for which construction and operation commenced prior to September 14, 1989, this report shall be combined with the report required by paragraph (a) of this section. For the owner or operator of an existing storage vessel seeking to obtain a waiver, the reporting date will be established in the response to the waiver request. For the owner or operator of a new storage vessel for which construction or operation commenced after September 14, 1989, the report shall be submitted within 90 days of the date the vessel is initially filled (or partially filled) with benzene.

(Approved by the Office of Management and Budget under control number 2060-0185)

§ 61.275 Periodic report.

(a) The owner or operator of each storage vessel to which this subpart applies after installing control equipment in accordance with § 61.271(a) (fixed roof and internal floating roof) shall submit a report describing the results of each inspection conducted in accordance with § 61.272(a). For vessels for which annual inspections are required under § 61.272(a)(2), the first report is to be submitted no more than 12 months after the initial report submitted in accordance with § 61.274, and each report is to be submitted within 60 days of each annual inspection.

(1) Each report shall include the date of the inspection of each storage vessel and identify each storage vessel in which:

(i) The internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached from the internal floating roof, or there are holes, tears or other openings in the seal or seal fabric; or

(ii) There are visible gaps between the seal and the wall of the storage vessel.

(2) Where an annual report identifies any condition in paragraph (a)(1) of this section the annual report shall describe the nature of the defect, the date the storage vessel was emptied, and the nature of an date the repair was made, except as provided in paragraph (a)(3) of this section.

(3) If an extension is requested in an annual periodic report in accordance with § 61.272(a)(2), a supplemental periodic report shall be submitted within 15 days of repair. The supplemental periodic report shall identify the vessel and describe the date the storage vessel was emptied and the nature of and date the repair was made.

(b) The owner or operator of each storage vessel to which this subpart applies after installing control equipment in accordance with § 61.271(a) (fixed roof and internal floating roof) shall submit a report describing the results of each inspection conducted in accordance with § 61.272(a) (3) or (4).

(1) The report is to be submitted within 60 days of conducting each inspection required by § 61.272(a) (3) or (4).

(2) Each report shall identify each storage vessel in which the owner or operator finds that the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area. The report shall also describe the nature of the defect, the date the storage vessel was emptied, and the nature of and date the repair was made.

(c) Any owner or operator of an existing storage vessel which had an internal floating roof with a continuous seal as of July 28, 1988, and which seeks to comply with the requirements of § 61.271(a)(5) during the first time after September 14, 1989, when the vessel is emptied and degassed but no later than 10 years from September 14, 1989, shall notify the Administrator 30 days prior to the completion of the installation of such controls and the date of refilling of the vessel so the Administrator has an opportunity to have an observer present to inspect the storage vessel before it is refilled. This report can be combined with the one required by § 61.275(b).

(d) The owner or operator of each storage vessel to which this subpart applies after installing control equipment in accordance with § 61.271(b) (external floating roof) shall submit a report describing the results of each seal gap measurement made in accordance with § 61.272(b). The first report is to be submitted no more than 12 months after the initial report submitted in accordance with § 61.274(a), and each annual periodic report is to be submitted within 60 days of each annual inspection.

(1) Each report shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in § 61.272(b) (2) and (3), and shall identify each storage vessel which does not meet the gap specifications of § 61.272(b). Where an annual report identifies any vessel not meeting the seal gap specifications of § 61.272(b) the report shall describe the date the storage vessel was emptied, the measures used to correct the condition and the date the storage vessel was brought into compliance.

(2) If an extension is requested in an annual periodic report in accordance with § 61.272(b)(4)(iii), a supplemental periodic report shall be submitted within 15 days of repair. The supplemental periodic report shall identify the vessel and describe the date the vessel was emptied and the nature of and date the repair was made.

(e) Excess emission report.

(1) The owner or operator of each source seeking to comply with § 61.271(c) (vessels equipped with closed vent systems with control devices) shall submit a quarterly report informing the Administrator of each occurrence that results in excess emissions. Excess emissions are emissions that occur at any time when compliance with the specifications and requirements of § 61.271(c) are not achieved, as evidenced by the parameters being measured in accordance with § 61.272(c)(1)(ii) if a control device other than a flare is used, or by the measurements required in § 61.272(d) and the general control device requirements in 40 CFR 60.18(f) (1) and (2) if a flare is used.

(2) The owner or operator shall submit the following information as a minimum in the report required by (e)(1) of this section:

(i) Identify the stack and other emission points where the excess emissions occurred;

(ii) A statement of whether or not the owner or operator believes a control system malfunction has occurred.

(3) If the owner or operator states that a control system malfunction has occurred, the following information as a minimum is also to be included in the report required under paragraph (e)(1) of this section:

(i) Time and duration of the control system malfunction as determined by continuous monitoring data (if any), or the inspections or monitoring done in accordance with the operating plan required by § 61.272(c).

(ii) Cause of excess emissions.

(Approved by the Office of Management and Budget under control number 2060-0185)

§ 61.276 Recordkeeping.

(a) Each owner or operator with a storage vessel subject to this subpart shall keep copies of all the reports and records required by this subpart for at least 2 years, except as specified in paragraphs (b) and (c)(1) of this section.

(b) Each owner or operator with a storage vessel, including any vessel which has a design storage capacity less than 38 cubic meters (10,000 gallons), shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel is in operation. Each storage vessel with a design capacity of less than 38 cubic meters (10,000 gallons) is subject to no provisions of this subpart other than those required by this paragraph.

(c) The following information pertaining to closed vent system and control devices shall be kept in a readily accessible location.

(1) A copy of the operating plan. This record shall be kept as long as the closed vent system and control device is in use.

(2) A record of the measured values of the parameters monitored in accordance with § 61.272(c)(1)(ii) and § 61.272(c)(2).

(3) A record of the maintenance performed in accordance with § 61.272(c)(1)(iii) of the operating plan, including the following:

(i) The duration of each time the closed vent system and control device does not meet the specifications of § 61.271(c) due to maintenance, including the following:

(A) The first time of day and date the requirements of 61.271(c) were not met at the beginning of maintenance.

(B) The first time of day and date the requirements of § 61.271(c) were met at the conclusion of maintenance.

(C) A continuous record of the liquid level in each storage vessel that the closed vent system and control device receive vapors from during the interval between the times specified by (c)(3)(i)(A) and (c)(3)(i)(B). Pumping records (simultaneous input and output) may be substituted for records of the liquid level.

(Approved by the Office of Management and Budget under control number 2060-0185)

§ 61.277 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: § 61.273.

Subparts Z–AA—[Reserved]

Subpart BB—National Emission Standard for Benzene Emissions from Benzene Transfer Operations

SOURCE: At 55 FR 8341, Mar. 7, 1990, unless otherwise noted.

§ 61.300 Applicability.

(a) The affected facility to which this subpart applies is the total of all loading racks at which benzene is loaded into tank trucks, railcars, or marine vessels at each benzene production facility and each bulk terminal. However, specifically exempted from this regulation are loading racks at which only the following are loaded: Benzene-laden waste (covered under subpart FF of this part), gasoline, crude oil, natural gas liquids, petroleum distillates (e.g., fuel oil, diesel, or kerosene), or benzene-laden liquid from coke by-product recovery plants.

(b) Any affected facility under paragraph (a) of this section which loads only liquid containing less than 70 weight-percent benzene is exempt from the requirements of this subpart, except for the recordkeeping and reporting requirements in § 61.305(i).

(c) Any affected facility under paragraph (a) of this section shall comply with the standards in § 61.302 at each loading rack that is handling a liquid containing 70 weight-percent or more benzene.

(d) Any affected facility under paragraph (a) of this section whose annual benzene loading is less than 1.3 million liters of 70 weight-percent or more benzene is exempt from the requirements of this subpart, except for the recordkeeping and reporting requirements in § 61.305(i).

(e) The owner or operator of an affected facility, as defined in § 61.300(a) that loads a marine vessel shall be in compliance with the provisions of this subpart on and after July 23, 1991. If an affected facility that loads a marine vessel also loads a tank truck or railcar, the marine vessel loading racks shall be in compliance with the provisions of this subpart on and after July 23, 1991, while the tank truck loading racks and the railcar loading racks shall be in compliance as required by § 61.12.

[55 FR 8341, Mar. 7, 1990, as amended at 55 FR 45804, Oct. 31, 1990]

§ 61.301 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, or in subpart A or subpart V of part 61.

Bulk terminal means any facility which receives liquid product containing benzene by pipelines, marine vessels, tank trucks, or railcars, and loads

(d) The owner or operator of each storage vessel to which this subpart applies after installing control equipment in accordance with § 61.271(b) (external floating roof) shall submit a report describing the results of each seal gap measurement made in accordance with § 61.272(b). The first report is to be submitted no more than 12 months after the initial report submitted in accordance with § 61.274(a), and each annual periodic report is to be submitted within 60 days of each annual inspection.

(1) Each report shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in § 61.272(b) (2) and (3), and shall identify each storage vessel which does not meet the gap specifications of § 61.272(b). Where an annual report identifies any vessel not meeting the seal gap specifications of § 61.272(b) the report shall describe the date the storage vessel was emptied, the measures used to correct the condition and the date the storage vessel was brought into compliance.

(2) If an extension is requested in an annual periodic report in accordance with § 61.272(b)(4)(iii), a supplemental periodic report shall be submitted within 15 days of repair. The supplemental periodic report shall identify the vessel and describe the date the vessel was emptied and the nature of and date the repair was made.

(e) Excess emission report.

(1) The owner or operator of each source seeking to comply with § 61.271(c) (vessels equipped with closed vent systems with control devices) shall submit a quarterly report informing the Administrator of each occurrence that results in excess emissions. Excess emissions are emissions that occur at any time when compliance with the specifications and requirements of § 61.271(c) are not achieved, as evidenced by the parameters being measured in accordance with § 61.272(c)(1)(ii) if a control device other than a flare is used, or by the measurements required in § 61.272(d) and the general control device requirements in 40 CFR 60.18(f) (1) and (2) if a flare is used.

(2) The owner or operator shall submit the following information as a minimum in the report required by (e)(1) of this section:

(i) Identify the stack and other emission points where the excess emissions occurred;

(ii) A statement of whether or not the owner or operator believes a control system malfunction has occurred.

(3) If the owner or operator states that a control system malfunction has occurred, the following information as a minimum is also to be included in the report required under paragraph (e)(1) of this section:

(i) Time and duration of the control system malfunction as determined by continuous monitoring data (if any), or the inspections or monitoring done in accordance with the operating plan required by § 61.272(c).

(ii) Cause of excess emissions.

(Approved by the Office of Management and Budget under control number 2060-0185)

§ 61.276 Recordkeeping.

(a) Each owner or operator with a storage vessel subject to this subpart shall keep copies of all the reports and records required by this subpart for at least 2 years, except as specified in paragraphs (b) and (c)(1) of this section.

(b) Each owner or operator with a storage vessel, including any vessel which has a design storage capacity less than 38 cubic meters (10,000 gallons), shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel is in operation. Each storage vessel with a design capacity of less than 38 cubic meters (10,000 gallons) is subject to no provisions of this subpart other than those required by this paragraph.

(c) The following information pertaining to closed vent system and control devices shall be kept in a readily accessible location.

(1) A copy of the operating plan. This record shall be kept as long as the closed vent system and control device is in use.

(2) A record of the measured values of the parameters monitored in accordance with § 61.272(c)(1)(ii) and § 61.272(c)(2).

(3) A record of the maintenance performed in accordance with § 61.272(c)(1)(iii) of the operating plan, including the following:

(i) The duration of each time the closed vent system and control device does not meet the specifications of § 61.271(c) due to maintenance, including the following:

(A) The first time of day and date the requirements of 61.271(c) were not met at the beginning of maintenance.

(B) The first time of day and date the requirements of § 61.271(c) were met at the conclusion of maintenance.

(C) A continuous record of the liquid level in each storage vessel that the closed vent system and control device receive vapors from during the interval between the times specified by (c)(3)(i)(A) and (c)(3)(i)(B). Pumping records (simultaneous input and output) may be substituted for records of the liquid level.

(Approved by the Office of Management and Budget under control number 2060-0185)

§ 61.277 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: § 61.273.

Subparts Z–AA—[Reserved]

Subpart BB—National Emission Standard for Benzene Emissions from Benzene Transfer Operations

SOURCE: At 55 FR 8341, Mar. 7, 1990, unless otherwise noted.

§ 61.300 Applicability.

(a) The affected facility to which this subpart applies is the total of all loading racks at which benzene is loaded into tank trucks, railcars, or marine vessels at each benzene production facility and each bulk terminal. However, specifically exempted from this regulation are loading racks at which only the following are loaded: Benzene-laden waste (covered under subpart FF of this part), gasoline, crude oil, natural gas liquids, petroleum distillates (e.g., fuel oil, diesel, or kerosene), or benzene-laden liquid from coke by-product recovery plants.

(b) Any affected facility under paragraph (a) of this section which loads only liquid containing less than 70 weight-percent benzene is exempt from the requirements of this subpart, except for the recordkeeping and reporting requirements in § 61.305(i).

(c) Any affected facility under paragraph (a) of this section shall comply with the standards in § 61.302 at each loading rack that is handling a liquid containing 70 weight-percent or more benzene.

(d) Any affected facility under paragraph (a) of this section whose annual benzene loading is less than 1.3 million liters of 70 weight-percent or more benzene is exempt from the requirements of this subpart, except for the recordkeeping and reporting requirements in § 61.305(i).

(e) The owner or operator of an affected facility, as defined in § 61.300(a) that loads a marine vessel shall be in compliance with the provisions of this subpart on and after July 23, 1991. If an affected facility that loads a marine vessel also loads a tank truck or railcar, the marine vessel loading racks shall be in compliance with the provisions of this subpart on and after July 23, 1991, while the tank truck loading racks and the railcar loading racks shall be in compliance as required by § 61.12.

[55 FR 8341, Mar. 7, 1990, as amended at 55 FR 45804, Oct. 31, 1990]

§ 61.301 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, or in subpart A or subpart V of part 61.

Bulk terminal means any facility which receives liquid product containing benzene by pipelines, marine vessels, tank trucks, or railcars, and loads

the product for further distribution into tank trucks, railcars, or marine vessels.

Car-sealed means having a seal that is placed on the device used to change the position of a valve (e.g., from open to closed) such that the position of the valve cannot be changed without breaking the seal and requiring the replacement of the old seal, once broken, with a new seal.

Control device means all equipment used for recovering or oxidizing benzene vapors displaced from the affected facility.

Incinerator means any enclosed combustion device that is used for destroying organic compounds and that does not extract energy in the form of steam or process heat. These devices do not rely on the heating value of the waste gas to sustain efficient combustion. Auxiliary fuel is burned in the device and the heat from the fuel flame heats the waste gas to combustion temperature. Temperature is controlled by controlling combustion air or fuel.

Leak means any instrument reading of 10,000 ppmv or greater using method 21 of 40 CFR part 60, appendix A.

Loading cycle means the time period from the beginning of filling a tank truck, railcar, or marine vessel until flow to the control device ceases, as measured by the flow indicator.

Loading rack means the loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves necessary to fill tank trucks, railcars, or marine vessels.

Marine vessel means any tank ship or tank barge which transports liquid product such as benzene.

Nonvapor tight means any tank truck, railcar, or marine vessel that does not pass the required vapor-tightness test.

Process heater means a device that transfers heat liberated by burning fuel to fluids contained in tubes, except water that is heated to produce steam.

Steam generating unit means any enclosed combustion device that uses fuel energy in the form of steam.

Vapor collection system means any equipment located at the affected facility used for containing benzene vapors displaced during the loading of tank trucks, railcars, or marine vessels. This does not include the vapor collection system that is part of any tank truck, railcar, or marine vessel vapor collection manifold system.

Vapor-tight marine vessel means a marine vessel with a benzene product tank that has been demonstrated within the preceding 12 months to have no leaks. This demonstration shall be made using method 21 of part 60, appendix A, during the last 20 percent of loading and during a period when the vessel is being loaded at its maximum loading rate. A reading of greater than 10,000 ppm as methane shall constitute a leak. As an alternative, a marine vessel owner or operator may use the vapor-tightness test described in § 61.304(f) to demonstrate vapor tightness. A marine vessel operated at negative pressure is assumed to be vapor-tight for the purpose of this standard.

Vapor-tight tank truck or *vapor-tight railcar* means a tank truck or railcar for which it has been demonstrated within the preceding 12 months that its product tank will sustain a pressure change of not more than 750 pascals within 5 minutes after it is pressurized to a minimum of 4,500 pascals. This capability is to be demonstrated using the pressure test procedure specified in method 27 of part 60, appendix A, and a pressure measurement device which has a precision of ±2.5 mm water and which is capable of measuring above the pressure at which the tank truck or railcar is to be tested for vapor tightness.

§ 61.302 Standards.

(a) The owner or operator of an affected facility shall equip each loading rack with a vapor collection system that is:

(1) Designed to collect all benzene vapors displaced from tank trucks, railcars, or marine vessels during loading, and

(2) Designed to prevent any benzene vapors collected at one loading rack from passing through another loading rack to the atmosphere.

(b) The owner or operator of an affected facility shall install a control device and reduce benzene emissions routed to the atmosphere through the control device by 98 weight percent. If a boiler or process heater is used to comply with the percent reduction requirement, then the vent stream shall be introduced into the flame zone of such a device.

(c) The owner or operator of an affected facility shall operate any flare used to comply with paragraph (b) of this section in accordance with the requirements of § 60.18 (b) through (f).

(d) The owner or operator of an affected facility shall limit loading of benzene into vapor-tight tank trucks and vapor-tight railcars using the following procedures:

(1) The owner or operator shall obtain the vapor-tightness documentation described in § 61.305(h) for each tank truck or railcar loaded at the affected facility. The test date in the documentation must be within the preceding 12 months. The vapor-tightness test to be used for tank trucks and railcars is method 27 of part 60, appendix A.

(2) The owner or operator shall cross-check the identification number for each tank truck or railcar to be loaded with the file of vapor-tightness documentation before the corresponding tank truck or railcar is loaded. If no documentation is on file, the owner or operator shall obtain a copy of the information from the tank truck or railcar operator before the tank truck or railcar is loaded.

(3) Alternate procedures to those described in paragraphs (d)(1) and (d)(2) of this section may be used upon application to, and approval by, the Administrator.

(e) The owner or operator of an affected facility shall limit the loading of marine vessels to those vessels that are vapor tight as determined by either paragraph (e)(1), (e)(2), (e)(3), or (e)(4) of this section.

(1) The owner or operator of an affected facility shall ensure that each marine vessel is loaded with the benzene product tank below atmospheric pressure (i.e., at negative pressure). If the pressure is measured at the interface between the shoreside vapor collection pipe and the marine vessel vapor line, the pressure measured according to the procedures in § 61.303(f) must be below atmospheric pressure.

(2) The owner or operator of an affected facility shall use the following procedure to obtain the vapor-tightness documentation described in § 61.305(h). The vapor-tightness test for marine vessels is method 21 of part 60, appendix A, and shall be applied to any potential sources of vapor leaks. A reading of 10,000 ppmv or greater as methane shall constitute a leak.

(i) The owner or operator of an affected facility shall obtain the leak test documentation described in § 61.305(h) for each marine vessel prior to loading, if available. The date of the test listed in the documentation must be within the 12 preceding months.

(ii) If there is no documentation of a successful leak test conducted on the marine vessel in the preceding 12 months, the owner or operator of an affected facility shall require that a leak test of the marine vessel be conducted during the final 20 percent of loading of the marine vessel or shall not load the vessel. The test shall be conducted when the marine vessel is being loaded at the maximum allowable loading rate.

(A) If no leak is detected, the owner or operator of an affected facility shall require that the documentation described in § 61.305(h) is completed prior to departure of the vessel. The owner or operator of the affected facility shall retain a copy of the vapor-tightness documentation on file.

(B) If any leak is detected, the owner or operator of an affected facility shall require that the vapor-tightness failure be documented for the marine vessel owner or operator prior to departure of the vessel. The owner or operator of the affected facility shall retain a copy of the vapor-tightness documentation on file. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without dry-docking the vessel. This equipment will be excluded from future method 21 tests until repairs are effected. Repair of this equipment

shall occur the next time the vessel is dry-docked.

(iii) If the marine vessel has failed its most recent vapor-tightness test as described in § 61.302(c)(2)(ii), the owner or operator of the affected facility shall require that the owner or operator of the nonvapor-tight marine vessel provide documentation that the leaks detected during the previous vapor-tightness test have been repaired, or proof that repair is technically infeasible without dry-docking the vessel. Once the repair documentation has been provided, the owner or operator may load the marine vessel. The owner or operator shall require that the vapor-tightness test described in § 61.302(e)(2)(ii) be conducted during loading, and shall retain a copy of the vapor-tightness documentation on file.

(3) The owner or operator of an affected facility shall obtain a copy of the marine vessel's vapor-tightness documentation described in § 61.305(h) for a test conducted within the preceding 12 months in accordance with § 61.304(f).

(4) Alternate procedures to those described in paragraphs (e)(1), (e)(2) and (e)(3) of this section may be used upon application to, and approval by, the Administrator.

(f) The owner or operator of an affected facility shall limit loading of benzene to tank trucks, railcars, and marine vessels equipped with vapor collection equipment that is compatible with the affected facility's vapor collection system.

(g) The owner or operator of an affected facility shall limit loading of tank trucks, railcars, and marine vessels to tank trucks, railcars, and marine vessels whose collection systems are connected to the affected facility's vapor collection systems.

(h) The owner or operator of an affected facility shall ensure that the vapor collection and benzene loading equipment of tank trucks and railcars shall be designed and operated to prevent gauge pressure in the tank truck or railcar tank from exceeding, during loading, the initial pressure the tank was pressured up to and shown to be vapor tight at during the most recent vapor-tightness test using method 27 of part 60, appendix A. This vapor-tightness test pressure is not to be exceeded when measured by the procedures specified in § 61.304(c).

(i) The owner or operator of an affected facility shall ensure that no pressure-vacuum vent in the affected facility's vapor collection system for tank trucks and railcars shall begin to open at a system pressure less than the maximum pressure at which the tank truck or railcar is operated.

(j) The owner or operator of an affected facility shall ensure that the maximum normal operating pressure of the marine vessel's vapor collection equipment shall not exceed 0.8 times the relief set pressure of the pressure-vacuum vents. This level is not to be exceeded when measured by the procedures specified in § 61.304(d).

(k) The owner or operator of an affected facility shall inspect the vapor collection system and the control device for detectable emissions, and shall repair any leaks detected, in accordance with § 61.242-11 (c) and (f). This inspection of the vapor collection system and control device shall be done during the loading of tank trucks, railcars, or marine vessels.

(l) Vent systems that contain valves that could divert a vent stream from a control device shall have car-sealed opened all valves in the vent system from the emission source to the control device, and car-sealed closed all valves in the vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the control device.

§ 61.303 Monitoring requirements.

(a) Each owner or operator of an affected facility that uses an incinerator to comply with the percent reduction requirement specified under § 61.302(b) shall install, calibrate, maintain, and operate according to manufacturer's specifications a temperature monitoring device equipped with a continuous recorder and having an accuracy of ±1 percent of the combustion temperature being measured expressed in degrees Celsius or ±0.5° C, whichever is greater.

(1) Where an incinerator other than a catalytic incinerator is used, the

owner or operator of the affected facility shall install a temperature monitoring device in the firebox.

(2) Where a catalytic incinerator is used, the owner or operator shall install temperature monitoring devices in the gas stream immediately before and after the catalyst bed.

(b) Each owner or operator of an affected facility that uses a flare to comply with § 61.302(b) shall install, calibrate, maintain, and operate according to manufacturer's specifications a heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light to indicate the presence of a flame during the entire loading cycle.

(c) Each owner or operator of an affected facility that uses a steam generating unit or process heater to comply with § 61.302(b) shall comply with the following requirements. Where a steam generating unit with a design heat input capacity of less than 44 MW is used to comply with § 61.302(b), the owner or operator of an affected facility shall comply with paragraph (c)(1) of this section. Where a steam generating unit or process heater with a design heat input capacity of 44 MW or greater is used to comply with § 61.302(b), the owner or operator of an affected facility shall comply with paragraph (c)(2) of this section.

(1) Install in the firebox, calibrate, maintain, and operate according to manufacturer's specifications a temperature monitoring device equipped with a continuous recorder and having an accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5° C, whichever is greater, for steam generating units or process heaters of less than 44 MW design heat input capacity.

(2) Monitor and record the periods of operation of the steam generating units or process heater if the design heat input capacity of the steam generating unit or process heater is 44 MW or greater. The records must be readily available for inspection.

(d) Each owner or operator of an affected facility that uses a carbon adsorption system to comply with the percent reduction requirement specified under § 61.302(b) shall install, calibrate, maintain, and operate according to manufacturer's specifications a device that continuously indicates and records the concentration or reading of organic compounds in the outlet gas stream of each carbon adsorber bed.

(e) The owner or operator of an affected facility who wishes to demonstrate compliance with the standards specified under § 61.302(b) using control devices other than an incinerator, steam generating unit, process heater, carbon adsorber, or flare shall provide the Administrator with information describing the operation of the control device and the process parameter(s) that would indicate proper operation and maintenance of the device. The Administrator may request further information and will specify appropriate monitoring procedures or requirements.

(f) Each owner or operator of an affected facility complying with § 61.302(e)(1) shall install, calibrate, maintain, and operate a recording pressure measurement device (magnehelic gauge or equivalent device) and an audible and visible alarm system that is activated when the pressure vacuum specified in § 61.302(e)(1) is not attained. The owner or operator shall place the alarm system so that it can be seen and heard where cargo transfer is controlled and on the open deck.

(g) Owners or operators using a vent system that contains valves that could divert a vent stream from a control device used to comply with the provisions of this subpart shall do one or a combination of the following:

(1) Install a flow indicator immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere. The flow indicator shall be capable of recording flow at least once every 15 minutes.

(2) Monitor the valves once a month, checking the position of the valves and the condition of the car seal, and identify all times when the car seals have been broken and the valve position has been changed (*i.e.*, from opened to closed for valves in the vent piping to the control device and from closed to open for valves that allow

the stream to be vented directly or indirectly to the atmosphere).

(Approved by the Office of Management and Budget under control number 2060-0182)

§ 61.304 Test methods and procedures.

(a) The procedures for determining compliance with § 61.302(b) for all control devices other than flares is as follows:

(1) All testing equipment shall be prepared and installed as specified in the appropriate test methods.

(2) The time period for a performance test shall be not less than 6 hours, during which at least 300,000 liters of benzene are loaded. If the throughput criterion is not met during the initial 6 hours, the test may be either continued until the throughput criterion is met, or resumed the next day with at least another 6 complete hours of testing.

(3) For intermittent control devices:

(i) The vapor holder level of the intermittent control device shall be recorded at the start of the performance test. The end of the performance test shall coincide with the time when the vapor holder is at its original level.

(ii) At least two startups and shutdowns of the control device shall occur during the performance test. If this does not occur under an automatically controlled operation, the system shall be manually controlled.

(4) An emission testing interval shall consist of each 5-minute period during the performance test. For each interval:

(i) The reading from each measurement instrument shall be recorded.

(ii) Method 1 or 1A of part 60, appendix A, as appropriate, shall be used for selection of the sampling site,

(iii) The volume exhausted shall be determined using method 2, 2A, 2C, or 2D of part 60, appendix A, as appropriate.

(iv) The average benzene concentration upstream and downstream of the control device in the vent shall be determined using method 25A or method 25B of appendix A of this part, using benzene as the calibration gas. The average benzene concentration shall correspond to the volume measurement by taking into account the sampling system response time.

(5) The mass emitted during each testing interval shall be calculated as follows:

$M_i = FKV_sC$

where:

M_i = Mass of benzene emitted during testing interval i, kg.

V_s = Volume of air-vapor mixture exhausted, m^3 at standard conditions.

C = Benzene concentration (as measured) at the exhaust vent, ppmv.

K = Density, (kg/m^3 benzene), standard conditions.

K = 3.25 for benzene.

F = Conversion factor, (m^3 benzene/m^3 air)(1/ppmv).

$F = 10/^{-6}/$.

s = Standard conditions, 20 °C and 760 mm Hg.

(6) The benzene mass emission rates before and after the control device shall be calculated as follows:

$$E = \frac{\sum_{i=1}^{n} M_i}{T}$$

where:

E = Mass flow rate of benzene emitted, kg/hr.

M_i = Mass of benzene emitted during testing interval i, kg.

T = Total time of all testing intervals, hr.

n = Number of testing intervals.

(7) The percent reduction across the control device shall be calculated as follows:

$$R = \frac{E_b - E_a}{E_b}(100)$$

where:

R = Control efficiency of control device, %.

E_b = Mass flow rate of benzene prior to control device, kg/hr.

E_a = Mass flow rate of benzene after control device, kg/hr.

(b) When a flare is used to comply with § 61.302(b), a performance test according to method 22 of appendix A of this part, shall be performed to determine visible emissions. The observation period shall be at least 2 hours

and shall be conducted according to method 22. Performance testing shall be conducted during at least three complete loading cycles with a separate test run for each loading cycle. The observation period for detecting visible emissions shall encompass each loading cycle. Integrated sampling to measure process vent stream flow rate shall be performed continuously during each loading cycle.

(c) For the purpose of determining compliance with § 61.302(h), the following procedures shall be used:

(1) Calibrate and install a pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), which has a precision of ±2.5 mm H_2O in the range that the tank truck or railcar was initially pressured to during the most recent vapor-tightness test.

(2) Connect the pressure measurement device to a pressure tap in the affected facility's vapor collection system, located as close as possible to the connection with the tank truck or railcar.

(3) During the performance test, record the pressure every 5 minutes while a tank truck or railcar is being loaded, and record the highest instantaneous pressure that occurs during each loading cycle. Every loading rack shall be tested at least once during the performance test.

(4) If more than one loading rack is used simultaneously, then the performance test shall be conducted simultaneously to represent the maximum capacity.

(d) For the purpose of determining compliance with § 61.302(j), the following procedures shall be used:

(1) Calibrate and install a pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to the relief set pressure of the pressure-vacuum vents.

(2) Connect the pressure measurement device to a pressure tap in the affected facility's vapor collection system, located as close as possible to the connection with the marine vessel.

(3) During the performance test, record the pressure every 5 minutes while a marine vessel is being loaded, and record the highest instantaneous pressure that occurs during each loading cycle.

(e) Immediately prior to a performance test required for determination of compliance with § 61.302(b), all potential sources of vapor leakage in the affected facility's vapor collection system equipment shall be inspected for detectable emissions as required in § 61.302(k). The monitoring shall be conducted only while a vapor-tight tank truck, railcar, or marine vessel is being loaded. All identified leaks in the terminal's vapor collection system shall be repaired prior to conducting the performance test.

(f) The following test method shall be used to comply with the marine vessel vapor-tightness requirements of § 61.302(e)(3):

(1) Each benzene product tank shall be pressurized with dry air or inert gas to not less than 1.0 psig and not more than the pressure of the lowest relief valve setting.

(2) Once the pressure is obtained, the dry air or inert gas source shall be shut off.

(3) At the end of one-half hour, the pressure in the benzene product tank and piping shall be measured. The change in pressure shall be calculated using the following formula:

$\Delta P = P_i - P_f$

where:

ΔP = Change in pressure, inches of water.

P_i = Pressure in tank when air/gas source is shut off, inches of water.

P_f = Pressure in tank at the end of one-half hour after air/gas source is shut off, inches of water.

(4) The change in pressure, ΔP, shall be compared to the pressure drop calculated using the following formula:

$\Delta PM = 0.861\ P_{ia}\ L/V$

where:

ΔPM = Maximum allowable pressure change, inches of water.

P_{ia} = Pressure in tank when air/gas source is shut off, pounds per square inch, absolute (psia).

L = Maximum permitted loading rate of vessel, barrels per hour.

V = Total volume of product tank, barrels.

(5) If $\Delta P < \Delta PM$, the vessel is vapor tight.

(6) If $\Delta P > \Delta PM$, the vessel is not vapor tight and the source of the leak

must be identified and repaired prior to retesting.

[55 FR 8341, Mar. 7, 1990; 55 FR 12444, Apr. 3, 1990

§ 61.305 Reporting and recordkeeping.

(a) Each owner or operator of an affected facility subject to the provisions of this subpart shall keep an up-to-date, readily accessible record of the following data measured during each performance test, and also include the following data in the report of the initial performance test required under § 61.13. Where a steam generating unit or process heater with a design heat input capacity of 44 MW or greater is used to comply with § 61.302(b), a report containing performance test data need not be submitted, but a report containing the information in § 61.305(a)(3)(i) is required.

(1) Where an owner or operator subject to the provisions of this subpart is complying with § 61.302(b) through use of an incinerator:

(i) The average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed), measured at least every 2 minutes during a loading cycle if the total time period of the loading cycle is less than 3 hours and every 15 minutes if the total time period of the loading cycle is equal to or greater than 3 hours. The measured temperature shall be averaged over the loading cycle.

(ii) The percent reduction of benzene determined as specified in § 61.304(a) achieved by the incinerator.

(iii) The duration of the loading cycle.

(2) Where an owner or operator subject to the provisions of this subpart is complying with § 61.302 (b) and (c) through use of a smokeless flare or other flare design (i.e., steam-assisted, air-assisted or nonassisted), all visible emission readings, heat content determination, flow rate measurements, maximum permitted velocity calculations, and exit velocity determinations made during the performance test, continuous records of the flare pilot flame monitoring measured continuously during the loading cycle, duration of all loading cycles and records of all loading cycles during which the pilot flame is absent for each vent stream.

(3) Where an owner or operator subject to the provisions of this subpart is complying with § 61.302(b) through the use of a steam generating unit or process heater:

(i) A description of the location at which the vent stream is introduced into the steam generating unit or process heater.

(ii) The average combustion temperature of the steam generating unit or process heater with a design heat input capacity of less than 44 MW measured at least every 2 minutes during a loading cycle if the total time period of the loading cycle is less than 3 hours and every 15 minutes if the total time period of the loading cycle is equal to or greater than 3 hours. The measured temperature shall be averaged over the loading cycle.

(iii) The duration of the loading cycle.

(4) Where an owner or operator subject to the provisions of this subpart is complying with § 61.302(b) through the use of a carbon adsorption system, the control efficiency, R, of the carbon adsorption system, and all supporting performance test data and calculations used to determine that value.

(5) Each owner or operator subject to the provisions of this subpart shall submit with the initial performance test an engineering report describing in detail the vent system used to vent each affected vent stream to a control device. This report shall include all valves and vent pipes that could vent the stream to the atmosphere, thereby bypassing the control device, and identify which valves are car-sealed opened and which valves are car-sealed closed.

(b) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under § 61.303 (a), (c), and (d) as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data. Periods of operation during which the parameter boundaries established during the most recent performance tests are exceeded are defined as follows:

(1) For thermal incinerators, all loading cycles during which the average combustion temperature was more than 28°C below the average loading cycle combustion temperature during the most recent performance test at which compliance with § 61.302(b) was determined.

(2) For catalytic incinerators, all loading cycles during which the average temperature of the vent stream immediately before the catalyst bed is more than 28°C below the average temperature of the process vent stream during loading cycles during the most recent performance test at which compliance with § 61.302(b) was determined.

(3) All loading cycles during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test at which compliance with § 61.302(b) was determined for steam generating units or process heaters with a design heat input capacity of less than 44 MW.

(4) For steam generating units or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under § 61.302(b).

(5) For carbon adsorbers, all 3-hour periods of operation during which the average VOC concentration or reading of organics in the exhaust gases is more than 20 percent greater than the average exhaust gas concentration or reading measured by the organics monitoring device during the most recent determination of the recovery efficiency of the carbon adsorber that demonstrated that the facility was in compliance.

(c) If a vent system containing valves that could divert the emission stream away from the control device is used, each owner or operator subject to the provisions of this subpart shall keep for at least 2 years up-to-date, readily accessible continuous records of:

(1) All periods when flow is indicated if flow indicators are installed under § 61.303(g)(1).

(2) All times when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for valves that vent the stream directly or indirectly to the atmosphere bypassing the control device) if valves are monitored under § 60.303(g)(2).

(d) Each owner or operator of an affected facility subject to the provisions of this subpart who uses a steam generating unit or process heater with a design heat input capacity of 44 MW or greater to comply with § 61.302(b) shall keep an up-to-date, readily accessible record of all periods of operation of the steam generating unit or process heater. Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State or Federal regulatory requirements.

(e) Each owner or operator of an affected facility subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the flare pilot flame monitoring specified under § 61.303(b), as well as up-to-date, readily accessible records of any absence of the pilot flame during a loading cycle.

(f) Each owner or operator of an affected facility subject to the requirements of § 61.302 shall submit to the Administrator quarterly reports of the following information. The owner or operator shall submit the initial report within 90 days after the effective date of this subpart or 90 days after startup for a source that has an initial startup date after the effective date.

(1) Periods of operation where there were exceedances of monitored parameters recorded under § 61.305(b).

(2) All periods recorded under § 61.305(c)(1) when the vent stream is diverted from the control device.

(3) All periods recorded under § 61.305(d) when the steam generating unit or process heater was not operating.

(4) All periods recorded under § 61.305(e) in which the pilot flame of the flare was absent.

(5) All times recorded under § 61.305(c)(2) when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed.

(g) The owner or operator of an affected facility shall keep the vapor-tightness documentation required under § 61.302 (d) and (e) on file at the affected facility in a permanent form available for inspection.

(h) The owner or operator of an affected facility shall update the documentation file required under § 61.302 (d) and (e) for each tank truck, railcar, or marine vessel at least once per year to reflect current test results as determined by the appropriate method. The owner or operator shall include, as a minimum, the following information in this documentation:

(1) Test title;

(2) Tank truck, railcar, or marine vessel owner and address;

(3) Tank truck, railcar, or marine vessel identification number;

(4) Testing location;

(5) Date of test;

(6) Tester name and signature;

(7) Witnessing inspector: name, signature, and affiliation; and

(8) Test results, including, for railcars and tank trucks, the initial pressure up to which the tank was pressured at the start of the test.

(i) Each owner or operator of an affected facility complying with § 61.300(b) or § 61.300(d) shall record the following information. The first year after promulgation the owner or operator shall submit a report containing the requested information to the Director of the Emission Standards Division, (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711. After the first year, the owner or operator shall continue to record; however, no reporting is required. The information shall be made available if requested. The information shall include, as a minimum:

(1) The affected facility's name and address;

(2) The weight percent of the benzene loaded;

(3) The type of vessel loaded (i.e., tank truck, railcar, or marine vessel); and

(4) The annual amount of benzene loaded into each type of vessel.

(Approved by the Office of Management Budget under control number 2060-0182)

§ 61.306 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: No restrictions.

Subparts CC–EE—[Reserved]

Subpart FF—National Emission Standard for Benzene Waste Operations

SOURCE: 55 FR 8346, Mar. 7, 1990, unless otherwise noted.

§ 61.340 Applicability.

(a) The provisions of this subpart apply to owners and operators of chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries.

(b) The provisions of this subpart apply to owners and operators of hazardous waste treatment, storage, and disposal facilities that treat, store, or dispose of hazardous waste generated by any facility listed in paragraph (a) of this section. The waste streams at hazardous waste treatment, storage, and disposal facilities subject to the provisions of this subpart are the benzene-containing hazardous waste from any facility listed in paragraph (a) of this section. A hazardous waste treatment, storage, and disposal facility is a facility that must obtain a hazardous waste management permit under subtitle C of the Solid Waste Disposal Act.

(c) At each facility identified in paragraph (a) or (b) of this section, the following waste is exempt from the requirements of this subpart:

(1) Waste in the form of gases or vapors that is emitted from process fluids;

(2) Waste that is contained in a segregated stormwater sewer system; and

(3) Waste that is not discharged from the process unit which generates the waste stream and, instead, is returned directly to the process. Examples of such waste are intermediate and product distillation reflux streams.

[55 FR 8346, Mar. 7, 1990, as amended at 55 FR 37231, Sept. 10, 1990]

§ 61.341 Definitions.

Benzene concentration means the fraction by weight of benzene in a waste as determined in accordance with the procedures specified in § 61.355 of this subpart.

Chemical manufacturing plant means any facility engaged in the production of chemicals by chemical, thermal, physical, or biological processes for use as a product, co-product, by-product, or intermediate including but not limited to industrial organic chemicals, organic pesticide products, pharmaceutical preparations, paint and allied products, fertilizers, and agricultural chemicals. Examples of chemical manufacturing plants include facilities at which process units are operated to produce one or more of the following chemicals: benzenesulfonic acid, benzene, chlorobenzene, cumene, cyclohexane, ethylene, ethylbenzene, hydroquinone, linear alkylbenzene, nitrobenzene, resorcinol, sulfolane, or styrene.

Closed-vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow inducing devices that transport gas or vapor from an emission source to a control device.

Coke by-product recovery plant means any facility designed and operated for the separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery.

Container means any portable waste management unit in which a material is stored, transported, treated, or otherwise handled. Examples of containers are drums, barrels, tank trucks, barges, dumpsters, tank cars, dump trucks, and ships.

Control device means an enclosed combustion device, vapor recovery system, or flare.

Cover means a device or system which is placed on or over a waste placed in a waste management unit so that the entire waste surface area is enclosed and sealed to minimize air emissions. A cover may have openings necessary for operation, inspection, and maintenance of the waste management unit such as access hatches, sampling ports, and gauge wells provided that each opening is closed and sealed when not in use. Example of covers include a fixed roof installed on a tank, a lid installed on a container, and an air-supported enclosure installed over a waste management unit.

External floating roof means a pontoon-type or double-deck type cover with certain rim sealing mechanisms that rests on the liquid surface in a waste management unit with no fixed roof.

Facility means all process units and product tanks that generate waste within a stationary source, and all waste management units that are used for waste treatment, storage, or disposal within a stationary source.

Fixed roof means a cover that is mounted on a waste management unit in a stationary manner and that does not move with fluctuations in liquid level.

Floating roof means a cover with certain rim sealing mechanisms consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and unit wall.

Individual drain system means the system used to convey waste from a process unit, product storage tank, or waste management unit to a waste management unit. The term includes all process drains and common junction boxes, together with their associated sewer lines and other junction boxes, down to the receiving waste management unit.

Internal floating roof means a cover that rests or floats on the liquid sur-

face inside a waste management unit that has a fixed roof.

Liquid-mounted seal means a foam or liquid-filled primary seal mounted in contact with the liquid between the waste management unit wall and the floating roof continuously around the circumference.

Loading means the introduction of waste into a waste management unit but not necessarily to complete capacity (also referred to as filling).

No detectable emissions means less than 500 parts per million by volume (ppmv) above background levels, as measured by a detection instrument reading in accordance with the procedures specified in § 61.355(h) of this subpart.

Oil-water separator means a waste management unit, generally a tank or surface impoundment, used to separate oil from water. An oil-water separator consists of not only the separation unit but also the forebay and other separator basins, skimmers, weirs, grit chambers, sludge hoppers, and bar screens that are located directly after the individual drain system and prior to additional treatment units such as an air flotation unit, clarifier, or biological treatment unit. Examples of an oil-water separator incude an API separator, parallel-plate interceptor, and corrugated-plate interceptor with the associated ancillary equipment.

Petroleum refinery means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through the distillation of petroleum, or through the redistillation, cracking, or reforming of unfinished petroleum derivatives.

Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

Point of waste generation means the location where samples of a waste stream are collected for the purpose of determining the waste flow rate, water content, or benzene concentration in accordance with procedures specified in § 61.355 of this subpart. For a chemical manufacturing plant or petroleum refinery, the point of waste generation is a location after the waste stream exits the process unit component, product tank, or waste management unit generating the waste, and before the waste is exposed to the atmosphere or mixed with other wastes. For a coke-by-product recovery plant subject to and complying with the control requirements of §§ 61.132, 61.133, or 61.134 of this part, the point of waste generation is a location after the waste stream exits the process unit component or waste management unit controlled by that subpart, and before the waste is exposed to the atmosphere. For other facilities subject to this subpart, the point of waste generation is a location after the waste enters the facility, and before the waste is exposed to the atmosphere or placed in a facility waste management unit.

Process unit means equipment assembled and connected by pipes or ducts to produce intermediate or final products. A process unit can be operated independently if supplied with sufficient fuel or raw materials and sufficient product storage facilities.

Process wastewater means water which comes in contact with benzene during manufacturing or processing operations conducted within a process unit. Process wastewater is not organic wastes, process fluids, product tank drawdown, cooling tower blowdown, steam trap condensate, or landfill leachate.

Process wastewater stream means a waste stream that contains only process wastewater.

Product tank means a stationary unit that is designed to contain an accumulation of materials that are fed to or produced by a process unit, and is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

Product tank drawdown means any material or mixture of materials discharged from a product tank for the purpose of removing water or other contaminants from the product tank.

Segregated stormwater sewer system means a drain and collection system designed and operated for the sole purpose of collecting rainfall runoff at a facility, and which is segregated from all other individual drain systems.

Sewer line means a lateral, trunk line, branch line, or other enclosed conduit used to convey waste to a downstream waste management unit.

Slop oil means the floating oil and solids that accumulate on the surface of an oil-water separator.

Surface impoundment means a waste management unit which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or waste containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

Tank means a stationary waste management unit that is designed to contain an accumulation of waste and is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

Treatment process means a stream stripping unit, thin-film evaporation unit, waste incinerator, or any other process used to comply with § 61.348 of this subpart.

Vapor-mounted seal means a foam-filled primary seal mounted continuously around the perimeter of a waste management unit so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the unit wall, the liquid surface, and the floating roof.

Waste means any material resulting from industrial, commercial, mining or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, thermally, or biologically treated prior to being discarded, recycled, or discharged.

Waste management unit means a piece of equipment, structure, or transport mechanism used in handling, storage, treatment, or disposal of waste. Examples of a waste management unit include a tank, surface impoundment, container, oil-water separator, individual drain system, steam stripping unit, thin-film evaporation unit, waste incinerator, and landfill.

Waste stream means the waste generated by a particular process unit, product tank, or waste management unit. The characteristics of the waste stream (e.g., flow rate, benzene concentration, water content) are determined at the point of waste generation. Examples of a waste stream include process wastewater, product tank drawdown, sludge and slop oil removed from waste management units, and landfill leachate.

Wastewater treatment system means any component, piece of equipment, or installation that receives, manages, or treats process wastewater, product tank drawdown, or landfill leachate prior to direct or indirect discharge in accordance with the National Pollutant Discharge Elimination System permit regulations under 40 CFR part 122. These systems typically include individual drain systems, oil-water separators, air flotation units, equalization tanks, and biological treatment units.

Water seal controls means a seal pot, p-leg trap, or other type of trap filled with water that has a design capability to create a water barrier between the sewer line and the atmosphere.

[55 FR 8346, Mar. 7, 1990; 55 FR 12444, Apr. 3, 1990]

§ 61.342 Standards: General.

(a) An owner or operator of a facility at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) shall be exempt from the requirements of paragraphs (b) and (c) of this section. The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste streams at the facility that has a flow-weighted annual average water content greater than 10 percent. The total annual benzene quantity from facility waste shall be determined in accordance with the procedures specified in § 61.355(a) of this subpart.

(b) Each owner or operator of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr as determined in paragraph (a) of this section shall be in compliance with the

requirements of paragraphs (c) through (g) of this section no later than March 7, 1992 or by the initial startup for a new source with an initial startup after this date.

(c) Each owner or operator of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr as determined in paragraph (a) of this section shall manage and treat the facility waste as follows:

(1) For each waste stream, the owner or operator shall:

(i) Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in § 61.348 of this subpart.

(ii) Comply with the standards specified in §§ 61.343 through 61.347 of this subpart for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream in accordance with paragraph (c)(1)(i) of this section.

(iii) Each waste management unit used to manage or treat waste streams that will be recycled to a process shall comply with the standards specified in §§ 61.343 through 61.347 of this subpart. Once the waste stream is recycled to a process, the material is no longer subject to paragraph (c) of this section.

(2) A waste stream is exempt from paragraph (c)(1) of this section provided that the owner or operator demonstrates initially and, thereafter, at least once per year that the flow-weighted annual average benzene concentration for the waste stream is less than 10 ppmw as determined by the procedures specified in § 61.355(c) of this subpart.

(3) A process wastewater stream is exempt from paragraph (c)(1) of this section provided that the owner or operator demonstrates initially and, thereafter, at least once per year that one of the following conditions is met:

(i) The process wastewater stream flow rate is less than 0.02 liters per mintue; or

(ii) The annual waste quantity of the process wastewater stream is less than 10 Mg/yr.

(d) As an alternative to the requirements specified in paragraph (c) of this section, an owner or operator of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr as determined in paragraph (a) of this section may elect to manage and treat the facility waste as follows:

(1) The owner or operator shall manage and treat facility waste other than process wastewater in accordance with the requirements of paragraph (c)(1) of this section.

(2) The owner or operator shall manage and treat process wastewater in accordance with the following requirements:

(i) Process wastewater shall be treated to achieve a total annual benzene quantity from facility process wastewater less than 1 Mg/yr. Total annual benzene from facility process wastewater shall be determined by adding together the annual benzene quantity at the point of waste generation for each untreated process wastewater stream plus the annual benzene quantity exiting the treatment process for each process wastewater stream treated in accordance with the requirements of paragraph (c)(1)(i) of this section.

(ii) Each treated process wastewater stream identified in paragraph (d)(2)(i) of this section shall be managed and treated in accordance with paragraph (c)(1) of this section.

(iii) Each untreated process wastewater stream identified in paragraph (d)(2)(i) of this section is exempt from the requirements of paragraph (c)(1) of this section.

(e) Rather than treating the waste onsite, an owner or operator may elect to comply with paragraph (c)(1)(i) of this section by transferring the waste offsite to another facility where the waste is treated in accordance with the requirements of paragraph (c)(1)(i) of this section. The owner or operator transferring the waste shall:

(1) Comply with the standards specified in §§ 61.343 through 61.347 of this subpart for each waste management unit that receives or manages the waste prior to shipment of the waste offsite.

(2) Include with each offsite waste shipment a notice stating that the waste contains benzene which is required to be managed and treated in accordance with the provisions of this subpart.

(f) Compliance with this subpart will be determined by review of facility records and results from tests and inspections using methods and procedures specified in § 61.355 of this subpart.

(g) Permission to use an alternative means of compliance to meet the requirements of §§ 61.342 through 61.352 of this subpart may be granted by the Administrator as provided in § 61.353 of this subpart.

§ 61.343 Standards: Tanks.

(a) Except as provided in § 61.351 of this subpart, the owner or operator shall meet the following standards for each tank in which the waste stream is placed in accordance with § 61.342(c)(1)(ii) of this subpart. The standards in this section apply to the treatment of the waste stream in a tank, including dewatering.

(1) The owner or operator shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device.

(i) The fixed-roof shall meet the following requirements:

(A) The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in § 61.355(h) of this subpart.

(B) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of § 61.349 of this subpart.

(b) Each cover seal, access door, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur between the cover and tank wall and that access doors and other openings are closed and gasketed properly.

(c) Except as provided in § 61.350 of this subpart, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

[55 FR 8346, Mar. 7, 1990, as amended at 55 FR 18331, May 2, 1990]

§ 61.344 Standards: Surface impoundments.

(a) The owner or operator shall meet the following standards for each surface impoundment in which waste is placed in accordance with § 61.342(c)(1)(ii) of this subpart:

(1) The owner or operator shall install, operate, and maintain on each surface impoundment a cover (e.g., air-supported structure or rigid cover) and closed-vent system that routes all organic vapors vented from the surface impoundment to a control device.

(i) The cover shall meet the following requirements:

(A) The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in § 61.355(h) of this subpart.

(B) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the surface impoundment except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(C) The cover shall be used at all times that waste is placed in the surface impoundment except during removal of treatment residuals in accordance with 40 CFR 268.4 or closure of the surface impoundment in accordance with 40 CFR 264.228. (Note: the

treatment residuals generated by these activities may be subject to the requirements of this part.)

(ii) The closed-vent system and control device shall be designed and operated in accordance with § 61.349 of this subpart.

(b) Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

(c) Except as provided in § 61.350 of this subpart, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

§ 61.345 Standards: Containers.

(a) The owner or operator shall meet the following standards for each container in which waste is placed in accordance with § 61.342(c)(1)(ii) of this subpart:

(1) The owner or operator shall install, operate, and maintain a cover on each container used to handle, transfer, or store waste in accordance with the following requirements:

(i) The cover and all openings (e.g., bungs, hatches, and sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in § 61.355(h) of this subpart.

(ii) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the container except when it is necessary to use the opening for waste loading, removal inspection, or sampling.

(2) Loading a pumpable waste into a container shall be performed by the owner or operator using a submerged fill pipe. The submerged fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe and for venting of the container to prevent physical damage or permanent deformation of the container or cover.

(3) Treatment of a waste in a container, including aeration, thermal or other treatment, shall be performed by the owner or operator in a manner such that whenever it is necessary for the container to be open while the waste is being treated, the container is located under a cover (e.g., enclosure) with a closed-vent system that routes all organic vapors vented from the container to a control device.

(i) The cover and all openings (e.g., doors, hatches) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in § 61.355(h) of this subpart.

(ii) The closed-vent system and control device shall be designed and operated in accordance with § 61.349 of this subpart.

(b) Each cover and all openings shall be visually inspected initially and quarterly thereafter to ensure that they are closed and gasketed properly.

(c) Except as provided in § 61.350 of this subpart, when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

§ 61.346 Standards: Individual drain systems.

(a) Except as provided in paragraph (b) of this section, the owner or operator shall meet the following standards for each individual drain system in which waste is placed in accordance with § 61.342(c)(1)(ii) of this subpart:

(1) The owner or operator shall install, operate, and maintain on each drain system opening a cover and closed-vent system that routes all organic vapors vented from the drain system to a control device.

(i) The cover shall meet the following requirements:

(A) The cover and all openings (e.g., access hatches, sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in § 61.355(h) of this subpart.

(B) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the drain system except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(ii) The closed-vent system and control device shall be designed and operated in accordance with § 61.349 of this subpart.

(2) Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

(3) Except as provided in § 61.350 of this subpart, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

(b) As an alternative to complying with paragraph (a) of this section, an owner or operator may elect to comply with the following requirements:

(1) Each drain shall be equipped with water seal controls or a tightly sealed cap or plug.

(2) Each junction box shall be equipped with a cover and may have a vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.

(i) Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

(ii) One of the following methods shall be used to control emissions from the junction box vent pipe to the atmosphere:

(A) Equip the junction box with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation. An example of such a system includes use of water seal controls on the junction box. A flow indicator shall be installed, operated, and maintained on each junction box vent pipe to ensure that organic vapors are not vented from the junction box to the atmosphere during normal operation.

(B) Connect the junction box vent pipe to a closed-vent system and control device in accordance with § 61.349 of this subpart.

(3) Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

(4) Equipment installed in accordance with paragraphs (b)(1), (b)(2), or (b)(3) of this section shall be inspected as follows:

(i) Each drain using water seal controls shall be checked by visual or physical inspection initially and thereafter quarterly for indications of low water levels or other conditions that would reduce the effectiveness of water seal controls.

(ii) Each drain using a tightly sealed cap or plug shall be visually inspected initially and thereafter quarterly to ensure caps or plugs are in place and properly installed.

(iii) Each junction box shall be visually inspected initially and thereafter quarterly to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

(iv) The unburied portion of each sewer line shall be visually inspected initially and thereafter quarterly for indication of cracks, gaps, or other problems that could result in benzene emissions.

(5) Except as provided in § 61.350 of this subpart, when a broken seal, gap, crack or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

[55 FR 8346, Mar. 7, 1990, as amended at 55 FR 37231, Sept. 10, 1990]

§ 61.347 Standards: Oil-water separators.

(a) Except as provided in § 61.352 of this subpart, the owner or operator

shall meet the following standards for each oil-water separator in which waste is placed in accordance with § 61.342(c)(1)(ii) of this subpart:

(1) The owner or operator shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device.

(i) The fixed-roof shall meet the following requirements:

(A) The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in § 61.355(h) of this subpart.

(B) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the oil-water separator except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of § 61.349 of this subpart.

(b) Each cover seal, access hatch; and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur between the cover and oil-water separator wall and that access hatches and other openings are closed and gasketed properly.

(c) Except as provided in § 61.350 of this subpart, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

§ 61.348 Standards: Treatment processes.

(a) Except as provided in paragraph (a)(5) of this section, the owner or operator shall treat the waste stream in accordance with the following requirements:

(1) The owner or operator shall design, install, operate, and maintain a treatment process that either:

(i) Removes benzene from the waste stream to a level less than 10 parts per million by weight (ppmw) on a flow-weighted annual average basis,

(ii) Removes benzene from the waste stream by 99 percent or more on a mass basis, or

(iii) Destroys benzene in the waste stream by incinerating the waste in a combustion unit that achieves a destruction efficiency of 99 percent or greater for benzene.

(2) Each treatment process complying with paragraphs (a)(1)(i) or (a)(1)(ii) of this section shall be designed and operated in accordance with the appropriate waste management unit standards specified in §§ 61.343 through 61.347 of this subpart. For example, if a treatment process is a tank, then the owner or operator shall comply with § 61.343 of this subpart.

(3) For the purpose of complying with the requirements specified in paragraph (a)(1)(i) of this section, the intentional or unintentional reduction in the benzene concentration of a waste stream by dilution of the waste stream with other wastes or materials is not allowed.

(4) An owner or operator may aggregate or mix together individual waste streams to create a combined waste stream for the purpose of facilitating treatment of waste to comply with the requirements of paragraph (a)(1) of this section except as provided in paragraph (a)(5) of this section.

(5) If an owner or operator aggregates or mixes any combination of process wastewater, product tank drawdown, or landfill leachate subject to § 61.342(c)(1) of this subpart together with other waste streams to create a combined waste stream for the purpose of facilitating management or treatment of waste in a wastewater treatment system, then the wastewater treatment system shall be operated in accordance with paragraph (b) of this section.

(b) The owner or operator that aggregates or mixes individual waste streams as defined in paragraph (a)(5) of this section for management and

treatment in a wastewater treatment system shall comply with the following requirements:

(1) The owner or operator shall design and operate each waste management unit that comprises the wastewater treatment system in accordance with the appropriate standards specified in §§ 61.343 through 61.347 of this subpart.

(2) The provisions of paragraph (b)(1) of this section do not apply to any waste management unit that the owner or operator demonstrates to meet the following conditions initially and, thereafter, at least once per year:

(i) The benzene content of each waste stream entering the waste management unit is less than 10 ppmw on a flow-weighted annual average basis as determined by the procedures specified in § 61.355(c) of this subpart; and

(ii) The total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units comprising the facility wastewater treatment systems is less than 1 Mg/yr. For this determination, total annual benzene quantity shall be calculated as follows:

(A) The total annual benzene quantity shall be calculated as the sum of the individual benzene quantities determined at each location where a waste stream first enters an exempt waste management unit. The benzene quantity discharged from an exempt waste management unit shall not be included in this calculation.

(B) The annual benzene quantity in a waste stream managed or treated in an enhanced biodegradation unit shall not be included in the calculation of the total annual benzene quantity, if the enhanced biodegradation unit is the first exempt unit in which the waste is managed or treated. A unit shall be considered enhanced biodegradation if it is a suspended-growth process that generates biomass, uses recycled biomass, and periodically removes biomass from the process. An enhanced biodegradation unit typically operates at a food-to-microorganism ratio in the range of 0.05 to 1.0 kg of biological oxygen demand per kg of biomass per day, a mixed liquor suspended solids ratio in the range of 1 to 8 grams per liter, and a residence time in the range of 3 to 36 hours.

(c) The owner and operator shall demonstrate that each treatment process or wastewater treatment system unit, except as provided in paragraph (d) of this section, achieves the appropriate conditions specified in paragraphs (a) or (b) of this section in accordance with the following requirements:

(1) Engineering calculations in accordance with requirements specified in § 61.356(e) of this subpart; or

(2) Performance tests conducted using the test methods and procedures that meet the requirements specified in § 61.355 of this subpart.

(d) A treatment process or waste stream is in compliance with the requirements of this subpart and exempt from the requirements of paragraph (c) of this section provided that the owner or operator documents that the treatment process or waste stream is in compliance with other regulatory requirements as follows:

(1) The treatment process is a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O;

(2) The treatment process is an industrial furnace or boiler burning hazardous waste for energy recovery for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart D;

(3) The waste stream is treated by a means or to a level that meets benzene-specific treatment standards in accordance with the Land Disposal Restrictions under 40 CFR part 268, and the treatment process is designed and operated with a closed-vent system and control device meeting the requirements of § 61.349 of this subpart;

(4) The waste stream is treated by a means or to a level that meets benzene-specific effluent limitations or performance standards in accordance with the Effluent Guidelines and Standards under 40 CFR parts 401–464, and the treatment process is designed and operated with a closed-vent

system and control device meeting the requirements of § 61.349 of this subpart; or

(5) The waste stream is discharged to an underground injection well for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 122.

(e) If the treatment process or wastewater treatment system unit has any openings (e.g., access doors, hatches, etc.), all such openings shall be sealed (e.g., gasketed, latched, etc.) and kept closed at all times when waste is being treated, except during inspection and maintenance.

(f) Each seal, access door, and all other openings shall be checked by visual inspections initially and quarterly thereafter to ensure that no cracks or gaps occur and that openings are closed and gasketed properly.

(g) Except as provided in § 61.350 of this subpart, when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

(h) Except for treatment processes complying with paragraph (d) of this section, the Administrator may request at any time an owner or operator demonstrate that a treatment process or wastewater treatment system unit meets the applicable requirements specified in paragraphs (a) or (b) of this section by conducting a performance test using the test methods and procedures as required in § 61.355 of this subpart.

(i) The owner or operator of a treatment process or wastewater treatment system unit that is used to comply with the provisions of this section shall monitor the unit in accordance with the applicable requirements in § 61.354 of this subpart.

[55 FR 8346, Mar. 7, 1990, as amended at 55 FR 37231, Sept. 10, 1990]

§ 61.349 Standards: Closed-vent systems and control devices.

(a) For each closed-vent system and control device used to comply with standards in accordance with §§ 61.343 through 61.348 of this subpart, the owner or operator shall properly design, install, operate, and maintain the closed-vent system and control device in accordance with the following requirements:

(1) The closed-vent system shall:

(i) Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in § 61.355(h) of this subpart.

(ii) A flow indicator shall be installed on each vent stream to the control device to ensure that the vapors are being routed to the device. The flow indicator shall be installed in the vent stream at the nearest feasible point to the control device inlet but before being combined with other vent streams.

(iii) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(2) The control device shall be designed and operated in accordance with the following conditions:

(i) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall meet one of the following conditions:

(A) Reduce the organic emissions vented to it by 95 weight percent or greater;

(B) Achieve a total organic compound concentration of 20 ppmv (as compound by Method 18) on a dry basis corrected to 3 percent oxygen; or

(C) Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760°C. If a boiler or process heater issued as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(ii) A vapor recovery system (e.g., carbon absorption system or condenser) shall recover the organic emissions vented to it with an efficiency of 95 weight percent or greater.

(iii) A flare shall comply with the requirements of 40 CFR 60.18.

(b) Each closed-vent system and control device used to comply with this subpart shall be operated at all times when waste is placed in the waste management unit vented to the control device except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.

(c) An owner and operator shall demonstrate that each control device, except for a flare, achieves the appropriate conditions specified in paragraph (a)(2) of this section by using one of the following methods:

(i) Engineering calculations in accordance with requirements specified in § 61.356(f) of this subpart; or

(ii) Performance tests conducted using the test methods and procedures that meet the requirements specified in § 61.355 of this subpart.

(d) An owner or operator shall demonstrate compliance of each flare in accordance with paragraph (a)(2)(iii) of this section.

(e) The Administrator may request at any time an owner or operator demonstrate that a control device meets the applicable conditions specified in paragraph (a)(2) of this section by conducting a performance test using the test methods and procedures as required in § 61.355 of this subpart.

(f) Each closed-vent system and control device shall be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visable defects such as holes in ductwork or piping and loose connections.

(g) Except as provided in § 61.350 of this subpart, if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

(h) The owner or operator of a control device that is used to comply with the provisions of this section shall monitor the control device in accordance with § 61.354(c) of this subpart.

[55 FR 8346, Mar. 7, 1990; 55 FR 12444, Apr. 3, 1990, as amended at 55 FR 37231, Sept. 10, 1990]

§ 61.350 Standards: Delay of repair.

(a) Delay of repair of facilities or units that are subject to the provisions of this subpart will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

(b) Repair of such equipment shall occur before the end of the next facility or unit shutdown.

§ 61.351 Alternative standards for tanks.

(a) As an alternative to the standards for tanks specified in § 61.343 of this subpart, an owner or operator may elect to comply with one of the following:

(1) A fixed roof and internal floating roof meeting the requirements in 40 CFR 60.112b(a)(1);

(2) An external floating roof meeting the requirements of 40 CFR 60.112b (a)(2); or

(3) An alternative means of emission limitation as described in 40 CFR 60.114b.

(b) If an owner or operator elects to comply with the provisions of this section, then the owner or operator is exempt from the provisions of § 61.343 of this subpart applicable to the same facilities.

[55 FR 8346, Mar. 7, 1990, as amended at 55 FR 37231, Sept. 10, 1990]

§ 61.352 Alternative standards for oil-water separators.

(a) As an alternative to the standards for oil-water separators specified in § 61.347 of this subpart, an owner or operator may elect to comply with one of the following:

(1) A floating roof meeting the requirements in 40 CFR 60.693-2(a); or

(2) An alternative means of emission limitation as described in 40 CFR 60.694.

(b) For portions of the oil-water separator where it is infeasible to construct and operate a floating roof, such as over the weir mechanism, a fixed roof vented to a vapor control device that meets the requirements in §§ 61.347 and 61.349 of this subpart shall be installed and operated.

(c) Except as provided in paragraph (b) of this section, if an owner or operator elects to comply with the provi-

sions of this section, then the owner or operator is exempt from the provisions in § 61.347 of this subpart applicable to the same facilities.

§ 61.353 Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in benzene emissions at least equivalent to the reduction in benzene emissions achieved by the applicable requirements in §§ 61.342 through 61.349 of this subpart, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative means for purposes of compliance with that requirement. The notice may condition the permission on requirements related to the operation and maintenance of the alternative means.

(b) Any notice under paragraph (a) of this section shall be published only after public notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions.

§ 61.354 Monitoring of operations.

(a) Except for a treatment process or waste stream complying with § 61.348(d), the owner or operator shall monitor each treatment process or wastewater treatment system unit to ensure the unit is properly operated and maintained by one of the following monitoring procedures:

(1) Measure the benzene concentration of the waste stream exiting the treatment process complying with paragraph (a)(1)(i) of this section or the wastewater stream exiting the wastewater treatment unit complying with paragraph (b) of this section at least once per month by collecting and analyzing one or more samples using the procedures specified in § 61.355(c)(2) of this subpart.

(2) Install, calibrate, operate, and maintain according to manufacturer's specifications equipment to continuously monitor and record a process parameter (or parameters) for the treatment process or wastewater treatment system unit that indicates proper system operation. The owner or operator shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the unit is operating properly.

(b) If an owner or operator complies with the requirements of § 61.348(b) of this subpart, then the owner or operator shall install, calibrate, operate, and maintain according to manufacturer's specifications equipment to continuously monitor and record the flow rate of each wastewater stream exiting the wastewater treatment system.

(c) An owner or operator subject to the requirements in § 61.349 of this subpart shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the control device operation as specified in the following paragraphs, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator. The owner or operator shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the control device is operating properly.

(1) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(2) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations, and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(3) For a flare, a monitoring device in accordance with 40 CFR 60.18(f)(2) equipped with a continuous recorder.

(4) For a boiler or process heater having a design heat input capacity less than 44 megawatts (MW), a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(5) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.

(6) For a condenser, either: (i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or (ii) A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations, and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed at a location in the exhaust stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser.

(7) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

(i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed; or (ii) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

(8) For a vapor recovery system other than a condenser or carbon adsorption system, a monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the control device.

(d) For a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device (e.g., a carbon canister), the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, an owner or operator may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system.

(e) An alternative operation or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

§ 61.355 Test methods, procedures, and compliance provisions.

(a) An owner or operator shall determine the total annual benzene quantity from facility waste by the following procedure:

(1) For each waste stream subject to this subpart having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, the owner or operator shall:

(i) Determine the annual waste quantity for each waste stream at the point of waste generation using the procedures specified in paragraph (b) of this section.

(ii) Determine the flow-weighted annual average benzene concentration for each waste stream at the point of waste generation using the procedures

specified in paragraph (c) of this section.

(iii) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.

(2) Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream.

(3) If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr, then the owner or operator shall comply with the requirements of § 61.342(c) or (d) of this subpart.

(4) If the total annual benzene quantity from facility waste is less than 10 Mg/yr but is equal to or greater than 1 Mg/yr, then the owner or operator shall:

(i) Comply with the recordkeeping requirements of § 61.356 and reporting requirements of § 61.357 of this subpart; and

(ii) Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr or more.

(5) If the total annual benzene quantity from facility waste is less than 1 Mg/yr, then the owner or operator shall:

(i) Comply with the recordkeeping requirements of § 61.356 and reporting requirements of § 61.357 of this subpart; and

(ii) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr or more.

(b) An owner or operator shall determine the annual waste quantity for each waste stream by one of the following methods:

(1) Selecting the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;

(2) Using the maximum design capacity of the waste management unit; or

(3) Measurements that are representative of maximum waste generation rates.

(c) An owner or operator shall determine the flow-weighted annual average benzene concentration for each waste stream by one of the following methods:

(1) *Knowledge of the waste.* The owner or operator shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the owner or operator shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream.

(2) Measurements of the benzene concentration in the waste stream in accordance with the following procedures:

(i) Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.

(ii) For waste in enclosed pipes, the following procedures shall be used:

(A) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.

(B) A static mixer shall be installed in the process line or in a by-pass line unless the owner or operator demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.

(C) The sampling tap shall be located within two pipe diameters of the static mixer outlet.

(D) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.

(E) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.

(F) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10°C.

(G) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.

(H) The sample containers shall immediately be cooled and maintained at a temperature below 10°C for transfer to the laboratory.

(iii) When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.

(iv) Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(A) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of this part);

(B) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of this part);

(C) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of this part);

(D) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of this part);

(E) Method 602, Purgeable Aromatics, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or

(F) Method 624, Purgeables, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.

(v) The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

$$\bar{C} = \frac{1}{Q_t} \times \sum_{i=1}^{n} (Q_i)(C_i)$$

Where:

$\bar{C}$ = Flow-weighted annual average benzene concentration for waste stream, ppmw.

Q_t = Total annual waste quantity for waste stream, kg/yr.

n = Number of waste samples (at least 3).

Q_i = Annual waste quantity for waste stream represented by C_i, kg/yr.

C_i = Measured concentration of benzene in waste sample i, ppmw.

(d) An owner or operator using performance tests to demonstrate compliance of a treatment process with § 61.348(a)(1)(i) of this subpart shall measure the flow-weighted annual average benzene concentration of the waste stream exiting the treatment process by collecting and analyzing a minimum of three representative samples of the waste stream using the procedure in paragraph (c)(2) of this section. The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction

shall not constitute representative conditions for the purpose of a test. The owner or operator shall record all process information as is necessary to document the operating conditions during the test.

(e) An owner or operator using performance tests to demonstrate compliance of a treatment process with § 61.348(a)(1)(ii) of this subpart shall determine the percent reduction of benzene in the waste stream on a mass basis by the following procedure:

(1) The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The owner or operator shall record all process information as is necessary to document the operating conditions during the test.

(2) All testing equipment shall be prepared and installed as specified in the appropriate test methods.

(3) The mass flow rate of benzene entering the treatment process (E_b) shall be determined by computing the product of the flow rate of the waste stream entering the treatment process, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical procedures specified in paragraph (c) of this section. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene entering the treatment process is calculated as follows:

$$E_b = \frac{K}{n \times 10^6} \left(\sum_{i=1}^{n} V_i C_i \right)$$

Where:

E_b = Mass flow rate of benzene entering the treatment process, kg/hour.

K = Density of the waste stream, kg/m³.

V_i = Average volume flow rate of waste entering the treatment process during each run i, m³/hour.

C_i = Average concentration of benzene in the waste stream entering the treatment process during each run i, ppmw.

n = Number of runs.

(4) The mass flow rate of benzene exiting the treatment process (E_a) shall be determined by computing the product of the flow rate of the waste stream exiting the treatment process, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical procedures specified in paragraph (c) of this section. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over the same 3-hour period at which the mass flow rate of benzene entering the treatment process is determined. The mass flow rate of benzene exiting the treatment process is calculated as follows:

$$E_a = \frac{K}{n \times 10^6} \left(\sum_{i=1}^{n} V_i C_i \right)$$

Where:

E_a = Mass flow rate of benzene exiting the treatment process, kg/hour.

K = Density of the waste stream, kg/m³.

V_i = Average volume flow rate of waste exiting the treatment process during each run i, m³/hour.

C_i = Average concentration of benzene in the waste stream exiting the treatment process during each run i, ppmw.

n = Number of runs.

(5) The percent reduction across the treatment process shall be calculated as follows:

$$R = \frac{E_b - E_a}{E_b} \times 100$$

Where:

R = Control efficiency of the treatment process, percent.

E_b = Mass flow rate of benzene entering the treatment process, kg/hour.

E_a = Mass flow rate of benzene exiting the treatment process, kg/hour.

(f) An owner or operator using performance tests to demonstrate compliance of a treatment process with § 61.348(a)(1)(iii) of this subpart shall determine the benzene destruction efficiency for the combustion unit by the following procedure:

(1) The test shall be conducted under conditions that exist when the combustion unit is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The owner or operator shall record all process information necessary to document the operating conditions during the test.

(2) All testing equipment shall be prepared and installed as specified in the appropriate test methods.

(3) The mass flow rate of benzene entering the combustion unit shall be determined by computing the product of the flow rate of the waste stream entering the combustion unit, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling procedures in paragraph (c) of this section. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene into the combustion unit is calculated as follows:

$$E_b = \frac{K}{n \times 10^6} \left(\sum_{i=1}^{n} V_i C_i \right)$$

Where:

E_b = Mass flow rate of benzene into the combustion unit, kg/hour.

K = Density of the waste stream, kg/m³.

V_i = Average volume flow rate of waste entering the combustion unit during each run i, m³/hour.

C_i = Average concentration of benzene in the waste stream entering the combustion unit during each run i, ppmw.

n = Number of runs.

(4) The mass flow rate of benzene exiting the combustion unit exhaust stack shall be determined as follows:

(i) The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected and be the same time period at which the mass flow rate of benzene entering the treatment process is determined. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample and each 1-hour period shall correspond to the periods when the waste feed is sampled.

(ii) A run shall consist of a 1-hour period during the test. For each run:

(A) The reading from each measurement shall be recorded;

(B) The volume exhausted shall be determined using method 2, 2A, 2C, or

2D from appendix A of 40 CFR part 60, as appropriate.

(C) The average benzene concentration in the exhaust downstream of the combustion unit shall be determined using method 18 from appendix A of 40 CFR part 60.

(iii) The mass of benzene emitted during each run shall be calculated as follows:

$M_i = KVC(10^{-6})$

Where:

M_i = Mass of benzene emitted during run i, kg.

V = Volume of air-vapor mixture exhausted at standard conditions, m^3.

C = Concentration of benzene measured in the exhaust, ppmv.

K = Conversion factor = 3.24 kg/m^3 for benzene.

(iv) The benzene mass emission rate in the exhaust shall be calculated as follows:

$$E_a = \left(\sum_{i=1}^{n} M_i \right) / T$$

Where:

E_a = Mass flow rate of benzene emitted, kg/hour.

M_i = Mass of benzene emitted during run i, kg.

T = Total time of all runs, hour.

n = Number of runs.

(5) The benzene destruction efficiency for the combustion unit shall be calculated as follows:

$$R = \frac{E_b - E_a}{E_b} \times 100$$

Where:

R = Benzene destruction efficiency for the combustion unit, percent.

E_b = Mass flow rate of benzene into the combustion unit, kg/hour.

E_a = Mass flow of benzene from the combustion unit, kg/hour.

(g) An owner or operator using performance tests to demonstrate compliance of a wastewater treatment system unit with § 61.348(b)(1) of this subpart shall measure the flow-weighted annual average benzene concentration of the wastewater stream exiting the unit by collecting and analyzing a minimum of three representative samples of the waste stream using the procedures in paragraph (c)(2) of this section. The test shall be conducted under conditions that exist when the wastewater treatment system is operating at the highest inlet wastewater stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The owner or operator shall record all process information as is necessary to document the operating conditions during the test.

(h) An owner or operator shall test equipment for compliance with no detectable emissions as required in §§ 61.343 through 61.347, and § 61.349 of this subpart in accordance with the following requirements:

(1) Monitoring shall comply with method 21 from appendix A of 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The background level shall be determined as set forth in method 21.

(6) The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in method 21.

(7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

(i) An owner or operator using a performance test to demonstrate compliance of a control device with the organic reduction efficiency requirement specified under § 61.349(a)(2) of this subpart shall use the following procedures:

(1) The test shall be conducted under conditions that exist when the waste management unit vented to the control device is operating at the highest load or capacity level expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The owner or operator shall record all process information necessary to document the operating conditions during the test.

(2) Sampling sites shall be selected using method 1 or 1A from appendix A of 40 CFR part 60, as appropriate.

(3) The mass flow rate of organics entering and exiting the control device shall be determined as follows:

(i) The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected. Samples of the vent stream entering and exiting the control device shall be collected during the same time period. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample.

(ii) A run shall consist of a 1-hour period during the test. For each run:

(A) The reading from each measurement shall be recorded;

(B) The volume exhausted shall be determined using method 2, 2A, 2C, or 2D from appendix A of 40 CFR part 60, as appropriate;

(C) The organic concentration in the vent stream entering and exiting the control shall be determined using method 18 from appendix A of 40 CFR part 60.

(iii) The mass of organics entering and exiting the control device during each run shall be calculated as follows:

$$M_{aj} = K\ V_{aj} \left(\sum_{i=1}^{n} C_{ai} MW_i \right) (10^{-6})$$

$$M_{bj} = K\ V_{bj} \left(\sum_{i=1}^{n} C_{bi} MW_i \right) (10^{-6})$$

Where:

M_{aj} = Mass of organics in the vent stream entering the control device during run j, kg.

M_{bj} = Mass of organics in vent stream exiting the control device during run j, kg.

V_{aj} = Volume of vent stream entering the control device during run j at standards conditions, m^3.

V_{bj} = Volume of vent stream exiting the control device during run j at standards conditions, m^3.

C_{ai} = Organic concentration of compound i measured in the vent stream entering the control device as determined by Method 18, ppm by volume on a dry basis.

C_{bi} = Organic concentration of compound i measured in the vent stream exiting the control device as determined by method 18, ppm by volume on a dry basis.

MW_i = Molecular weight of organic compound i in the vent stream kg/kg-mol.

n = Number of organic compounds in the vent stream.

K = Conversion factor for molar volume = 0.0416 kg-mol/m^3 (at 293°K and 760 mm Hg).

10^{-6} = Conversion from ppm, ppm^{-1}.

(iv) The mass flow rate of organics entering and exiting the control device shall be calculated as follows:

$$E_a = \left(\sum_{j=1}^{n} M_{aj} \right) / T$$

$$E_b = \left(\sum_{j=1}^{n} M_{bj} \right) / T$$

Where:

E_a = Mass flow rate of organics entering the control device, kg/hour.

E_b = Mass flow rate of organics exiting the control device, kg/hour.

M_{aj} = Mass of organics in the vent stream entering the control device during run j, kg.

M_{bj} = Mass of organics in vent stream exiting the control device during run j, kg.

T = Total time of all runs, hour.

n = Number of runs.

(4) The organic reduction efficiency for the control device shall be calculated as follows:

$$R = \frac{E_b - E_a}{E_b} \times 100$$

Where:

R=Total organic reduction efficiency for the control device, percent.

E_b=Mass flow rate of organics entering the control device, kg/hr.

E_a=Mass flow rate of organics exiting the control device, kg/hr.

[55 FR 8346, Mar. 7, 1990; 55 FR 12444, Apr. 3, 1990, as amended at 55 FR 37231, Sept. 10, 1990]

§ 61.356 Recordkeeping requirements.

(a) Each owner or operator of a facility subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.

(b) Each owner or operator shall maintain records that identify each waste stream at the facility subject to this subpart, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart. In addition the owner or operator shall maintain the following records:

(1) For each waste stream not controlled for benzene emissions in accordance with this subpart, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(2) For each process wastewater stream not contolled for benzene emissions in accordance with § 61.342(c)(3) of this subpart, the records shall include all measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters per minute or the annual waste quantity of process wastewater is less than 10 Mg/yr.

(3) For each facility where process wastewater streams are controlled for benzene emissions in accordance with § 61.342(d) of this subpart, the records shall include for each treated process wastewater stream all measurements, calculations, and other documentation used to determine the annual benzene quantity in the process wastewater stream exiting the treatment process.

(4) For each facility where wastewater streams are controlled for benzene emissions in accordance with § 61.348(b)(1)(i) of this subpart, the records shall include all measurements, calculations, and other documentation used to determine the annual benzene quantity in the wastewater streams exiting wastewater treatment systems at the facility.

(c) An owner or operator transferring waste off-site to another facility for treatment in accordance with § 61.342(e) of this subpart shall maintain documentation for each offsite waste shipment that includes the following information: date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.

(d) An owner or operator using control equipment in accordance with § 61.343 through 61.347 of this subpart shall maintain engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment. If a cover is used, then the documentation shall include the following information: cover type, name of company manufacturing or fabricating the cover, manufacturer model number, cover dimensions, materials used to fabricate cover, mechanism used to install cover on the waste management unit and seal the cover perimeter; type, dimensions, and location of each opening; and mechanism used to close and seal each opening. If a control device is used, then the owner or operator shall maintain the control device records required by paragraph (f) of this section.

(e) An owner or operator using a treatment process or wastewater treatment system unit in accordance with § 61.348 of this subpart shall maintain the following records. The documentation shall be retained for the life of the unit.

(1) A statement signed and dated by the owner or operator certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

(2) If engineering calculations are used to determine treatment process or wastewater treatment system unit performance, then the owner or operator shall maintain the complete design analysis for the unit. The design analysis shall include the following information: a list of all information references and sources used in preparing the documentation; design specifications, drawings, schematics, and piping and instrumentation diagrams; and other documentation necessary to demonstrate the unit performance.

(3) If performance tests are used to determine treatment process or wastewater treatment system unit performance, then the owner or operator shall maintain all test information necessary to demonstrate the unit performance.

(i) A description of the unit including the following information: type of treatment process; manufacturer name and model number; and for each waste stream entering and exiting the unit, the waste stream type (e.g., process wastewater, sludge, slurry, etc.), and the design flow rate and benzene content.

(ii) Documentation describing the test protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the unit performance. The description of the test protocol shall include the following information: sampling locations, sampling method, sampling frequency, and analytical procedures used for sample analysis.

(iii) Records of unit operating conditions during each test run including all key process parameters.

(iv) All test results.

(4) If a control device is used, then the owner or operator shall maintain the control device records required by paragraph (f) of this section.

(f) An owner or operator using a closed-vent system and control device in accordance with § 61.349 of this subpart shall maintain the following records. The documentation shall be retained for the life of the control device.

(1) A statement signed and dated by the owner or operator certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.

(2) If engineering calculations are used to determine control device performance in accordance with § 61.349(c) of this subpart, then a design analysis for the control device that includes:

(i) A list of all information references and sources used in preparing the documentation,

(ii) Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:

(A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(B) For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(C) For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent

concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the flame zone.

(D) For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in 40 CFR 60.18.

(E) For a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.

(F) For a carbon adsorption system that regenerates the carbon bed directly on-site in the control device such as a fixed-bed adsorber, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(G) For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(3) If performance tests are used to determine control device performance in accordance with § 61.349(c) of this subpart:

(i) A description of how it is determined that the test is conducted when the waste management unit or treatment process is operating at the highest load or capacity level. This description shall include the estimated or design flow rate and organic content of each vent stream and definition of the acceptable operating ranges of key process and control parameters during the test program.

(ii) A description of the control device including the type of control device, control device manufacturer's name and model number, control device dimensions, capacity, and construction materials.

(iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(iv) All test results.

(g) An owner or operator shall maintain a record for each visual inspection required by §§ 61.343 through 61.347 of this subpart that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

(h) An owner or operator shall maintain a record for each test of no detectable emissions required by §§ 61.343 through 61.347 and § 61.349 of this subpart. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

(i) For each treatment process and wastewater treatment system unit operated to comply with § 61.348, the owner or operator shall maintain documentation that includes the following information regarding the unit operation:

(1) Dates of startup and shutdown of the unit.

(2) If measurements of waste stream benzene concentration are performed in accordance with § 61.354(a)(1) of this subpart, the owner or operator shall maintain records that include date each test is performed and all test results.

(3) If a process parameter is continuously monitored in accordance with § 61.354(a)(2) of this subpart, the owner or operator shall maintain records that include a description of the operating parameter (or parameters) to be monitored to ensure that the unit will be operated in conformance with these standards and the unit's design specifications, and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the unit.

(4) Periods when the unit is not operated as designed.

(j) For each control device, the owner or operator shall maintain documentation that includes the following information regarding the control device operation:

(1) Dates of startup and shutdown of the closed-vent system and control device.

(2) A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the control device.

(3) Periods when the closed-vent system and control device is not operated as designed including periods when a flare pilot does not have a flame.

(4) If a thermal vapor incinerator is used, then the owner or operator shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28 °C below the design combustion zone temperature.

(5) If a catalytic vapor incinerator is used, then the owner or operator shall maintain continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator, records of all 3-hour periods of operation during which the average temperature measured before the catalyst bed is more than 28 °C below the design gas stream temperature, and records of all 3-hour periods of operation during which the average temperature difference across the catalyst bed is less than 80 percent of the design temperature difference.

(6) If a boiler or process heater is used, then the owner or operator shall maintain records of each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone as required by § 61.349(a)(2)(i)(C) of this subpart. For a boiler or process heater having a design heat input capacity less than 44 MW, the owner or operator shall maintain continuous records of the temperature of the gas stream in the combustion zone of the boiler or process heater and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28 °C below the design combustion zone temperature. For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, the owner or operator shall maintain continuous records of the parameter(s) monitored in accordance with the requirements of § 61.354(b)(5) of this subpart.

(7) If a flare is used, then the owner or operator shall maintain continuous

records of the flare pilot flame monitoring and records of all periods during which the pilot flame is absent.

(8) If a condenser is used, then the owner or operator shall maintain continuous records of the parameters selected to be monitored in accordance with § 61.354(c)(6) of this subpart. If concentration of organics in the control device outlet gas stream is monitored, then the owner or operator shall record all 3-hour periods of operation during which the concentration of organics in the exhaust stream is more than 20 percent greater than the design value. If the temperature of the condenser exhaust stream and coolant fluid is monitored, then the owner or operator shall record all 3-hour periods of operation during which the temperature of the condenser exhaust vent stream is more than 6 °C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid existing the condenser is more than 6 °C above the design average coolant fluid temperature at the condenser outlet.

(9) If a carbon adsorber is used, then the owner or operator shall maintain continuous records of the concentration of organics in the control device outlet gas stream. If concentration of organics in the control device outlet gas stream is monitored, then the owner or operator shall record all 3-hour periods of operation during which the concentration of organics in the exhaust stream is more than 20 percent greater than the design value. If the carbon bed regeneration interval is monitored, then the owner or operator shall record each occurrence when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time.

(10) If a carbon adsorber that is not regenerated directly on site in the control device is used, then the owner or operator shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time then the existing carbon in the control device is replaced with fresh carbon.

(11) If an alternative operational or process parameter is monitored for a control device, as allowed in § 61.354(b) of this subpart, then the owner or operator shall maintain records of the continuously monitored parameter, including periods when the device is not operated as designed.

(k) An owner or operator who elects to install and operate the control equipment in § 61.351 of this subpart shall comply with the recordkeeping requirements in 40 CFR 60.115b.

(l) An owner or operator who elects to install and operate the control equipment in § 61.352 of this subpart shall maintain records of the following:

(1) The date, location, and corrective action for each visual inspection required by 40 CFR 60.693-2(a)(5), during which a broken seal, gap, or other problem is identified that could result in benzene emissions.

(2) Results of the seal gap measurements required by 40 CFR 60.693-2(a).

(Approved by the Office of Management and Budget under control number 2060-0183)

[55 FR 8346, Mar. 7, 1990; 55 FR 12444, Apr. 3, 1990; 55 FR 18331, May 2, 1990]

§ 61.357 Reporting requirements.

(a) Each owner or operator subject to this subpart shall submit to the Administrator within 90 days after the effective date of this subpart, or by the initial startup for a new source with an initial startup after the effective date, a report that summarizes the regulatory status of each waste stream subject to this subpart and is determined by the procedures specified in § 61.355(c) of this subpart to contain benzene. The report shall include the following information:

(1) Total annual benzene quantity from facility waste determined in accordance with § 61.355(a) of this subpart.

(2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of this subpart.

(3) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart the following information shall be added to the table:

(i) Whether or not the water content of the waste stream is greater than 10 percent;

(ii) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;

(iii) Annual waste quantity for the waste stream;

(iv) Range of benzene concentrations for the waste stream;

(v) Annual average flow-weighted benzene concentration for the waste stream; and

(vi) Annual benzene quantity for the waste stream.

(4) This information should present the owner's or operator's best estimate of the waste stream characteristics based on existing information and current configuration and operating conditions. An owner or operator only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in § 61.10(b) of this part. The owner or operator should update and resubmit the report to the Administrator when new information becomes available. Instances where resubmittal of the report would be appropriate include cases where results from surveys of waste stream characteristics become available after June 5, 1990, and cases where the process is redesigned such that the facility waste characteristics could be changed before the March 7, 1992, compliance date.

(b) If the total annual benzene quantity from facility waste is less than 1 Mg/yr, then the owner or operator shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr or more.

(c) If the total annual benzene quantity from facility waste is less than 10 Mg/yr but is equal to or greater than 1 Mg/yr, then the owner or operator shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr or more.

(d) If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr, then the owner or operator shall submit to the Administrator the following reports:

(1) Within 2 years after March 7, 1990, or by the date of initial startup for a new source with an initial startup after the effective date, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with this subpart.

(2) Beginning on the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit annually to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section.

(3) If an owner or operator elects to comply with the alternative requirements of § 61.342(d) of this subpart, then he shall include in the report required by paragraph (d)(2) of this section a table presenting the following information for each process wastewater stream:

(i) Whether or not the process wastewater stream is being controlled for benzene emissions in accordance with the requirements of this subpart;

(ii) For each process wastewater stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart, the table shall report the following information for the process wastewater stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(iii) For each process wastewater stream identified as being controlled

for benzene emissions in accordance with the requirements of this subpart, the table shall report the following information for the process wastewater stream as determined at the exit to the treatment process: Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(4) If an owner or operator complies with the requirements of § 61.348(b) of this subpart, then he shall include in the report required by paragraph (d)(2) of this section a table presenting the annual benzene quantity in each wastewater stream exiting wastewater treatment systems at the facility.

(5) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.

(6) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit a report quarterly to the Administrator that includes:

(i) If a treatment process or wastewater treatment system unit is monitored in accordance with § 61.354(a)(1) of this subpart, then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.

(ii) If a treatment process or wastewater treatment system unit is monitored in accordance with § 61.354(a)(2) of this subpart, then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.

(iii) For a control device monitored in accordance with § 61.354(c) of this subpart, each period of operation monitored during which any of the following conditions occur, as applicable to the control device:

(A) Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(B) Each 3-hour period of operation during which the average temperature of the gas stream immediately before the catalyst bed of a catalytic vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design gas stream temperature, and any 3-hour period during which the average temperature difference across the catalyst bed (i.e., the difference between the temperatures of the gas stream immediately before and after the catalyst bed), as measured by the temperature monitoring device, is less than 80 percent of the design temperature difference.

(C) Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a boiler or process heater having a design heat input capacity less than 44 MW, as mesured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(D) Each 3-hour period of operation during which the average concentration of organics in the exhaust gases from a carbon adsorber, condenser, or other vapor recovery system is more than 20 percent greater than the design exhaust gas concentration level.

(E) Each 3-hour period of operation during which the temperature of the condenser exhaust vent stream is more than 6°C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C above the design average coolant fluid temperature at the condenser outlet.

(F) Each period in which the pilot flame of a flare is absent.

(G) Each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone of a boiler or process heater as required by § 61.349(a)(2)(i)(C) of this subpart.

(H) Each occurrence when the carbon in a carbon adsorber system that is regenerated directly on site in the control device is not regenerated at the predetermined carbon bed regeneration time.

(I) Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified in § 61.354(c) of this subpart.

(7) Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit annually to the Administrator a report that summarizes all inspections required by §§ 61.342 through 61.352 of this subpart during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

(e) An owner or operator electing to comply with the provisions of §§ 61.351 or 61.352 of this subpart shall notify the Administrator of the alternative standard selected in the report required under § 61.07 or § 61.10 of this part.

(f) An owner or operator who elects to install and operate the control equipment in § 61.351 of this subpart shall comply with the reporting requirements in 40 CFR 60.115b.

(g) An owner or operator who elects to install and operate the control equipment in § 61.352 of this subpart shall submit initial and quarterly reports that identify all seal gap measurements, as required in 40 CFR 60.693-2(a), that are outside the prescribed limits.

(Approved by the Office of Management and Budget under control number 2060-0183)

[55 FR 8346, Mar. 7 1990; 55 FR 12444, Apr. 3, 1990, as amended at 55 FR 37231, Sept. 10, 1990]

§ 61.358 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Clean Air Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Alternative means of omission limitation under § 61.353 of this subpart will not be delegated to States.

§ 61.359 Stay of effective date.

The effective date for subpart FF is stayed for each chemical manufacturing plant, coke by-product recovery plant, petroleum refinery, and facility at which waste management units are used to treat, store, or dispose of waste generated by chemical manufacturing plants, coke by-product recovery plants, or petroleum refineries, until the date final action is taken with respect to clarifying amendments to subpart FF. The Environmental Protection Agency will publish any such final action in the FEDERAL REGISTER.

[57 FR 8016, Mar. 5, 1992]

H. B. 4220

(By Delegates Gallagher, Douglas, Compton, Huntwork, Burk and Faircloth

(Introduced January 31, 1994; referred to the Committee on the Judiciary)

A BILL to amend and reenact section one, article three, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, relating to authorizing the air pollution control commission to promulgate legislative rules relating to emission standards for hazardous air pollutants.

Be it enacted by the Legislature of West Virginia:

That section one, article three, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, be amended and reenacted to read as follows:

ARTICLE 3. AUTHORIZATION FOR DEPARTMENT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES TO PROMULGATE LEGISLATIVE RULES.

§64-3-1. Air pollution control commission.

(a) The legislative rules filed in the state register on the thirteenth day of August, one thousand nine hundred eighty-two,

relating to the air pollution control commission (series VII), are authorized.

(b) The legislative rules filed in the state register on the thirteenth day of August, one thousand nine hundred eighty-two, relating to the air pollution control commission (series XIX), are authorized.

(c) The legislative rules filed in the state register on the sixteenth day of November, one thousand nine hundred eighty-three, relating to the air pollution control commission (emission standards for hazardous air pollutants) (series XV), are authorized.

(d) The legislative rules filed in the state register on the sixteenth day of November, one thousand nine hundred eighty-three, relating to the air pollution control commission (standards of performance for new stationary sources) (series XVI), are authorized.

(e) The legislative rules filed in the state register on the sixth day of January, one thousand nine hundred eighty-four, relating to the air pollution control commission (to prevent and control air pollution from hazardous waste treatment, storage or disposal facilities)(series XXV), are authorized with the amendments set forth below:

Page 3, §1.06, change the § title from "Enforcement" to "Procedure"; place an "(a)" in front of the existing paragraph and add the following:

"(b) Permit applications filed pursuant to this regulation shall be processed in accordance with the permitting procedures as set forth in code §20-5E of this regulation. Permit procedures set forth in code §16-20 and any other regulation of this commission are not applicable to any permit application filed pursuant to this regulation."

Such rules shall also include a section which shall read as follows:

"The commission shall report to the legislative rule-making review committee as required by that committee, but in no event later than the first day of the regular session of the Legislature in the year one thousand nine hundred eighty-five. Such report shall include information regarding the commission's data gathering efforts, the development of compliance programs, the progress in implementation, and such other matters as the committee may require, pertaining to the regulations hereby authorized."

(f) The legislative rules filed in the state register on the ninth day of January, one thousand nine hundred eighty-four, relating to the air pollution control commission (permits for construction and modification of stationary sources of air pollution for the prevention of significant deterioration) (series XIV), are authorized.

(g) The legislative rules filed in the state register on the thirtieth day of December, one thousand nine hundred

eighty-eight, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the twenty-third day of February, one thousand nine hundred eighty-nine, relating to the air pollution control commission (prevention and control of air pollution from hazardous waste treatment, storage or disposal facilities), are authorized.

(h) The legislative rules filed in the state register on the thirtieth day of December, one thousand nine hundred eighty-eight, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the twenty-third day of February, one thousand nine hundred eighty-nine, relating to the air pollution control commission (good engineering practice as applicable to stack heights), are authorized.

(i) The legislative rules filed in the state register on the thirtieth day of December, one thousand nine hundred eighty-eight, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the twenty-third day of February, one thousand nine hundred eighty-nine, relating to the air pollution control commission (TP-2, compliance test procedures for regulation 2 -- to prevent and control particulate air pollution from combustion of fuel in indirect heat exchangers), are authorized.

(j) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the tenth day of January, one thousand nine hundred ninety, relating to the air pollution control commission (ambient air quality standards for sulfur oxides and particulate matter), are authorized.

(k) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the tenth day of January, one thousand nine hundred ninety, relating to the air pollution control commission (prevention of air pollution emergency episodes), are authorized.

(l) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the tenth day of January, one thousand nine hundred ninety, relating to the air pollution control commission (permits for construction and major modification of major stationary sources of air pollution for the prevention of significant deterioration), are authorized.

(m) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, relating to the air pollution control commission (standards of performance for new stationary sources), are authorized.

(n) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, relating to the air pollution control commission (emission standards for hazardous air pollutants), are authorized.

(o) The legislative rules filed in the state register on the sixteenth day of October, one thousand nine hundred eighty-nine, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the tenth day of January, one thousand nine hundred ninety, relating to the air pollution control commission (prevention and control of emissions of toxic air pollutants), are authorized.

(p) The legislative rules filed in the state register on the tenth day of August, one thousand nine hundred ninety, relating to the air pollution control commission (prevention and control of air pollution from the emission of volatile organic compounds from bulk gasoline terminals), are authorized.

(q) The legislative rules filed in the state register on the thirteenth day of August, one thousand nine hundred ninety, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and

refiled in the state register on the fifteenth day of November, one thousand nine hundred ninety, relating to the air pollution control commission (air quality management fee program), are authorized.

(r) The legislative rules filed in the state register on the tenth day of August, one thousand nine hundred ninety, relating to the air pollution control commission (prevention and control of air pollution from the emission of volatile organic compounds from the storage of petroleum liquids in fixed roof tanks), are authorized.

(s) The legislative rules filed in the state register on the tenth day of August, one thousand nine hundred ninety, relating to the air pollution control commission (prevention and control of air pollution from the emission of volatile organic compounds from petroleum refinery sources), are authorized.

(t) The legislative rules filed in the state register on the eighteenth day of December, one thousand nine hundred ninety-one, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the fifteenth day of December, one thousand nine hundred ninety-two, relating to the air pollution control commission (regulations to prevent and control air pollution from the emission of volatile organic compounds), are authorized with the amendments set forth below:

"On page 26, subsection §45-21-9.2, by striking all of §45-21-9.2 and inserting in lieu thereof a new §45-21-9.2, to read as follows:

"9.2 Registration. -- Within thirty (30) days after May 31, 1993, all persons owning and/or operating a source subject to this regulation and not previously registered shall have registered such source(s) with the chief: **Provided,** That on a case-by-case basis, the chief may extend the 30-day period for the registration of sources to allow sources up to one hundred eighty (180) days after May 31, 1993 to register. The information required for registration shall be determined and provided in the manner specified by the chief. Registration forms shall be requested from the chief by the owner or operator of such source(s)."

And,

"On page fifty-six, subsection §45-21-20.5a by striking out all of line "a" and its equivalent column and inserting in lieu thereof the words "a = Surface area coated per day in terms of square meters divided by 100 or surface area coated per day in terms of square feet divided by 1000."

And,

"On page one hundred eighty-three, subsection §45-21-40.2 after the words "control technology (RACT) in section" by striking the numbers "2.57." and inserting in lieu thereof the numbers "2.60."

(u) The legislative rules filed in the state register on the eighteenth day of September, one thousand nine hundred ninety-two, relating to the air pollution control commission (confidential information), are authorized.

(v) The legislative rules filed in the state register on the eighteenth day of September, one thousand nine hundred ninety-two, relating to the air pollution control commission (serious and minor violations of applicable rules), are authorized.

(w) The legislative rules filed in the state register on the thirty-first day of August, one thousand nine hundred ninety-two, relating to the air pollution control commission (permits for construction and major modification of major stationary sources of air pollution for the prevention of significant deterioration), are authorized with the amendments set forth below:

"On page fourteen, subsection §45.13.6.5 after the word "[W]ithin" by striking the word "twelve(12)" and inserting in lieu thereof the word "six(6)".

(x) The legislative rules filed in the state register on the twenty-eighth day of August, one thousand nine hundred ninety-two, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the nineteenth day of February, one thousand nine hundred ninety-three, relating to

the air pollution control commission (regulations to prevent and control air pollution from the operation of coal preparation plants and coal handling operations), are authorized.

(y) The legislative rules filed in the state register on the thirty-first day of August, one thousand nine hundred ninety-two, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the nineteenth day of February, one thousand nine hundred ninety-three, relating to the air pollution control commission (requirements for pre-construction review, determination of emission offsets for proposed new or modified stationary sources of air pollutants and emission trading for intrasource pollutants), are authorized with amendments set forth below:

"On page twenty-one, subsection §45.19.12.5 after the word "[W]ithin" by striking the word "twelve (12)" and inserting in lieu thereof the word "six(6)".

(z) The legislative rules filed in the state register on the twenty-eighth day of August, one thousand nine hundred ninety-two, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the nineteenth day of February, one thousand nine hundred ninety-three, relating to the air pollution control commission (requiring the submission of emission statements for volatile organic compound emissions and

oxides of nitrogen emissions), are authorized with the amendments set forth below:

"On page four, section 2.27. after the words 'VOC or' by striking out the words '100 tons per year or more of'".

(aa) The legislative rules filed in the state register on the thirteenth day of August, one thousand nine hundred ninety-three, relating to the air pollution control commission (emission standards for hazardous air pollutants) are authorized.

NOTE: The purpose of this bill is to authorize the Air Pollution Control Commission to promulgate legislative rules relating to emission standards for hazardous air pollutants.

Strike-throughs indicate language that would be stricken from the present law, and underscoring indicates new language that would be added.

SENATE BILL NO. 147

(By Senators Anderson, Grubb, Macnaughtan and Minard)

[Introduced January 31, 1994; referred to the Committee on E/M Judiciary]

A BILL to amend and reenact section one, article three, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, relating to authorizing the air pollution control commission to promulgate legislative rules relating to emission standards for hazardous air pollutants.

Be it enacted by the Legislature of West Virginia:

That section one, article three, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, be amended and reenacted to read as follows:

ARTICLE 3. AUTHORIZATION FOR DEPARTMENT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES TO PROMULGATE LEGISLATIVE RULES.

§64-3-1. Air pollution control commission.

(a) The legislative rules filed in the state register on the thirteenth day of August, one thousand nine hundred eighty-two,

relating to the air pollution control commission (series VII), are authorized.

(b) The legislative rules filed in the state register on the thirteenth day of August, one thousand nine hundred eighty-two, relating to the air pollution control commission (series XIX), are authorized.

(c) The legislative rules filed in the state register on the sixteenth day of November, one thousand nine hundred eighty-three, relating to the air pollution control commission (emission standards for hazardous air pollutants) (series XV), are authorized.

(d) The legislative rules filed in the state register on the sixteenth day of November, one thousand nine hundred eighty-three, relating to the air pollution control commission (standards of performance for new stationary sources) (series XVI), are authorized.

(e) The legislative rules filed in the state register on the sixth day of January, one thousand nine hundred eighty-four, relating to the air pollution control commission (to prevent and control air pollution from hazardous waste treatment, storage or disposal facilities)(series XXV), are authorized with the amendments set forth below:

Page 3, §1.06, change the § title from "Enforcement" to "Procedure"; place an "(a)" in front of the existing paragraph and add the following:

"(b) Permit applications filed pursuant to this regulation shall be processed in accordance with the permitting procedures as set forth in code §20-5E of this regulation. Permit procedures set forth in code §16-20 and any other regulation of this commission are not applicable to any permit application filed pursuant to this regulation."

Such rules shall also include a section which shall read as follows:

"The commission shall report to the legislative rule-making review committee as required by that committee, but in no event later than the first day of the regular session of the Legislature in the year one thousand nine hundred eighty-five. Such report shall include information regarding the commission's data gathering efforts, the development of compliance programs, the progress in implementation, and such other matters as the committee may require, pertaining to the regulations hereby authorized."

(f) The legislative rules filed in the state register on the ninth day of January, one thousand nine hundred eighty-four, relating to the air pollution control commission (permits for construction and modification of stationary sources of air pollution for the prevention of significant deterioration) (series XIV), are authorized.

(g) The legislative rules filed in the state register on the thirtieth day of December, one thousand nine hundred

eighty-eight, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the twenty-third day of February, one thousand nine hundred eighty-nine, relating to the air pollution control commission (prevention and control of air pollution from hazardous waste treatment, storage or disposal facilities), are authorized.

(h) The legislative rules filed in the state register on the thirtieth day of December, one thousand nine hundred eighty-eight, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the twenty-third day of February, one thousand nine hundred eighty-nine, relating to the air pollution control commission (good engineering practice as applicable to stack heights), are authorized.

(i) The legislative rules filed in the state register on the thirtieth day of December, one thousand nine hundred eighty-eight, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the twenty-third day of February, one thousand nine hundred eighty-nine, relating to the air pollution control commission (TP-2, compliance test procedures for regulation 2 -- to prevent and control particulate air pollution from combustion of fuel in indirect heat exchangers), are authorized.

(j) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the tenth day of January, one thousand nine hundred ninety, relating to the air pollution control commission (ambient air quality standards for sulfur oxides and particulate matter), are authorized.

(k) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the tenth day of January, one thousand nine hundred ninety, relating to the air pollution control commission (prevention of air pollution emergency episodes), are authorized.

(l) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the tenth day of January, one thousand nine hundred ninety, relating to the air pollution control commission (permits for construction and major modification of major stationary sources of air pollution for the prevention of significant deterioration), are authorized.

(m) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, relating to the air pollution control commission (standards of performance for new stationary sources), are authorized.

(n) The legislative rules filed in the state register on the sixth day of September, one thousand nine hundred eighty-nine, relating to the air pollution control commission (emission standards for hazardous air pollutants), are authorized.

(o) The legislative rules filed in the state register on the sixteenth day of October, one thousand nine hundred eighty-nine, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the tenth day of January, one thousand nine hundred ninety, relating to the air pollution control commission (prevention and control of emissions of toxic air pollutants), are authorized.

(p) The legislative rules filed in the state register on the tenth day of August, one thousand nine hundred ninety, relating to the air pollution control commission (prevention and control of air pollution from the emission of volatile organic compounds from bulk gasoline terminals), are authorized.

(q) The legislative rules filed in the state register on the thirteenth day of August, one thousand nine hundred ninety, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and

refiled in the state register on the fifteenth day of November, one thousand nine hundred ninety, relating to the air pollution control commission (air quality management fee program), are authorized.

(r) The legislative rules filed in the state register on the tenth day of August, one thousand nine hundred ninety, relating to the air pollution control commission (prevention and control of air pollution from the emission of volatile organic compounds from the storage of petroleum liquids in fixed roof tanks), are authorized.

(s) The legislative rules filed in the state register on the tenth day of August, one thousand nine hundred ninety, relating to the air pollution control commission (prevention and control of air pollution from the emission of volatile organic compounds from petroleum refinery sources), are authorized.

(t) The legislative rules filed in the state register on the eighteenth day of December, one thousand nine hundred ninety-one, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the fifteenth day of December, one thousand nine hundred ninety-two, relating to the air pollution control commission (regulations to prevent and control air pollution from the emission of volatile organic compounds), are authorized with the amendments set forth below:

"On page 26, subsection §45-21-9.2, by striking all of §45-21-9.2 and inserting in lieu thereof a new §45-21-9.2, to read as follows:

"9.2 Registration. -- Within thirty (30) days after May 31, 1993, all persons owning and/or operating a source subject to this regulation and not previously registered shall have registered such source(s) with the chief: **Provided,** That on a case-by-case basis, the chief may extend the 30-day period for the registration of sources to allow sources up to one hundred eighty (180) days after May 31, 1993 to register. The information required for registration shall be determined and provided in the manner specified by the chief. Registration forms shall be requested from the chief by the owner or operator of such source(s)."

And,

"On page fifty-six, subsection §45-21-20.5a by striking out all of line "a" and its equivalent column and inserting in lieu thereof the words "a = Surface area coated per day in terms of square meters divided by 100 or surface area coated per day in terms of square feet divided by 1000."

And,

"On page one hundred eighty-three, subsection §45-21-40.2 after the words "control technology (RACT) in section" by striking the numbers "2.57." and inserting in lieu thereof the numbers "2.60."

(u) The legislative rules filed in the state register on the eighteenth day of September, one thousand nine hundred ninety-two, relating to the air pollution control commission (confidential information), are authorized.

(v) The legislative rules filed in the state register on the eighteenth day of September, one thousand nine hundred ninety-two, relating to the air pollution control commission (serious and minor violations of applicable rules), are authorized.

(w) The legislative rules filed in the state register on the thirty-first day of August, one thousand nine hundred ninety-two, relating to the air pollution control commission (permits for construction and major modification of major stationary sources of air pollution for the prevention of significant deterioration), are authorized with the amendments set forth below:

"On page fourteen, subsection §45.13.6.5 after the word "[W]ithin" by striking the word "twelve(12)" and inserting in lieu thereof the word "six(6)".

(x) The legislative rules filed in the state register on the twenty-eighth day of August, one thousand nine hundred ninety-two, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the nineteenth day of February, one thousand nine hundred ninety-three, relating to

the air pollution control commission (regulations to prevent and control air pollution from the operation of coal preparation plants and coal handling operations), are authorized.

(y) The legislative rules filed in the state register on the thirty-first day of August, one thousand nine hundred ninety-two, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the nineteenth day of February, one thousand nine hundred ninety-three, relating to the air pollution control commission (requirements for pre-construction review, determination of emission offsets for proposed new or modified stationary sources of air pollutants and emission trading for intrasource pollutants), are authorized with amendments set forth below:

"On page twenty-one, subsection §45.19.12.5 after the word "[W]ithin" by striking the word "twelve (12)" and inserting in lieu thereof the word "six(6)".

(z) The legislative rules filed in the state register on the twenty-eighth day of August, one thousand nine hundred ninety-two, modified by the air pollution control commission to meet the objections of the legislative rule-making review committee and refiled in the state register on the nineteenth day of February, one thousand nine hundred ninety-three, relating to the air pollution control commission (requiring the submission of emission statements for volatile organic compound emissions and

oxides of nitrogen emissions), are authorized with the amendments set forth below:

"On page four, section 2.27. after the words 'VOC or' by striking out the words '100 tons per year or more of'".

(aa) The legislative rules filed in the state register on the thirteenth day of August, one thousand nine hundred ninety-three, relating to the air pollution control commission (emission standards for hazardous air pollutants) are authorized.

NOTE: The purpose of this bill is to authorize the Air Pollution Control Commission to promulgate legislative rules relating to emission standards for hazardous air pollutants.

Strike-throughs indicate language that would be stricken from the present law, and underscoring indicates new language that would be added.

KEN HECHLER
Secretary of State

MARY P. RATLIFF
Deputy Secretary of State

A. RENEE COE
Deputy Secretary of State

CATHERINE FREROTTE
Executive Assistant

Telephone: (304) 558-6000
Corporations: (304) 558-8000

STATE OF WEST VIRGINIA

SECRETARY OF STATE

Building 1, Suite 157-K
1900 Kanawha Blvd., East
Charleston, WV 25305-0770

WILLIAM H. HARRINGTON
Chief of Staff

JUDY COOPER
Director, Administrative Law

DONALD R. WILKES
Director, Corporations

(Plus all the volunteer help we can get)

FAX: (304) 558-0900

March 18, 1994

G. Dale Farley
Air Pollution Control Comm.
1558 Washington St. East
Charleston, WV 25311-2599

SB 1005 authorizing, **Title 45, Series 15, Emission Standards for Hazardous Air Pollutants,** passed the Legislature on **March 16, 1994 .** It is now awaiting the Governor's signature.

You have sixty (60) days after the Governor signs SB 1005, to final file the legislative rule with the Secretary of State's office. To final file your legislative rule, fill in the blanks on the enclosed form #6, the "Final Filing" form and file the form with our office with a promulgation history of the rule. Authorization for your legislative rule is cited in **SB 1005** section **64-3-1(aa).** The agency may set the effective date of the legislative rule up to ninety (90) days from the date the legislative rule is final filed with the Secretary of State's office. Please have an authorized signature on the bottom line.

***IMPORTANT: IF YOUR AGENCY HAS COMPLETED THE LEGISLATIVE RULE ON A WORD PERFECT OR WORD PERFECT COMPATIBLE COMPUTER SYSTEM THAT USES A 3 1/2" OR 5 1/4" DISK, **YOU MUST SUBMIT A CLEAN COPY, WITH ALL UNDERLINING AND STRIKE-THROUGHS TAKEN OUT,** TO OUR OFFICE WHEN FINAL FILING THE RULE. STATE ON THE DISK THE FORMAT THE RULE IS IN AND THE TITLE IT IS FILED UNDER. THIS WILL MAKE IT QUICKER FOR US TO ENTER YOUR RULES ON THE LEGISLATIVE DATA BASE. REMEMBER THE TEXT OF THE COMPUTER FILED RULE MUST BE IDENTICAL - WORD FOR WORD, COMMA FOR COMMA, **WITH ALL UNDERLINING AND STRIKE-THROUGHS TAKEN OUT,** AS THE HARD COPY AUTHORIZED BY THE LEGISLATURE.

After the final rule is entered into the legislative data base, the rule will be sent to the agency for review and proofing. Following confirmation or corrections, as the case may be, the Secretary of State shall submit to the agency a final version of the rule for their records.

If you have any questions or need any assistance, please do not hesitate to call our office.

Thank You
Administrative Law Division

KEN HECHLER
Secretary of State

MARY P. RATLIFF
Deputy Secretary of State

A. RENEE COE
Deputy Secretary of State

CATHERINE FREROTTE
Executive Assistant

Telephone: (304) 558-6000
Corporations: (304) 558-8000

STATE OF WEST VIRGINIA

SECRETARY OF STATE

Building 1, Suite 157-K
1900 Kanawha Blvd., East
Charleston, WV 25305-0770

WILLIAM H. HARRINGTON
Chief of Staff

JUDY COOPER
Director, Administrative Law

DONALD R. WILKES
Director, Corporations

(Plus all the volunteer help we can get)

FAX: (304) 558-0900

TO: Tammy Mowrer

AGENCY: APCC

FROM: JUDY COOPER, DIRECTOR, ADMINISTRATIVE LAW DIVISION

DATE: July 1, 1994

THE ATTACHED RULE FILED BY YOUR AGENCY HAS BEEN ENTERED INTO OUR COMPUTER SYSTEM. PLEASE REVIEW, PROOF AND RETURN IT WITH ANY CORRECTIONS. IF THERE ARE NO CORRECTIONS, PLEASE SIGN THIS MEMO AND RETURN IT TO THIS OFFICE. YOU WILL BE SENT A FINAL VERSION OF THE RULE FOR YOUR RECORDS.

PLEASE RETURN EITHER THE CORRECTED RULE OR THIS FORM WITHIN TEN (10) WORKING DAYS OF THE DATE YOU RECEIVED THIS REQUEST. CALL IF YOU HAVE ANY QUESTIONS.

SERIES: 15 TITLE: 45 APCC

* THE ATTACHED RULE HAS BEEN REVIEWED AND IS CORRECT.

SIGNED: _____

TITLE OF PERSON SIGNING: _____

DATE: _____

****

X * THE ATTACHED RULE HAS BEEN REVIEWED AND NEEDS CORRECTING. THE CORRECTIONS HAVE BEEN MARKED.

SIGNED: Damra D. Mowrer

TITLE OF PERSON SIGNING: Administrative Secretary

DATE: July 19, 1994

NOTE: IF YOU ARE NOT THE PERSON WHO HANDLES THIS RULE, PLEASE FORWARD TO THE CORRECT PERSON.