WEST VIRGINIA
SECRETARY OF STATE
KEN HECHLER
ADMINISTRATIVE LAW DIVISION

Form #3

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OFFICE OF WEST VIRGINIA SECRETARY OF STATE

NOTICE OF AGENCY APPROVAL OF A PROPOSED RULE AND FILING WITH THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

AGENCY: West Virginia Division of Environmental Protection Office of Air Quality TITLE NUMBER: 45CSR25

CITE AUTHORITY WV Code 22-5-1 et seq.

AMENDMENT TO AN EXISTING RULE: YES X NO ___

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 45CSR25

TITLE OF RULE BEING AMENDED: "To Prevent and Control Air Pollution From Hazardous Waste Treatment, Storage, or Disposal Facilities"

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

TITLE OF RULE BEING PROPOSED: ___

THE ABOVE PROPOSED LEGISLATIVE RULE HAVING GONE TO A PUBLIC HEARING OR A PUBLIC COMMENT PERIOD IS HEREBY APPROVED BY THE PROMULGATING AGENCY FOR FILING WITH THE SECRETARY OF STATE AND THE LEGISLATIVE RULE MAKING REVIEW COMMITTEE FOR THEIR REVIEW.

Roger F Wolf
Authorized Signature

31.20 (with Comments)
22.20 (w/o Comments)

45CSR25

TO PREVENT AND CONTROL AIR POLLUTION FROM HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES

STATEMENT OF CIRCUMSTANCE

Hercules Aerospace Corporation petitioned the West Virginia Division of Environmental Protection, Office of Air Quality, on June 2, 1994, to modify 45CSR6 and 45CSR25. The modification request resolves certain inconsistencies between the two rules and, in addition, sets forth a standard to allow the open burning of spent propellants. The rule being proposed also updates certain sections of the federal counterpart regulations which are referenced in the rule. The modifications also update the rule in accordance with the new Division of Environmental Protection legislation.

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title: 45CSR25 - To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities

Type of Rule: X Legislative _____ Interpretive _____ Procedural

Agency: Office of Air Quality

Address: 1558 Washington Street, East

Charleston, WV 25311-2599

1. Effect of Proposed Rule	Annual		Fiscal Year		
	Increase	Decrease	Current	Next	There-after
Estimated Total Cost	$ -0-	$ -0-	$131,183	$161,000	$169,000
Personal Services	-0-	-0-	112,883	138,000	145,000
Current Expense	-0-	-0-	18,250	21,200	22,000
Repairs and Alterations	-0-	-0-	----	----	----
Equipment	-0-	-0-	-0-	1,800	1,800
Other	-0-	-0-	-0-	-0-	-0-

2. Explanation of above estimates: Estimates based upon work plan program submitted to U. S. EPA reflect in the office's FY'94 and FY'95 appropriation request - 74% of program funding is from Federal Grants. Rule adopted on April 27, 1994 by the Office of Air Quality will incur additional expense to implement U. S. EPA's new combustion strategy requirements incorporated into the Federal rule which is adopted by reference. One additional technical staff position is required.

3. Objectives of these rules: (1) To resolve inconsistencies between 45CSR6 and 45CSR25, which will allow Hercules Aerospace Corporation to open burn spent propellant in accordance with the provision of 40 CFR §265.382; (2) to adopt by reference new or revised federal rules; and (3) to update the rule in accordance with the new DEP legislation.

45CSR25 - To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities

4. Explanation of overall economic impact of proposed rule.

A. Economic impact on state government.

Costs to administer new Federal hazardous waste provisions would increase in the FY'95 to FY'96 period by $30,000 - $38,000 per year. Seventy-four percent (74%) of these costs are funded by a federal grant award. Approximately $7,500 to $9,500 per year in state funds from general and/or special revenue would be required to match the federal grant.

B. Economic impact on political subdivisions; specific industries; specific groups of citizens.

No impact above that resulting from the currently applicable emission standards.

C. Economic impact on citizens/public at large.

Minimal economic impact expected upon citizens at large.

Date: September 12, 1994

Signature of agency head or authorized representative:

G. Dale Farley
Chief, Office of Air Quality

DATE: September 13, 1994

TO: LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

FROM: G. DALE FARLEY
CHIEF, OFFICE OF AIR QUALITY
DIVISION OF ENVIRONMENTAL PROTECTION

LEGISLATIVE RULE TITLE: Series 25 - "To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities"

1. Authorizing statute(s) citation W. Va. Code §§22-5-1 et seq.

2. a. Date filed in State Register with Notice of Hearing:

July 6, 1994

b. What other notice, including advertising, did you give of the hearing?

Class I legal advertisement filed in a newspaper published in each of the Air Quality Control Regions of West Virginia.

Office of Air Quality mailing list.

c. Date of hearing(s): August 9, 1994

d. Attach list of persons who appeared at hearing, comments received, amendments, reasons for amendments.

Attached X No comments received

e. Date you filed in State Register the agency approved proposed Legislative Rule following public hearing: (be exact)

September 13, 1994

f. Name and phone number of agency person to contact for additional information:

G. Dale Farley, Chief

Office of Air Quality (Phone: 558-2275)

3. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a condition precedent to their promulgation:

a. Give the date upon which you filed in the State Register a notice of the time and place of a hearing for the taking of evidence and a general description of the issues to be decided.

N/A

b. Date of hearing: N/A

c. On what date did you file in the State Register the findings and determinations required together with the reasons therefor?

N/A

d. Attach findings and determinations and reasons:

Attached N/A

BUREAU OF ENVIRONMENT
10 McJUNKIN ROAD
NITRO, WV 25143-2506

GASTON CAPERTON
GOVERNOR

DAVID C. CALLAGHAN
COMMISSIONER

September 13, 1994

Ms. Judy Cooper
Director, Administrative Law Division
Secretary of State's Office
Building 1, Suite 157K
Charleston, West Virginia 25305

RE: 45CSR25 - To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities

Dear Ms. Cooper:

This is to advise you that I am giving approval for the filing of the above-captioned rule with your Office and with Legislative Rule-Making Review Committee as an agency-approved rule.

Your cooperation in this regard is very much appreciated. If you have any questions or require additional information, please feel free to contact Roger T. Hall at 759-0515.

Sincerely yours,

David C. Callaghan
Commissioner
Bureau of Environment

DCC;RTH:cc

Attachment

45CSR25

TO PREVENT AND CONTROL AIR POLLUTION FROM HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES

SUMMARY

The purpose of this rule is to establish a program of regulation over the treatment, storage, and disposal of hazardous wastes in order to achieve and maintain such levels of air quality as will protect the public health and safety and the environment from the effects of improper, inadequate, or unsound treatment, storage, or disposal of hazardous wastes.

The proposed rule changes will update references to the counterpart federal regulations, incorporate references to the new Division of Environmental Protection legislation and also resolve inconsistencies between 45CSR6 and 45CSR25 which will allow Hercules Aerospace Corporation to burn spent propellent in accordance with the provisions of 40 CFR §265.382, a rule which applies, in part, to the open burning of military explosives.

Changes are indicated by strikeout and underlines.

45CSR25

TITLE 45
LEGISLATIVE RULES
~~WEST VIRGINIA AIR POLLUTION CONTROL COMMISSION~~
BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY

SERIES 25
TO PREVENT AND CONTROL AIR POLLUTION FROM HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES

§45-25-1. General.

1.1. Scope.

a. The intent and purpose of this rule is to establish a program of regulation over air emissions from the treatment, storage and disposal of hazardous wastes in order to achieve and maintain such levels of air quality as will protect the public health and safety and the environment from the effects of improper, inadequate, or unsound treatment, storage, or disposal of hazardous wastes. Further, all persons engaged in the treatment, storage, or disposal of hazardous waste shall give careful consideration to the effects of the resultant emissions on the air quality or the areas affected by such any hazardous waste or constituent thereof in such quantities as to cause ambient air concentrations which may be injurious to human health or welfare which would interfere with the enjoyment of life or property.

b. The requirements of this rule apply to all owners and operators of hazardous waste treatment, storage, and disposal facilities, including but not limited to:

A. Generators accumulating hazardous waste on-site for periods of less than ninety (90) days;

B. Owners and operators of wastewater treatment units as defined in this rule; and

C. Owners and operators which burn hazardous wastes in incinerator, boilers and industrial furnaces in order to destroy the wastes.

c. Neither compliance with the provisions of this rule nor the absence of specific language to cover particular situations constitutes approval or implies consent or condonement of any emission which is released in any locality in such manner or amount as to cause or contribute to statutory air pollution. Neither does it exempt nor excuse anyone from complying with other applicable laws, ordinances, regulations, or orders of governmental entities having jurisdiction.

ed. This rule is promulgated pursuant to W.Va. Code ~~§20-5E-1~~§§22-18-1, et seq., and ~~§16-20-1~~§§22-5-1, et seq. Recognizing that each Chapter has its own enforcement sections, it is the intent of the ~~Commission~~Director that enforcement shall be implemented in accordance with W. Va. Code ~~§20-5E-1~~§§22-18-1,

et seq., where practicable. ~~The Chief shall retain all powers conferred by W. Va. Code §20-5E-1, et seq.; and §16-20-1, et seq.; and the rules of the Commission or the Division of Environmental Protection and shall exercise such powers as necessary.~~

~~d~~e. Permit applications filed pursuant to this rule shall be processed in accordance with the permitting procedures as set forth in W. Va. Code ~~§20-5E-1~~§§22-18-1, et seq., and this rule.

1.2. Authority -- W.Va. Code ~~16-20-5 and §20-5E-7-(e).~~ §§22-5-1 et seq. and §§22-18-1 et seq.

1.3. Filing Date -- ~~August 13, 1993.~~

1.4. Effective Date -- ~~April 27, 1994.~~

1.5. ~~Former Rule. This legislative rule amends and replaces 45CSR25 "To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities" which became effective July 14, 1989.~~ Incorporation By Reference.

a. This rule incorporates by reference the provisions contained in the Code of Federal Regulations as listed in Table 25-A. Unless otherwise indicated, where reference to a federal regulation or standard appears in this rule, such regulation or standard will for purposes of this rule, be construed as that version which was in effect as of July 1, 1994.

b. This rule also incorporates by reference the provisions contained in 47CSR35, effective July 1, 1994.

1.6. Determination of Stringency -- Federal Counterpart Regulations - The Director has determined that this rule is no more or no less stringent than the federal counterpart rule.

1.7. Constitutional Takings Determination - The Director has determined that this rule will not result in the constitutional taking of real property.

§45-25-2. Definitions.

2.1. "Air Pollutants" means solids, liquids, or gases which, if discharged into the air, may result in statutory air pollution.

2.2. "Air Pollution", 'statutory air pollution' shall have the meaning ascribed to it in W. Va. Code §~~16-20-2~~22-5-2. ~~, as amended.~~

2.3. "Air Pollution Control Equipment" means any equipment used for collecting or converting hazardous waste emissions for the purpose of preventing or reducing emissions of these materials into the open air from hazardous waste treatment, storage, or disposal facilities.

WEST VIRGINIA
SECRETARY OF STATE
KEN HECHLER
ADMINISTRATIVE LAW DIVISION

Form #1

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JUL 6 4 34 PM '94

OFFICE OF WEST VIRGINIA SECRETARY OF STATE

NOTICE OF PUBLIC HEARING ON A PROPOSED RULE

AGENCY: West Virginia Division of Environemntal Protection Office of Air Quality TITLE NUMBER: 45CSR25

RULE TYPE: Legislative ; CITE AUTHORITY W. Va. Code §§22-5-1 et seq.

AMENDMENT TO AN EXISTING RULE: YES X NO ___

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 45CSR25

TITLE OF RULE BEING AMENDED: "To Prevent and Control Air Pollution From Hazardous Waste Treatment, Storage, or Disposal Facilities"

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

TITLE OF RULE BEING PROPOSED: ___

DATE OF PUBLIC HEARING: August 9, 1994 TIME: 9:00 a.m.

LOCATION OF PUBLIC HEARING: Office of Air Quality
1558 Washington Street, East
Charelston, WV 25311

RECEIVED
JUL 07 1994
Legislative Rule Making Review Committee

COMMENTS LIMITED TO: ORAL ___, WRITTEN ___, BOTH X

COMMENTS MAY ALSO BE MAILED TO THE FOLLOWING ADDRESS: Same as Above.

The Department requests that persons wishing to make comments at the hearing make an effort to submit written comments in order to facilitate the review of these comments.

The issues to be heard shall be limited to the proposed rule.

ATTACH A **BRIEF** SUMMARY OF YOUR PROPOSAL

2.4. "BACT", 'Best Available Control Technology' means an emissions limitation based on the maximum degree of reduction for each pollutant which would be emitted from any hazardous waste treatment, storage or disposal facility which the ~~Chief~~Director, on a case-~~to~~by-case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for such facility through application of production processes or available methods, systems, or techniques. If the ~~Chief~~Director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

~~2.5. "Boiler" means an enclosed device using controlled flame combustion which the Chief has determined, on case by case basis, to be a boiler, after considering the standards in subsection 3.1.3 of 47 CSR 35, or which has the following characteristics:~~

~~a. The unit must have physical provisions for recording and exporting thermal energy in the form of steam, heated fluids, or heated gases; and~~

~~b. The unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and primary energy recovery section(s). The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream) and fluidized bed combustion units; and~~

~~c. While in operation, the unit must maintain a thermal energy efficiency of at least sixty percent (60%), calculated in terms of the recovered energy compared with the thermal value of the fuel; and~~

~~d. The unit must export and utilize at least seventy-five percent (75%) of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps).~~

~~2.6. "Carbon Regeneration Unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.~~

~~2.7.--"Certification" means a statement of professional opinion based upon knowledge and belief.~~

~~2.8.--"Chief" means the Chief of the West Virginia Office of Air Quality, Division of Environmental Protection.~~

2.95. "CAA" means the federal Clean Air Act, as amended; 42 U.S.C. §7401, et seq.

~~2.10.--"Constituents" or "Hazardous Waste Constituent" means a constituent identified in Appendix VIII of section 3 of 47 CSR 35 or constituents that caused the DEP Director to list the waste as hazardous in section 3 of 47 CSR 35 or constituents listed in Table II of subsection 3.3.5 of 47 CSR 35.~~

2.116. "CFR" means the Code of Federal Regulations published by the Office of the Federal Register, National Archives and Records Service, General Services Administration.

2.127. "CWA" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act), Public Law 92-500, as amended by Public Law 95-217 and Public Law 95-576; 33 U.S. C. §1251, et seq.

2.128. "Director" means the Director of the West Virginia Division of Environmental Protection or his or her designated representative.

2.139. "Division of Environmental Protection or DEP" means that Division of the ~~Department of Commerce, Labor and Environmental Resources~~ which is created by the provisions of ~~West Virginia~~W. Va. Code §§22-1-1, et seq.

2.1410. "EPA" means the United States Environmental Protection Agency.

~~2.15.--"Hazardous Waste Management Facility", "facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing or disposing of hazardous wastes. A facility may consist of several treatment, storage or disposal operational units.~~

~~2.16.--"Hazardous Waste Management Unit" means a contiguous area of land on or in which hazardous waste is placed or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank (including its associated piping and underlying containment system), and a container storage area. A container alone does not constitute a unit, the unit includes containers and the land or pad upon which they are placed.~~

~~2.17.--"Incinerator" means any enclosed device that:~~

a.----Uses controlled flame combustion and does not meet the criteria for classification as a boiler, sludge dryer, carbon reactivation unit, nor listed as an industrial furnace; or

b.----Meets the definition of infrared incinerator or plasma arc incinerator.

2.18. "Industrial Furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplished recovery of materials or energy:

a.----Cement kilns;
b.----Lime kilns;
c.----Aggregate kilns;
d.----Phosphate kilns;
e.----Coke ovens;
f.----Blast furnaces;
g.----Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces);
h.----Titanium dioxide chloride process oxidation reactors;
i.----Methane reforming furnaces;
j.----Pulping liquor recovery furnaces;
k.----Combustion devices used in the recovery of sulfur values from spent sulfuric acid;
l.----Halogen acid furnaces (HAF's) for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20% as generated.
m.----Such other devices as the Commission or Chief of the Office of Air Quality may, after notice and comment, add to the list on the basis of one or more of the following factors:

A.----The design and use of the device primarily to accomplish recovery of material products;

B.----The use of the device to burn or reduce raw materials to make a material product;

C.----The use of device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;

D.----The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;

E.----The use of the device in common industrial practice to produce a material product; and

F.----Other factors, as appropriate.

2.1911. "Infectious Medical Waste" shall have the meaning ascribed to it in 64 CSR 56 "Infectious Medical Waste", (June 11, 1993), promulgated by the Division of Health.

2.20.--"Infrared Incinerator" means any enclosed device that uses electrical powered resistance heaters as a source of radiant heat and which is not listed as an industrial furnace.

2.21.--"Manufacturing or Mining By-Product" means a material that is not one of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation.--The term does not include an intermediate manufacturing or mining product which results from one of the steps in a manufacturing or mining process and is typically processes through the next step of the process within a short time.

2.22.--"Miscellaneous Unit" means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 40 CFR 146, or unit eligible for a research, development, and demonstration permit under 40 CFR 270.65.

2.23.--"Open Burning" means the combustion, or partial combustion, of any material without the following characteristics:

a.----Control of combustion air to maintain adequate temperature for efficient combustion;

b.----Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

c.----Control of emissions of the gaseous combustion products.--(See also "incinerator" and "thermal treatment").

2.24.--"Operator" means the person responsible for the overall operation of a facility.

2.25.--"Owner" means the person who owns a facility or part of a facility.

2.2612. "Particulate Matter" means any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

2.2713. "Pathological Incinerator" means an incinerator used to thermally treat infectious medical waste. Note: The owner or operator of a pathological waste incinerator is not subject to the requirements of this regulation. However, such pathological waste incinerator must be designed, constructed, and operated to meet all other applicable regulations promulgated by the ~~Air Pollution Control Commission~~Director including, but not limited to, 45CSR6 and 45CSR13.

~~2.28. "Plasma Arc Incinerator" means any enclosed device using a high intensity electrical discharge or arc as a source of heat and which is not listed as an industrial furnace.~~

2.2914. "RCRA" means the federal Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act, as amended; 42 U.S.C. §6901, et seq.

~~2.30. "Sludge Dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 BTU/lb of sludge treated on a wet weight basis.~~

2.3115. "Steady State" means that all conditions at all points in the thermal treatment process are in stable, normal operating conditions.

~~2.32. "Tank" means a stationary device designed to contain an accumulation of hazardous waste which is constructed primarily of non earthen materials (e.g. concrete, wood, steel, plastic) which provide structural support.~~

~~2.33. "Thermal Treatment" means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also "Incinerator" and "Open Burning").~~

~~2.34. "Totally Enclosed Treatment Facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents release of any hazardous waste or any constituent thereof into the environment during treatment.~~

~~2.35. "Treatment" means any method, technique, or process including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous, or less hazardous, safer to transport, store, or dispose of, or amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or process designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.~~

~~2.36. "Waste" shall have the same meaning ascribed in subsection 3.1.2 of 47 CSR 35.~~

~~2.37. "Wastewater Treatment Unit" means a device which:~~

~~a. Is part of a wastewater treatment facility which is subject to regulation under either Section 402 or 307 (b) of the Clean Water Act;~~

~~b. Receives and treats or stores an influent wastewater which is a hazardous waste as defined in 47 CSR 35, or generates and accumulates, or treats or stores a wastewater treatment sludge that is defined as a hazardous waste;~~

~~c. Meets the definition of a tank as defined in Section 2 of this rule.~~

2.3816. All other words or phrases not herein defined and used in this rule shall have the meaning as ascribed in W. Va. Code ~~16-20-1,~~§§22-5-1 et seq., or W. Va. Code ~~20-5E-1,~~§§22-18-1 et seq., or 47 CSR 35 "Hazardous Waste Management Regulations" governing the State Hazardous Waste Management Act.

§45-25-3. Adoption By Reference.

3.1. Definitions, lists, tables, appendices, conditions, or requirements from 47 CSR 35 "Hazardous Waste Management Regulations", effective ~~August 9, 1993~~July 1, 1994 are hereby adopted by reference.

a. ~~In making a determination of whether a material is a waste, and if so, whether that material is a hazardous waste, the chief of the office of waste management shall consult with the chief of the office of air quality in making such determination.~~ In case of a conflict between the Office of Air Quality and the Office of Waste Management as to whether a material is a waste and if so, whether the material is a hazardous waste, the Director will make the determination to resolve the conflict.

3.2. The provisions contained in the Code of Federal Regulations (~~1991~~July 1, 1994), as listed in Table 25-A, are hereby adopted by reference, with the following modifications:

a. Whenever the term "United States" is used it shall also mean the State of West Virginia.

b. Whenever the terms "Administrator" or "Regional Administrator", "The Assistant Administrator for Solid Waste and Emergency Response" or "Director" is used, the term means the ~~Chief of the Office of Air Quality~~Director of the West Virginia Division of Environmental Protection.

c. Whenever the term "Environmental Protection Agency" is used in 40 CFR 266, the term also means the West Virginia Division of Environmental Protection.~~, Office of Air Quality.~~

d. The distance provisions of 40 CFR 265.382 apply only to the open burning or open detonation of military explosives in a manner that presents an uncontrolled fragment release hazard. The applicable distance provisions of the American Table of Distances for Commercial Explosives, effective June 19, 1991, and of the Department of Defense Contractors Safety Manual for Ammunition and Explosives (DOD 4145.26-M), as amended April 11, 1988, apply otherwise.

§45-25-4. Facility Requirements.

4.1. ~~The requirements of this rule apply to all owners and operators of hazardous waste treatment, storage, and disposal facilities, including but not limited to:~~

~~a. Generators accumulating hazardous waste on-site for periods of less than ninety (90) days;~~

~~b. Owners and operators of wastewater treatment units as defined in this rule; and~~

~~c. Owners and operators which burn hazardous wastes in incinerator, boilers and industrial furnaces in order to destroy the wastes.~~

~~4.2.~~ Owners and operators of hazardous waste ~~management~~treatment, storage, and disposal facilities regulated by the provisions of this rule shall maintain a listing of all permits or construction approvals received or applied for under any of the following programs and their counterpart programs administered by the State, where appropriate:

a. Hazardous Waste Management Program under RCRA and 47 CSR 35;

b. Prevention of Significant Deterioration (PSD) program under 45CSR14 or the Federal Clean Air Act;

c. Nonattainment program under West Virginia DEP, Office of Air Quality or the Federal Clean Air Act and 45CSR19;

d. National Emission Standards for Hazardous Pollutants (NESHAP) preconstruction approval under 45CSR15 or the Federal Clean Air Act;

e. Standards of Performance for New Stationary Sources under 45CSR16 or the Federal Clean Air Act; and

f. Other relevant air pollution control permits including local permits.

4.3. Owners and operators of hazardous waste ~~management facilities~~ treatment, storage and disposal facilities covered under this rule shall comply with the personnel training requirements as specified by ~~Subsection 8.2.7 of 47 CSR 35.~~40

CFR 264.16. An outline of the training program ~~required by Subsection 8.2.7 of 47 CSR 35~~ and a description of how the training program is designed to meet actual job tasks must be submitted to the ~~Chief~~Director with Part B of the permit application.

4.43. Owners and operators of hazardous waste tanks, surface impoundments, landfills, waste piles, land treatment, incinerators, and boiler and industrial furnace facilities must design, construct, maintain, and operate such facilities to minimize the possibility of a fire, explosion, or any unplanned, sudden, or non-sudden release of hazardous waste constituents to the air which could threaten human health or the environment.

4.54. Owners and operators of hazardous waste management facilities that treat, store, or dispose of ignitable or reactive wastes, or mix incompatible waste or incompatible wastes and other materials, must prevent reactions which:

a. Produce uncontrolled toxic mists, fumes, dust or gases in sufficient quantities to threaten human health or the environment, and

b. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion.

4.65. Owners and operators of all hazardous waste tanks shall have treatment process controls, emission controls, and safety or emergency procedures as are necessary to protect human health and the environment from toxic or otherwise harmful fumes, mists, or gases resulting from:

a. Volatilization of wastes stored or treated in the tank;

b. Chemical reactions in the tank, either routine or resulting from process upsets; and

c. Physical agitation or other forms of treatment in the tank.

4.76. Tanks used to treat or store hazardous waste containing liquid waste whose true vapor pressure is greater than 10.5 ~~kilo-Pascals~~kilopascals (1.52 psia) at 25°C and 760 mmHg shall be equipped with an emission control system meeting the following requirements:

a. Storage or treatment in open (uncovered) tanks is prohibited.

b. External floating roofs shall be equipped with double mechanical seals.

c. Fixed roof tanks shall be equipped with an internal floating roof with appropriate seals, a vapor recovery system, or an equally effective alternative emission control system approved by the ~~Chief~~Director.

4.87. Emissions of hazardous waste whose true vapor pressure is greater than 10.5 ~~kilo-Pascals~~kilopascals (1.52 psia) at 25°C, 760 mmHg shall be controlled during

loading or unloading of tank trucks, railroad tank cars, and barges by the methods listed as follows:

a. Venting all displaced vapors and gases to a vapor recovery system or an alternative emission control system approved by the ~~Chief~~Director;

b. Providing a means to prevent liquid drainage from the loading (unloading) device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and

c. Equipping all loading and vapor lines with fittings which make vapor tight connections that close automatically when disconnected.

4.9~~8~~. A hazardous waste pile must be fully enclosed or otherwise designed to prevent dispersal of the waste by wind.

4.~~10~~9. Hazardous waste landfills must be covered or otherwise managed to prevent wind dispersal of the waste.

4.~~11~~10. All landfills, surface impoundments, and land treatment facilities shall be located, designed, constructed, operated, maintained, and closed in a manner that will assure protection of human health and the environment. Protection of human health and the environment shall include prevention of adverse effects on air quality considering:

a. The volume and physical and chemical characteristics of the waste in the facility, including its potential for volatilization and wind dispersal;

b. The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

c. The potential for health risks caused by human exposure to waste constituents;

d. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

e. The potential for interference with the enjoyment of life or property; and

f. The persistence and permanence of such potential adverse effects.

4.~~12~~11. Owners and operators of hazardous waste treatment, storage, or disposal facilities shall utilize best available control technology ("BACT") to limit the discharge of hazardous waste constituents to the atmosphere during:

a. Process turn-arounds;

b. Cleaning of process equipment;

c. Planned process shutdowns; and

d. Tank truck, railroad tank car, and barge cleaning.

4.132. a. The ~~Chief~~Director may, on a case-by-case basis, establish performance standards for hazardous waste incinerators for control of emissions of metals, hydrogen halides, and elemental halogen, based on a finding that such standards are necessary to limit the emission rates of these constituents to levels which do not pose an unacceptable risk to human health and environment. The ~~Chief~~Director may require the following data from the permit applicant:

A. Emissions of POHCs, hazardous combustion by-products, metals and hydrogen halides, including:

(a) Mass emission rates from the stack, and
(b) Concentration in the gas stream exiting the stack; and

B. Air dispersion estimates for those substances, including:

(a) Meteorological data, and
(b) Description of the air dispersion models, and
(c) Assumptions underlying the air dispersion models used; and

C. Expected human and environmental exposure, including:

(a) Topographic considerations,
(b) Population distributions,
(c) Population activities, and
(d) Modes, intensity, and duration of exposure; and

D. Consequences of exposure, including:

(a) Dose-response curves for carcinogens,
(b) Health effects based on human or animal studies for other toxic constituents,
(c) Potential for accumulation of toxic constituents in the human body, and
(d) Statements of expected risk to individuals or populations.

4.143. Emergency Permit. Notwithstanding any other provision in ~~Section 11 of 47 CSR 35~~40 CFR 270.61, in the event the ~~Chief~~Director finds an imminent and substantial danger to human health or the environment, the ~~Chief~~Director may issue a temporary permit to a facility to allow treatment, storage, or disposal of hazardous waste at a non-permitted facility, or hazardous waste not covered by the permit for a facility with an effective permit. This emergency permit:

a. May be oral or written. If oral, it shall be followed within five (5) days by written emergency permit;

b. Shall not exceed ninety (90) days in duration;

c. Shall clearly specify the hazardous wastes to be received, and the manner and location of the treatment, storage, or disposal;

d. May be terminated by the ~~Chief~~Director at any time without prior notice if it is determined that termination is appropriate to protect human health or the environment; and

e. Shall be accompanied by public notice ~~which shall be published by the permittee~~ as described under Section 7 of this rule and shall include the following:

A. Name and address of the office granting the emergency authorization,

B. Name and location of the permitted hazardous waste management facility,

C. A brief description of the wastes involved,

D. A brief description of the action authorized and reasons for authorizing it,

E. Duration of the emergency permit; and

f. Shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this rule.

§45-25-5. Exclusion and Exemptions.

5.1. Wastes and/or materials excluded in ~~Section 3.1.4 of~~ 47 CSR 35, are also excluded from the requirements of this rule, except that mixtures of domestic or industrial sewage and hazardous wastes which pass through a sewer system to a privately owned or publicly owned treatment works are subject to the requirements of this rule.

~~5.2. Except for those wastes identified in Sections 10.2.5, 10.2.7 and 10.2.10 of 47 CSR 35, a conditionally exempt small quantity generator's wastes as defined by Section 10.2.1 of 47 CSR 35 are not subject to the requirements of this rule provided that the generator complies with Section 10.2.6, 10.2.7 and 10.2.10 of 47 CSR 35.~~

5.32. Except for recyclable materials exempt pursuant to Section 3.1.6 of 47 CSR 35, hazardous wastes that are stored prior to recycling are subject to all applicable provisions of Section 4.

§45-25-6. Confidential Information.

6.1. Any records, reports, or information and any permit, permit applications, and related documents within the ~~Chief's~~Director's possession shall be available to the public for inspection and copying: provided, however, that upon satisfactory showing to the ~~Chief~~Director that such records, reports, permit documentation, or information, or any part thereof would, if made public, divulge methods or processes, or activities, entitled to protection as trade secrets, the ~~Chief~~Director shall consider, treat, and protect such records as confidential pursuant to W. Va. Code §~~20-5E-1~~22-18-1, et seq., and §~~16-29-1~~22-5-1, et seq.

§45-25-7. Public Notice.

Public notice of the preparation of a draft permit shall be given by the methods contained in 47 CSR 35 Section ~~11.2~~12, ~~except that the owner or operator shall place a Class I legal advertisement in two (2) newspapers of general circulation in the county where the source is located. In addition, the applicant shall have such notice broadcast over local radio stations. Upon publication and broadcasting, the applicant shall send the Chief a copy of the certificate of publication and confirmation of broadcasting~~.

§45-25-8. Application Fees.

8.1. Any person who applies for a permit for the construction and/or operation of a hazardous waste ~~management~~treatment, storage, or disposal facility shall submit as part of said application a money order or cashier's check payable to the "Hazardous Waste Management Fund" of the State Treasury. Such fee shall be determined by the schedule set forth below:

	ACTIVITY	FEES
a.	Hazardous Waste Management Facilities	
	Treatment design capacity more than 1,000 ton/yr	$5,000
	Treatment design capacity less than 1,000 ton/yr	$2,500
b.	Major Modifications or Renewals of Permits for Hazardous Waste Management Facilities	$1,000

All fees required under this section shall be in addition to fees required under any other rule of the ~~Commission or the~~West Virginia Division of Environmental Protection.

§45-25-9. Inconsistency Between Rules.

In the event of any inconsistency between this rule and any other rule of the ~~Commission or the~~West Virginia Division of Environmental Protection, such inconsistency shall be resolved by the determination of the Director and such determination shall be based upon the application of the more stringent provision, term, condition, method and rule.

45CSR25

TABLE 25-A

CFR No.		Part No.		Subpart No.		Title
40 CFR	-	264, 265	-	O	-	Incinerator
	-	270.19	-	B	-	Specific Requirements for Incinerators
	-	270.62	-	F	-	Hazardous Waste Incinerator Permits
40 CFR	-	264	-	X	-	Miscellaneous Units
	-	270.23	-	B	-	Specific Requirements for Miscellaneous Units
40 CFR	-	264, 265	-	AA	-	Air Emission Standards for Process Vents
	-	270.24	-	B	-	Specific Requirements for Process Vents
40 CFR	-	264, 265	-	BB	-	Air Emission Standards for Equipment Leaks
	-	270.25	-	B	-	Specific Requirements for Equipments Leaks
40 CFR	-	265	-	P	-	Thermal Treatment
40 CFR	-	266	-	H	-	Hazardous Waste Burned in Boilers and Industrial Furnaces
	-	270.22	-	B	-	Specific Requirements for Boilers and Industrial Furnaces Burning Hazardous Wastes
	-	270.66	-	F	-	Permits for Boiler and Industrial Furnaces Burning Hazardous Waste
40 CFR	-	266279.23	-	BC	-	~~Hazardous Waste Burned for Energy Recovery~~On-site Burning In Space Heater
	-	279.61 279.63	-	G	-	Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery
		------266----------		E		~~Used Oil Burned for Energy Recovery~~

PB86-176492

DOD CONTRACTORS' SAFETY MANUAL FOR AMMUNITION AND EXPLOSIVES

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Washington, DC.

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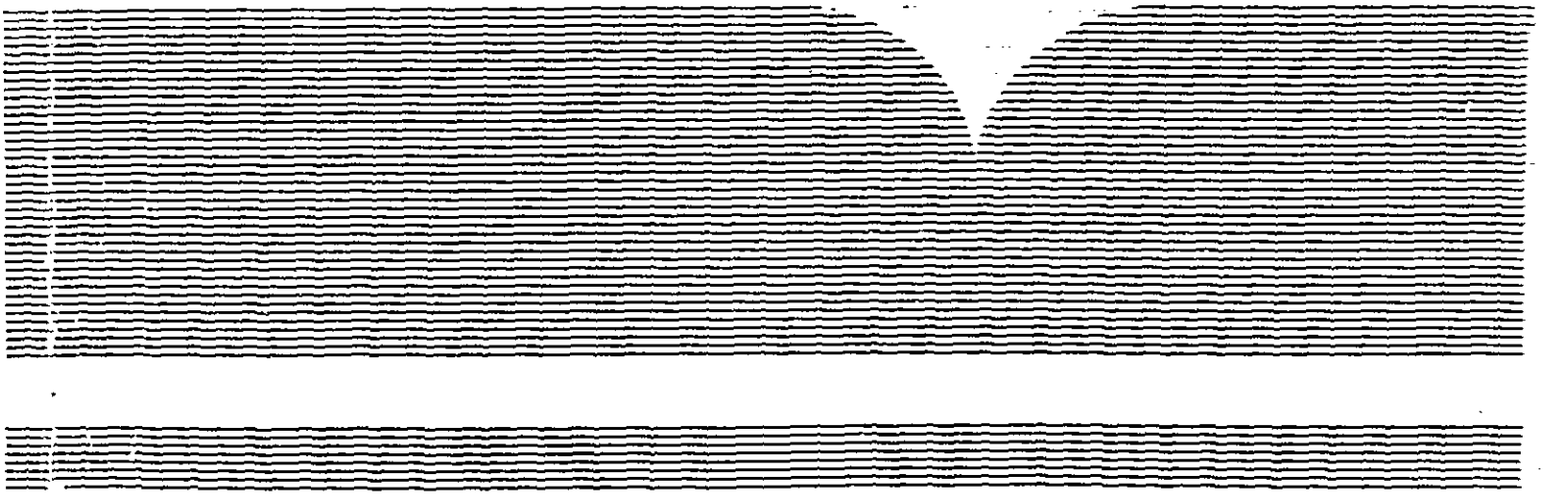

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7. When determining inhabited building and public traffic route distances, use table 6-1 for class 1, division 1; table 6-2 for specified class 1, division 1; tables 6-6 through 6-9 for class 1, division 2; table 6-10 for class 1, division 3; and table 6-11 for class 1, division 4.

8. When determining intraline and intermagazine distances, use tables 6-3 through 6-5 for class 1, division 1; tables 6-6 through 6-9 for class 1, division 2; table 6-10 for class 1, division 3; and table 6-11 for class 1, division 4.

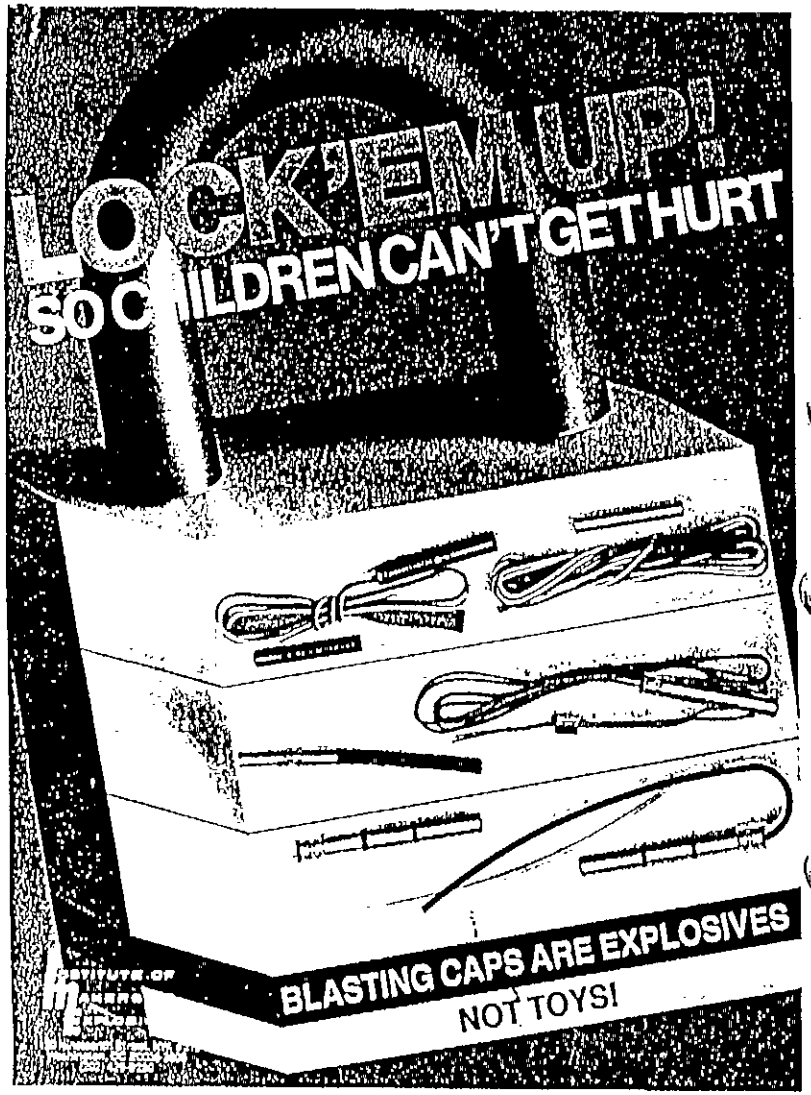
9. In the application of inhabited building and public traffic route distances, table 6-1, the property boundary will be treated as the governing * target. In interpreting application to navigable waterways as public traffic * routes, occasional small fishing and pleasure boats may be ignored.

C. CLASS 1, DIVISION 1 (MASS DETONATING)

Entire quantities of items in this division can detonate almost instantaneously. Some examples: bulk explosives, some propellants, mines, bombs, * demolition charges, torpedo and missile warheads, rockets, palletized projectiles loaded with TNT or Composition B, 8-inch and larger high-capacity projectiles loaded with Explosive D, mass-detonating CBUs, and mass-detonating ammunition components. *

NEW Over	Not Over	Distance in Feet to Inhabited Building From			Distance in Feet to Public Traffic Route From		
		Standard Earth-Covered Magazine		Other PES	Standard Earth-Covered Magazine		Other PES
		Front or Side	Rear		Front or Side	Rear	
1	2	3	4	5	6	7	8
0	1	35	25	40	21	15	24
1	2	44	32	50	26	19	30
2	5	60	43	69	36	26	40
5	10	75	54	87	45	32	52
10	20	95	68	110	57	41	65
20	30	110	78	125	65	47	75
30	40	120	86	140	72	51	83
40	50	130	92	150	77	55	89
50	100	160	115	190	97	70	115
100	200	205	145	235	125	88	140
200	300	235	165	270	140	100	160
300	400	260	185	295	155	110	175
400	500	280	200	320	165	120	190
500	600	295	210	340	175	125	205
600	700	310	220	355	185	135	215
700	800	325	230	375	195	140	225
800	900	340	240	390	205	145	235
900	1,000	350	250	400	210	150	240
1,000	1,500	400	285	460	240	170	275
1,500	2,000	440	315	505	265	190	305
2,000	3,000	505	360	580	305	215	350
3,000	4,000	555	395	635	335	240	380
4,000	5,000	600	430	685	360	255	410
5,000	6,000	635	455	730	380	275	440

Table 6-1. Class 1, Division 1: Inhabited Building and Public Traffic Route Distances.



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2

SAFETY LIBRARY PUBLICATION NO. 2

THE AMERICAN TABLE OF DISTANCES

June 1991

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PREFACE

The original study to develop safe distances for the location of explosive storage magazines was begun in 1909, a time when a majority of explosive materials were transported by rail and explosive materials storage facilities were located near the railroad lines. The potential hazard to passenger carrying trains and residential areas near the railroad, should an explosion occur in the magazine, necessitated radical changes in magazine location.

A special committee of the Association of Manufacturers of Powder and High Explosives was appointed to study the problem and develop recommendations. After reviewing established foreign requirements, the committee determined that these regulations could not be utilized for conditions existing in the United States. The committee then decided to develop an American Table of Distances based on empirical data gathered from explosions that had occurred in the field.

Information was gathered on a number of explosions ranging from very small amounts of explosive materials to some approximating one million pounds. The explosions studied covered a period of almost fifty years and occurred in manufacturing, transportation and storage, both in the United States and abroad.

Based on the work of the special committee of the Association of Manufacturers of Powder and High Explosives the American Table of Distances for inhabited buildings and public railways was established in December 1910.

When it became apparent that the distance table should also contain minimum safe distances for the location of explosive storage and manufacturing buildings from public highways, the special committee, in conjunction with the Institute of Makers of Explosives (founded in 1913), conducted additional studies. The highway distances were approved and adopted by the Institute of Makers of Explosives in 1914.

After the adoption of the American Table of Distances, the collection of data on explosions was continued. The table was reviewed in 1919 and again in 1939 to evaluate it and consider the data accumulated since the table was established. No significant revisions were made after either review.

Another detailed study of the table was made in 1950 to distinguish between military explosives (bombs, projectiles, cased ammunition, etc.) and commercial explosive materials which have virtually no missile hazard. The study also noted that the table was specifically designed to cover manufacture and permanent storage of explosive materials and is not applicable for the incidental handling or temporary storage of explosive materials being transported.

Based on tests conducted by governmental agencies and scientific laboratories much additional data on blast effects have been accumulated since 1950. The current edition includes revisions and additions based on these findings, together with the excellent experience acquired after over 75 years of use.

In the study of explosion damage data, the criteria for inhabited buildings was the distance at which substantial structural damage took place. For example, such minor damage as the breaking of window glass and the shaking down of plaster was not considered. This necessitated the acceptance of a definition for substantial structural damage, from two points of view:

DAMAGE TO PROPERTY—

It was concluded that no damage which was readily repairable should be considered "substantial" for the purpose in view.

RISK TO LIFE AND LIMB—

It was concluded that unless some integral portion of the building was damaged, the occupants would not be subjected to serious risks.

Storage of large quantities of explosives in heavily populated or built-up areas should be avoided. While the tables provide adequate and reasonable protection for expostures in rural areas, the statistical nature of blast damage makes it inadvisable to subject multiple exposures to blasts at the distances prescribed. This consideration has lead to an increase in distances required from major highways.

Barricaded Distance Requirements

Air blast damage at distances in excess of a few tens of feet is little affected by revetment or natural barricades. However, missile hazards are substantially affected by barricades. Accumulated experience plus DOD studies of explosion-propelled missiles indicates that at large distances the doubling of the barricaded distance is not required. The current tables reflect this finding.

Distances to Main Highways

Blast effects on vehicles have been analyzed extensively by government agencies in connection with assessing effects of military weapons. This work has shown the recommended distances from stored explosives to heavily travelled, high-speed highways as given in the table are necessary. Consultation and advice from the Department of Defense Explosives Safety Board is gratefully acknowledged in our analysis of this problem.

The distances given in the table are not to be construed as superseding the distances in any federal, state or municipal laws, ordinances or regulations.

Table of Recommended Separation Distances (Appendix)

Fundamental to proper application of the Amerian Table of Distances for Storage of Explosive Materials is the question of whether adjacent stores of explodable materials can propagate from an explosion at one source. If propagation can occur, the respective weights must be summed in determinging safe distances from dwellings, highways, and passenger railways. The Appendix comprises such non-propagating distances with definitions, explanations, and examples. Recommended Separation Distances of Ammonium Nitrate and Blasting Agents from Explosives or Blasting Agents is printed on pages 8 through 15.

NOTE:

USE THE *AMERICAN TABLE OF DISTANCES FOR STORAGE OF EXPLOSIVE MATERIALS* TO DETERMINE SAFE DISTANCES FROM INHABITED DWELLINGS, HIGHWAYS, PASSENGER RAILWAYS, AND BETWEEN EXPLOSIVE MATERIALS MAGAZINES.

USE THE APPENDIX, *SEPARATION DISTANCES OF AMMONIUM NITRATE AND BLASTING AGENTS FROM EXPLOSIVES OR BLASTING AGENTS*, TO DETERMINE NONPROPAGATING DISTANCES TO ANFO BLASTING AGENTS AND TO AMMONIUM NITRATE.

USE THE GREATER OF THE DISTANCES SHOWN IN THE AMERICAN TABLE OF DISTANCES AND IN THE TABLE OF RECOMMENDED SEPARATION DISTANCES TO DETERMINE THE REQUIRED SEPARATION BETWEEN A MAGAZINE FOR STORAGE OF EXPLOSIVES AND A MAGAZINE FOR STORAGE OF BLASTING AGENTS.

AMERICAN TABLE OF DISTANCES FOR STORAGE OF EXPLOSIVE MATERIALS
As Revised and Approved by The Institute of Makers of Explosives—June 1991

QUANTITY OF EXPLOSIVE MATERIALS[1,2,3,4]		DISTANCES IN FEET							
		Inhabited Buildings [5]		Public Highways with Traffic Volume of less than 3000 Vehicles/Day[5,6]		Passenger Railways — Public Highways with Traffic Volume of more than 3,000 Vehicles/Day [5,6,11]		Separation of Magazines [12]	
Pounds Over	Pounds Not Over	Barricaded[6,7,8]	Unbarricaded	Barricaded[6,7,8]	Unbarricaded	Barricaded[6,7,8]	Unbarricaded	Barricaded[6,7,8]	Unbarricaded
0	5	70	140	30	60	51	102	6	12
5	10	90	180	35	70	64	128	8	16
10	20	110	220	45	90	81	162	10	20
20	30	125	250	50	100	93	186	11	22
30	40	140	280	55	110	103	206	12	24
40	50	150	300	60	120	110	220	14	28
50	75	170	340	70	140	127	254	15	30
75	100	190	380	75	150	139	278	16	32
100	125	200	400	80	160	150	300	18	36
125	150	215	430	85	170	159	318	19	38
150	200	235	470	95	190	175	350	21	42
200	250	255	510	105	210	189	378	23	46
250	300	270	540	110	220	201	402	24	48
300	400	295	590	120	240	221	442	27	54
400	500	320	640	130	260	238	476	29	58
500	600	340	680	135	270	253	506	31	62
600	700	355	710	145	290	266	532	32	64
700	800	375	750	150	300	278	556	33	66
800	900	390	780	155	310	289	578	35	70
900	1,000	400	800	160	320	300	600	36	72
1,000	1,200	425	850	165	330	318	636	39	78
1,200	1,400	450	900	170	340	336	672	41	82
1,400	1,600	470	940	175	350	351	702	43	86
1,600	1,800	490	980	180	360	366	732	44	88
1,800	2,000	505	1,010	185	370	378	756	45	90
2,000	2,500	545	1,090	190	380	408	816	49	98
2,500	3,000	580	1,160	195	390	432	864	52	104
3,000	4,000	635	1,270	210	420	474	948	58	116
4,000	5,000	685	1,370	225	450	513	1,026	61	122
5,000	6,000	730	1,460	235	470	546	1,092	65	130
6,000	7,000	770	1,540	245	490	573	1,146	68	136
7,000	8,000	800	1,600	250	500	600	1,200	72	144
8,000	9,000	835	1,670	255	510	624	1,248	75	150
9,000	10,000	865	1,730	260	520	645	1,290	78	156
10,000	12,000	875	1,750	270	540	687	1,374	82	164
12,000	14,000	885	1,770	275	550	723	1,446	87	174
14,000	16,000	900	1,800	280	560	756	1,512	90	180
16,000	18,000	940	1,880	285	570	786	1,572	94	188
18,000	20,000	975	1,950	290	580	813	1,626	98	196
20,000	25,000	1,055	2,000	315	630	876	1,752	105	210
25,000	30,000	1,130	2,000	340	680	933	1,866	112	224
30,000	35,000	1,205	2,000	360	720	981	1,962	119	238
35,000	40,000	1,275	2,000	380	760	1,026	2,000	124	248
40,000	45,000	1,340	2,000	400	800	1,068	2,000	129	258
45,000	50,000	1,400	2,000	420	840	1,104	2,000	135	270
50,000	55,000	1,460	2,000	440	880	1,140	2,000	140	280
55,000	60,000	1,515	2,000	455	910	1,173	2,000	145	290
60,000	65,000	1,565	2,000	470	940	1,206	2,000	150	300
65,000	70,000	1,610	2,000	485	970	1,236	2,000	155	310
70,000	75,000	1,655	2,000	500	1,000	1,263	2,000	160	320
75,000	80,000	1,695	2,000	510	1,020	1,293	2,000	165	330
80,000	85,000	1,730	2,000	520	1,040	1,317	2,000	170	340
85,000	90,000	1,760	2,000	530	1,060	1,344	2,000	175	350
90,000	95,000	1,790	2,000	540	1,080	1,368	2,000	180	360
95,000	100,000	1,815	2,000	545	1,090	1,392	2,000	185	370
100,000	110,000	1,835	2,000	550	1,100	1,437	2,000	195	390
110,000	120,000	1,855	2,000	555	1,110	1,479	2,000	205	410
120,000	130,000	1,875	2,000	560	1,120	1,521	2,000	215	430
130,000	140,000	1,890	2,000	565	1,130	1,557	2,000	225	450
140,000	150,000	1,900	2,000	570	1,140	1,593	2,000	235	470
150,000	160,000	1,935	2,000	580	1,160	1,629	2,000	245	490
160,000	170,000	1,965	2,000	590	1,180	1,662	2,000	255	510
170,000	180,000	1,990	2,000	600	1,200	1,695	2,000	265	530
180,000	190,000	2,010	2,010	605	1,210	1,725	2,000	275	550
190,000	200,000	2,030	2,030	610	1,220	1,755	2,000	285	570
200,000	210,000	2,055	2,055	620	1,240	1,782	2,000	295	590
210,000	230,000	2,100	2,100	635	1,270	1,836	2,000	315	630
230,000	250,000	2,155	2,155	650	1,300	1,890	2,000	335	670
250,000	275,000	2,215	2,215	670	1,340	1,950	2,000	360	720
275,000	300,000	2,275	2,275	690	1,380	2,000	2,000	385	770

Numbers in ( ) refer to explanatory notes.

EXPLANATORY NOTES ESSENTIAL TO THE APPLICATION OF THE AMERICAN TABLE OF DISTANCES FOR STORAGE OF EXPLOSIVE MATERIALS

NOTE 1—"Explosive materials" means explosives, blasting agents and detonators.

NOTE 2—"Explosives" means any chemical compound, mixture, or device, the primary or common purpose of which is to function by explosion. A list of explosives determined to be within the coverage of "18 U.S.C. Chapter 40. Importation, Manufacturer, Distribution and Storage of Explosive Materials" is issued at least annually by the Director of the Bureau of Alcohol, Tobacco and Firearms of the Department of the Treasury. For quantity and distance purposes, detonating cord of 50 grains per foot should be calculated as equivalent to 8 lbs. of high explosives per 1,000 feet. Heavier or lighter core loads should be rated proportionately.

NOTE 3—"Blasting agents" means any material or mixture, consisting of fuel and oxidizer, intended for blasting, not otherwise defined as an explosive: Provided, That the finished product, as mixed for use or shipment, cannot be detonated by means of a No. 8 test blasting cap when unconfined.

NOTE 4—"Detonator" means any device containing any initiating or primary explosive that is used for initiating detonation. A detonator may not contain more than 10 grams of total explosives by weight, excluding ignition or delay charges. The term includes, but is not limited to, electric blasting caps of instantaneous and delay types, blasting caps for use with safety fuses, detonating cord delay connectors, and nonelectric instantaneous and delay blasting caps which use detonating cord, shock tube, or any other replacement for electric leg wires. All types of detonators in strengths through No. 8 cap should be rated at 1½ lbs. of explosives per 1,000 caps. For strengths higher than No. 8 cap, consult the manufacturer.

NOTE 5—"Magazine" means any building, structure, or container, other than an explosives manufacturing building, approved for the storage of explosive materials.

NOTE 6—"Natural Barricade" means natural features of the ground, such as hills, or timber of sufficient density that the surrounding exposures which require protection cannot be seen from the magazine when the trees are bare of leaves.

NOTE 7—"Artificial Barricade" means an artificial mound or revetted wall of earth of a minimum thickness of three feet.

NOTE 8—"Barricaded" means the effective screening of a building containing explosive materials from the magazine or other building, railway, or highway by a natural or an artificial barrier. A straight line from the top of any sidewall of the building containing explosive materials to the eave line of any magazine or other building or to a point twelve feet above the center of a railway or highway shall pass through such barrier.

NOTE 9—"Inhabited Building" means a building regularly occupied in whole or part as a habitation for human beings, or any church, schoolhouse, railroad station, store, or other structure where people are accustomed to assemble, except any building or structure occupied in connection with the manufacture, transportation, storage or use of explosive materials.

NOTE 10—"Railway" means any steam, electric, or other railroad or railway which carriers passengers for hire.

NOTE 11—"Highway" means any public street, public alley, or public road.

NOTE 12—When two or more storage magazines are located on the same property, each magazine must comply with the minimum distances specified from inhabited buildings, railways, and highways, and, in addition, they should be separated from each other by not less than the distances shown for "Separation of Magazines," except that the quantity of explosive materials contained in detonator magazines shall govern in regard to the spacing of said detonator magazines from magazines containing other explosive materials. If any two or more magazines are separated from each other by less than the specified "Separation of Magazines" distances, then such two or more magazines, as a group, must be considered as one magazine, and the total quantity of explosive materials stored in such group must be treated as if stored in a single magazine located on the site of any magazine of the group, and must comply with the minimum of distances specified from other magazines, inhabited buildings, railways, and highways.

NOTE 13—Storage in excess of 300,000 lbs. of explosive materials, in one magazine is generally not required for commercial enterprises.

NOTE 14—This Table applies only to the manufacture and permanent storage of commercial explosive materials. It is not applicable to transportation of explosives or any handling or temporary storage necessary or incident thereto. It is not intended to apply to bombs, projectiles, or other heavily encased explosives.

NOTE 15—When a manufacturing building on an explosive materials plant site is designed to contain explosive materials, such building shall be located from inhabited buildings, public highways and passenger railways in accordance with the American Table of Distances based on the maximum quantity of explosive materials permitted to be in the building at one time.

AMERICAN TABLE OF DISTANCES

The American Table of Distances applies to the manufacture and permanent storage of *commercial* explosive materials. The distances specified are those measured from the explosive materials storage facility to the inhabited building, highway or passenger railway, irrespective of property lines.

The American Table of Distances covers all *commercial* explosive materials, including, but not limited to, high explosives, blasting agents, detonators, initiating systems and explosives materials in process. The Table is not designed to be altered or adjusted to accommodate varying explosive characteristics such as blast effect, weight strength, density, bulk strength, detonation velocity, etc.

The American Table of Distances should not be used to determine safe distances for blasting work, the firing of explosive charges for testing or quality control work, or the open detonation of waste explosive materials. The American Table of Distances may be utilized as a guide for developing distances for the unconfined, open burning of waste explosive materials where the probability of transition from burning to high order detonation is improbable.

APPENDIX

Recommended

Separation Distances of Ammonium Nitrate and Blasting Agents from Explosives or Blasting Agents

Chapter 1 Derivation of the Table

1-1 A test program sponsored by industry with cooperation of the Manufacturing Chemists' Association and the Institute of Makers of Explosives and conducted by the Bureau of Mines developed data on the relative sensitivity of ammonium nitrate (AN) and ammonium nitrate-fuel oil (ANFO) to sympathetic detonation. These data were applied to the existing American Table of Distances for Storage of Explosives to develop the following table of recommended separation distances for ammonium nitrate and blasting agents from stores of high explosives or blasting agents.

1-2 The American Table of Distances for barricaded storage of explosives has been proven adequate through the years, and no data were developed in the test programs that would suggest that this table should be modified for explosives. On the other hand, a factor of 2 has been suggested in the past for increasing the distances listed in the American Table of Distances when the magazines are unbarricaded. The results, employing two charge sizes of AN and one charge size of ANFO, gave ratios of unbarricaded to barricaded distances of 4.2 to 7.4, for an average of about 6 which was taken as the appropriate factor. Thus, unbarricaded stores of AN or ANFO not in bullet-resistant magazines should have 6 times the separation distances as barricaded stores.

1-3 The relative sensitivity of AN and ANFO to dynamite was obtained by examining the relative K factors for 50 percent propagation distances when the cube root of the weight was employed in the usual equation:

$$S = KW^{1/3}$$

This equation allowed comparison of 1,600-pound dynamite acceptors with 5,400-pound AN and ANFO acceptors; results from these large charges are believed to be the most reliable available. The ratio of K factors for dynamite and AN was 6.27 which was rounded to 6; the ratio for dynamite and ANFO was 1.6. These factors were applied to the American Table of Distances by thus reducing the distance for barricaded ammonium nitrate to 1/6 the corresponding distance for explosives in the American Table of Distances and for ANFO to 6/10.

1-4 One point should be emphasized; the distances in the table are for separation of stores only. No change should be made in the American Table of Distances with respect to inhabited buildings, passenger railways, and public highways, as the blast effect from ANFO is not importantly less than for high explosives, but the blast effect from AN is about one-half that from high explosives. The blast effect is little modified by the presence of barricades, but the American Table of Distances for separation of stores from inhabited buildings, passenger railways, and public highways for unbarricaded stores provides an additional safety factor and should be retained.

TABLE OF RECOMMENDED SEPARATION DISTANCES OF AMMONIUM NITRATE AND BLASTING AGENTS FROM EXPLOSIVES OR BLASTING AGENTS[1,4]

Donor Weight		Minimum Separation Distance of Acceptor when Barricaded[2] (ft.)		Minimum Thickness of Artificial Barricades[5] (in.)
Pounds Over	Pounds Not Over	Ammonium Nitrate[3]	Blasting Agent[4]	
	100	3	11	12
100	300	4	14	12
300	600	5	18	12
600	1,000	6	22	12
1,000	1,600	7	25	12
1,600	2,000	8	29	12
2,000	3,000	9	32	15
3,000	4,000	10	36	15
4,000	6,000	11	40	15
6,000	8,000	12	43	20
8,000	10,000	13	47	20
10,000	12,000	14	50	20
12,000	16,000	15	54	25
16,000	20,000	16	58	25
20,000	25,000	18	65	25
25,000	30,000	19	68	30
30,000	35,000	20	72	30
35,000	40,000	21	76	30
40,000	45,000	22	79	35
45,000	50,000	23	83	35
50,000	55,000	24	86	35
55,000	60,000	25	90	35
60,000	70,000	26	94	40
70,000	80,000	28	101	40
80,000	90,000	30	108	40
90,000	100,000	32	115	40
100,000	120,000	34	122	50
120,000	140,000	37	133	50
140,000	160,000	40	144	50
160,000	180,000	44	158	50
180,000	200,000	48	173	50
200,000	220,000	52	187	60
220,000	250,000	56	202	60
250,000	275,000	60	216	60
275,000	300,000	64	230	60

*See note on page 3

Notes to Table of Recommended Separation Distances of Ammonium Nitrate and Blasting Agents from Explosives or Blasting Agents

NOTE 1 — Recommended separation distances to prevent explosion of ammonium nitrate and ammonium nitrate-based blasting agents by propagation from nearby stores of high explosives or blasting agents referred to in the Table as the "donor." Ammonium nitrate, by itself, is not considered to be a donor when applying this Table. Ammonium nitrate, ammonium nitrate-fuel oil or combinations thereof are acceptors. If stores of ammonium nitrate are located within the sympathetic detonation distance of explosives or blasting agents, one-half the mass of the ammonium nitrate should be included in the mass of the donor.

NOTE 2 — When the ammonium nitrate and/or blasting agent is not barricaded, the distances shown in the Table shall be multiplied by six. These distances allow for the possibility of high velocity metal fragments from mixers, hoppers, truck bodies, sheet metal structures, metal containers, and the like which may enclose the "donor." Where storage is in bullet-resistant magazines[1] recommended for explosives or where the storage is protected by a bullet-resistant wall, distances and barricade thicknesses in excess of those prescribed in the American Table of Distances are not required.

NOTE 3 — The distances in the Table apply to ammonium nitrate that passes the insensitivity test prescribed in the definition of ammonium nitrate fertilizer promulgated by the Fertilizer Institute;[3] and ammonium nitrate failing to pass said test shall be stored at separation distances determined by competent persons and approved by the authority having jurisdiction.

NOTE 4 — These distances apply to blasting agents which pass the insensitivity test prescribed in regulations of the U.S. Department of Transportation and the U.S. Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms.

NOTE 5 — Earth, or sand dikes, or enclosures filled with the prescribed minimum thickness of earth or sand are acceptable artificial barricades. Natural barricades, such as hills or timber of sufficient density that the surrounding exposures which require protection cannot be seen from the "donor" when the trees are bare of leaves, are also acceptable.

NOTE 6 — For determining the distances to be maintained from inhabited buildings, passenger railways, and public highways, use the American Table of Distances for Storage of Explosives Materials on pages 4 and 5.

[1]For construction of bullet-resistant magazines see Bureau of Alcohol, Tobacco and Firearms, Department of the Treasury, Publication ATF P 5400.7 (6/90), *ATF-Explosives Law and Regulations*.

[3]Definition and Test Procedures for Ammonium Nitrate Fertilizer, Fertilizer Institute, May 8, 1971.

Chapter 2 Guide to Use of Table of Recommended Separation Distances of Ammonium Nitrate and Blasting Agents from Explosives or Blasting Agents

2-1 Sketch location of all potential donor and acceptor materials together with the *maximum* mass of material to be allowed in that vicinity. (Potential donors are high explosives, blasting agents, and combination of masses of detonating materials. Potential acceptors are high explosives, blasting agents, and ammonium nitrate.)

2-2 Consider separately each donor mass in combination with each acceptor mass. If the masses are closer than table allowance (distances measured between nearest edges), the combination of masses becomes a new potential donor of weight equal to the total mass. When individual masses are considered as donors, distances to potential acceptors shall be measured between edges. When combined masses within propagating distance of each other are considered as a donor, the appropriate distance to the edge of potential acceptors shall be computed as a weighted distance from the combined masses.

Calculation of weighted distance from combined masses:

Let M_2, M_3 ..... M_n be donor masses to be combined.
M_1 is a potential acceptor mass.
D_{12} is distance from M_1 to M_2 (edge to edge).
D_{13} is distance from M_1 to M_3 (edge to edge), etc.
To find weighted distance $[D_{1(2,3,\ldots n)}]$ from combined masses to M_1, add the products of the individual masses and distances and divide the total by the sum of the masses thus:

$$D_{1(2,3,\ldots n)} = \frac{M_2 \times D_{12} + M_3 \times D_{13} \ldots + M_n \times D_{1n}}{M_2 + M_3 \ldots + M_n} \qquad (1)$$

Propagation is possible if either an individual donor mass is less than the tabulated distance from an acceptor or a combined mass is less than the weighted distance from an acceptor.

2-3 In determining the distances separating highways, railroads, and inhabited buildings from potential explosions *(see American Table of Distances for Storage of Explosive Materials on page 4 and 5)*, the sum of all masses which may propagate (i.e., lie at distances less than prescribed in the Table) from *either* individual *or* combined donor masses are included. However, when the ammonium nitrate must be included, only 50 percent of its weight shall be used because of its reduced blast effects.

In applying the American Table of Distances to distances from highways, railroads, and inhabited buildings, distances are measured from the nearest edge of potentially explodable material as prescribed in the American Table of Distances, Note 5. *(See American Table of Distances for Storage of Explosive Materials on page 4 and 5.)*

2-4 When all or part of a potential acceptor comprises Explosives Class A as defined in DOT regulations, storage in bullet-resistant magazines is required. Safe distances to stores in bullet-resistant magazines may be obtained from the intermagazine distances prescribed in the American Table of Distances.

2-5 Barricades must not have line-of-sight openings between potential donors and acceptors which permit blast or missiles to move directly between masses.

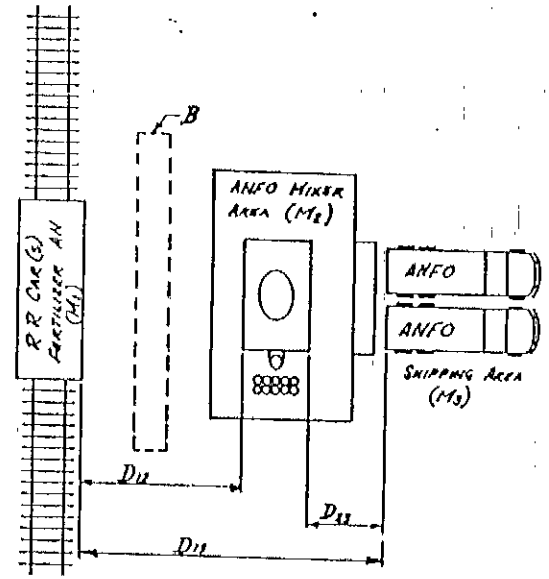

Figure 1.

Example 1 — ANFO Mix Plant (Figure 1)

M_1 100,000 lbs. Fertilizer AN Prills (maximum)
M_2 2,500 lbs. ANFO (maximum)
M_3 80,000 lbs. ANFO (maximum)

D_{11} 20 ft.
D_{21} 20 ft.
D_{11} 50 ft.

No other stores on site; no barricade exists.

Potential Donor	Potential Acceptor	Distance On Site (ft.)	Table Distance, Minimum Required (ft.)	Propagation Possible?
M_1 (2,500 lbs.)	M_1	20	9 × 6 = 54	Yes
M_2 (2,500 lbs.)	M_3	20	32 × 6 = 192	Yes
M_3 (80,000 lbs.)	M_1	50	28 × 6 = 168	Yes
M_3 (80,000 lbs.)	M_2	20	101 × 6 = 606	Yes

Conclusion:

The maximum amount of blasting agent to be considered for public protection at this site is sum of all masses, reducing Fertilizer AN mass by 50 percent as indicated in Paragraph 23.

100,000 × 50% = 50,000
2,500
80,000
132,500 pounds

In accordance with the American Table of Distances, the required separation distance from an inhabited building (unbarricaded) is 2,000 feet.

Example 2 — ANFO Mix Plant (Figure 1)

M_1 100,000 lbs. Fertilizer AN Prills (maximum)
M_2 2,500 lbs. ANFO (maximum)
M_3 80,000 lbs. ANFO (maximum)

D_{11} 20 ft.
D_{21} 20 ft.
D_{11} 50 ft.

No other stores on site; a 4-foot-thick earth barricade exists at B (Figure 1).

Potential Donor	Potential Acceptor	Distance On Site (ft.)	Table Distance, Minimum Required (ft.)	Propagation Possible?
M_1 (2,500 lbs.)	M_1	20	9	No
M_2 (2,500 lbs.)	M_3	20	6 × 32 = 192	Yes
M_3 (80,000 lbs.)	M_1	50	28	No
M_3 (80,000 lbs.)	M_2	20	6 × 101 = 606	Yes
Combined $M_1 + M_2$ (82,500 lbs.)	M_1	49*	30	No

Conclusion:

The maximum amount of blasting agent to be considered for public protection at this site is the sum of M_2 plus M_3 or 82,500 pounds. In accordance with the American Table of Distances, the required separation distance from an inhabited building (unbarricaded) is 2,000 feet. If a natural or artificial barricade protects the building, the required distance is 1,730 feet.

*Compute weighted distance to combined mass by equation 1:

$$\frac{2{,}500 \times 20 + 80{,}000 \times 50}{2{,}500 + 80{,}000} = 49 \text{ feet}$$

The INSTITUTE OF MAKERS OF EXPLOSIVES (IME) is the safety association of the commercial explosives industry in the United States and Canada. The primary concern of IME is the safety and protection of employees, users, the public and the environment in the manufacture, transportation, storage, handling, use and disposal of explosive materials used in blasting and other essential operations.

IME is a non-profit, incorporated association. It was founded in 1913 to provide technically accurate information and recommendations concerning explosive materials and to serve as a source of reliable data about their use. Committees of qualified representatives from IME member companies develop this information and a significant portion of IME's recommendations are embedded in the regulations of federal and state agencies as well as private standard-setting organizations.

The Institute's principal committees are: Environmental Affairs; Legal Affairs; Safety Education; Technical; and, Transportation and Distribution.

"DESTRUCTION OF COMMERCIAL EXPLOSIVE MATERIALS"

At times it may be necessary to destroy commercial explosive materials. These explosives may be fresh material from containers which have been broken during transportation, or materials that are believed to be deteriorated or no longer needed. Deteriorated or damaged explosives may be more hazardous than those in good condition and, hence, require special care in handling and disposal.

In the event it appears necessary to destroy commercial explosives, all handling and destruction should be deferred until a manufacturer has been consulted.

The member companies of the Institute of Makers of Explosives have agreed to supply advice or assistance in destroying commercial explosives to law enforcement agencies, fire departments, inspection and regulatory bodies, as well as users of explosives. If the manufacturer is known, seek his assistance. If the manufacturer is not known, a member company of the Institute of Makers of Explosives will provide advice or assistance.

The above policy of IME member companies relates only to commercial explosive materials. It does not include handling improvised explosive devices or bombs, military ordnance, military explosives or homemade explosive materials.

7/6/93

TITLE 47
LEGISLATIVE RULES
DEPARTMENT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES
DIVISION OF NATURAL RESOURCES

SERIES 35
HAZARDOUS WASTE MANAGEMENT REGULATIONS

§ 47-35-1. SCOPE AND AUTHORITY.

1.1 Scope and Purpose. -- The purpose of these regulations is to provide for the regulation of the generation, treatment, storage, and disposal of hazardous waste to the extent necessary for the protection of the public health and safety and the environment.

1.2 Authority. -- These regulations are promulgated pursuant to the West Virginia Hazardous Waste Management Act, W. Va. Code, § 20-5E-1, et seq.

1.3 Filing Date. May 20, 1994

1.4 Effective Date. June 1, 1994

1.5 Repeal of Former Rule - This rule repeals and replaces the Hazardous Waste Management Regulations, 47 CSR 35, in effect on the date this rule becomes effective.

1.6 Incorporation by Reference. -- Whenever either federal statutes or regulations or state statutes or regulations are incorporated by reference into this rule, the reference is to that statute or regulation in effect on July 1, 1993, unless otherwise noted in the text of this rule.

1.6.1 In applying the federal requirements incorporated by reference throughout this rule, the following exceptions or substitutions apply, unless the context clearly requires otherwise:

1.6.1.a "Office of Waste Management, West Virginia Division of Environmental Protection" shall be substituted for "Environmental Protection Agency."

1.6.1.b "Chief of the Office of Waste Management, West Virginia Division of Environmental Protection" shall be substituted for "Administrator," "Regional Administrator," and "Director."

1.6.1.c Whenever the regulations require publication in the "Federal Register" compliance shall be accomplished by

publication in the "West Virginia Register," a part of the "State Register" created pursuant to the provisions of W. Va. Code, § 29A-2-2.

1.6.1.d Whenever in the federal regulation reference is made to the Resource Conservation and Recovery Act of 1976 § 3010, as amended (42 U.S.C. § 6930), the reference should be to Section 4 of this regulation.

1.7 Whenever a reference is cited in a provision incorporated by reference which cross reference was not incorporated by reference, the provisions of the applicable state law and regulations, if any, control to the extent of any conflict or inconsistency. For example, cross reference to 40 CFR part 264 subpart O -- Incinerators, which was not incorporated by reference, would need to be referenced to the applicable West Virginia Air Pollution Control rule on incineration of hazardous waste, 45 CSR 25.

1.8 In the event a provision of the Code of Federal Regulations incorporated by reference herein includes a section which is inconsistent with the West Virginia Code, the West Virginia Code controls to the extent federal law does not preempt the state law. In the event a provision of the Code of Federal Regulations incorporated by reference herein is beyond the scope of authority granted the Division of Environmental Protection pursuant to statute, or is in excess of the statutory authority, such provision shall be and remain effective only to the extent authorized by the West Virginia Code.

1.9 The provisions of this rule are to be applied prospectively. All orders, determinations, demonstrations, rules, permits, certificates, licenses, waivers, bonds, authorizations and privileges which have been issued, made, granted, approved or allowed to become effective by the Chief, and which are in effect on the date this regulation becomes effective, shall continue in effect according to their terms unless modified, suspended or revoked in accordance with the law.

§ 47-35-2. HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL.

2.1 The provisions of 40 CFR part 260 are hereby adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

2.1.1 The definitions of terms used in this regulation shall have the meaning ascribed to them in 40 CFR parts 260, 261, 262, 263, 264, 265, 266, 267, 268, 270 and 279 with the exceptions, modifications and additions set forth in this section.

2.1.1.a "Major facility" means a disposal or treatment facility which disposes or treats an amount of hazardous waste

exceeding or equal to one (1000) tons during a calendar year, and any storage facility having a storage capacity for one thousand (1,000) tons of hazardous waste or more.

2.1.1.b "Full regulation" means those regulations applicable to generators of greater than one thousand (1000) kilograms of non-acutely hazardous waste in a calendar month.

2.2 The provisions of 40 CFR § 260.2 are excepted from incorporation by reference. Availability of information provided under these rules is controlled by the provisions of W. Va. Code, § 20-5E-11.

2.3 The provisions of 40 CFR § 260.21(d) are excepted from incorporation by reference.

2.4 Petitions for Waste Exclusions.

2.4.1 Persons desiring to exclude as waste at a particular generating facility from the lists set forth in 40 CFR part 261 may petition the chief for such an exclusion. The petition shall include:

2.4.1.a A copy of the petition submitted to the Administrator of the Environmental Protection Agency pursuant to 40 CFR § 260.22, including all demonstration information;

2.4.1.b A copy of the Administrator's approval granting the exclusion pursuant to 40 CFR § 260.20(d); and

2.4.1.c Any other additional information which may be required for the chief to evaluate the petition.

2.4.2 Within one hundred and twenty (120) days of the filing of the petition the chief shall decide whether to approve or to deny the petition and so advise the petitioner. Where a decision to deny a petition is made, the chief shall notify the petitioner of such action in writing, setting forth the reasons therefor.

2.4.3 The chief shall not deny a petition to exclude a waste at a particular facility that has been approved by the Administrator unless scientifically supportable reasons for such denial are advanced which had not been presented to the Administrator.

§ 47-35-3. IDENTIFICATION AND LISTING OF HAZARDOUS WASTE.

3.1 The provisions of 40 CFR part 261 are hereby adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

3.1.1 In order for a mixture of a waste and one or more hazardous wastes identified in 40 CFR §§ 261.3(a)(2)(iv)(A), (B), or (C) to be exempt from the definition of hazardous waste, the owner or operator must comply with the following:

3.1.1.a Provide a certification in writing to the chief that groundwater monitoring complying with either 40 CFR part 265, subpart F or which is approved by the chief, is or will be in place at the wastewater treatment facility identified in 40 CFR §§ 261.3(a)(2)(iv)(A), (B), or (C). A time schedule for the installation of such groundwater monitoring must be included. This requirement does not apply to wastewater treatment units or containers.

3.1.1.b Before claiming an exemption, the owner or operator of each wastewater treatment facility receiving mixtures of wastes under 40 CFR §§ 261.3(a)(2)(iv)(A), (B), or (C) shall notify the chief of the receipt of such wastes on a form prescribed by the chief.

3.1.1.C Annually submit to the chief a list of hazardous wastes that are expected to be present in the mixture to be exempted.

3.2 The provisions of 40 CFR § 261.5 are excepted from incorporation by reference and in lieu thereof the language of this Section 3.2 is inserted. All references to 40 CFR § 261.5 and subparagraphs thereof, shall be deemed references to Section 3.2 and the subparagraphs herein, as appropriate. The provisions of this Section 3.2 are the exclusive requirements for small quantity generators and conditionally exempt small quantity generators notwithstanding any provision of the Code of Federal Regulations or these regulations to the contrary.

3.2.1 **Special Requirements for Hazardous Waste Generated by Small Quantity Generators and Conditionally Exempt Small Quantity Generators.**

3.2.1.a. Small Quantity Generators.

3.2.1.a.A A Small Quantity Generator is a generator of hazardous waste that generates more than 100 kilograms but less than 1000 kilograms of hazardous waste per month.

3.2.1.a.B *Hazardous Waste Determination.* A person who generates wastes must determine if that waste is hazardous by:

(a) Applying knowledge of the waste in light of the materials or processes used and knowledge of the characteristic and listed hazardous wastes contained in 40 CFR part 261.

(b) Testing the waste according to methods set forth in 40 CFR part 261.

(c) Voluntarily declaring the wastes as hazardous and subject to regulation.

3.2.1.a.C The Small Quantity Generator must notify the chief of hazardous waste generation activities in accordance with the provisions of Section 4 of this regulation. A small quantity generator may not treat, store or dispose of, transport or offer for transportation hazardous waste without having received an EPA Identification number.

3.2.1.a.D The Small Quantity Generator may accumulate hazardous waste on site for 180 days unless the distance that waste must be shipped for proper treatment, storage or disposal is more than 200 miles in which case the generator may accumulate hazardous waste on site for 270 days provided that the quantity of waste accumulated on site does not exceed 6,000 kilograms.

(a) If, due to unforeseen, temporary and uncontrollable circumstances hazardous waste must remain on site for longer than 180 or 270 days, an extension of up to 30 days may be granted by the chief.

3.2.1.a.E *Containers*. The Small Quantity Generator must store hazardous waste in containers or tanks that must meet the following requirements.

(a) Containers must be in good condition as defined by Department of Transportation Regulations.

(b) Containers must be kept closed except when adding or removing waste.

(c) Containers must be handled in a way which will not cause them to rupture or leak.

(d) The owner or operator of a Small Quantity Generator facility must inspect hazardous waste container storage areas weekly for leaks and/or deterioration and must remediate these conditions, upon detection.

(e) Incompatible wastes (such as oxidizers and petroleum based degreasers) must not be placed in the same container. (Other examples of potentially incompatible wastes can be found at 40 CFR part 265, Appendix V).

(f) Storage containers for incompatible wastes must be separated by means of a dike, berm, wall or other device.

3.2.1.a.F *Tanks*. Small Quantity Generators who store hazardous waste in tanks must comply with 40 CFR § 265.201.

3.2.1.a.G If a Small Quantity Generator closes (permanently removes from service) a container or tank storage area 40 CFR § 265.114 must be followed to insure that no contamination exists or remains at the storage location.

3.2.1.a.H *Labeling*. Containers and Tanks storing hazardous waste must comply with the following labeling requirements:

(a) On containers, the date upon which each period of accumulation began must be clearly marked and visible for inspection on each container.

(b) Each container and tank must be clearly labeled or marked with the words "Hazardous Waste" while in use on site.

3.2.1.a.I *Manifest*. Small Quantity Generators that transport or offer for transportation, hazardous waste for off site treatment, storage or disposal must prepare a manifest on the currently approved EPA form according to the instructions that accompany that form unless the waste is reclaimed under a contractual agreement where:

(a) The type of waste and frequency of shipments are specified in the agreement;

(b) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and

(c) The generator maintains a copy of the reclamation agreement on site for a period of at least three (3) years.

3.2.1.a.J *Record Keeping*. The Small Quantity Generator must comply with the following record keeping requirements:

(a) A copy of each properly completed manifest must be kept on site for at least three (3) years from the date that the waste was accepted by the initial transporter.

(b) Any test results, waste analyses or other record of a method used to make a hazardous waste determination must be kept on site for at least three (3) years from the date that the waste was sent to on site or off site treatment, storage or disposal.

(c) The three (3) year record retention time is automatically extended during the course of any unresolved enforcement action regarding regulated activity or as requested by the chief.

(d) If a copy of the manifest with the handwritten signature of the owner or operator of the designated facility has not been received by the generator within 60 days of the date the waste was accepted by the initial transporter, the generator must submit a legible copy of the manifest with some indication that the generator has not received confirmation of delivery to the chief.

(e) The chief, as he deems necessary, may require generators to furnish additional reports concerning the quantities and disposition of hazardous wastes.

3.2.1.a.K *Preparedness and prevention.* Facilities must be maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous wastes or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment.

(a) Required Equipment - All facilities must be equipped with the following unless none of the hazardous posed by the wastes handled at the facility could require a particular kind of equipment specified below:

(i) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.

(ii) A device such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments or State or local emergency response teams.

(iii) Portable fire extinguishers, fire control equipment (including special extinguishing equipment), spill control equipment and decontamination equipment.

(iv) Water at adequate volumes and pressure to supply water hose streams, or foam producing equipment or automatic sprinklers or water spray systems.

(b) All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment where required must be tested and maintained as necessary to assure its proper operation in time of emergency.

(c) Whenever hazardous waste is being handled all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another unless such a device is not required by Section 3.2.1.a.K.(a) of these regulations. If there is just one employee on the premises while the facility is operating, that employee must have immediate access to a device referenced by Section 3.2.1.a.K.(a) of these regulations.

(d) The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency unless aisle space is not needed for any of these purposes.

(e) The owner or operator must attempt to make the following arrangements, as appropriate, for the type of waste handled at the facility and the potential need for these services of these organizations.

(i) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places when facility personnel would normally be working, entrances to roads inside the facility and possible evacuation routes.

(ii) Arrangements designating primary emergency authority to a specific policy and a specific fire department where more than one police or fire department might respond and arrangements with any others to provide support to the primary emergency authority.

(iii) Agreements with State emergency response teams, emergency response contractors and equipment suppliers.

(iv) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions or releases at the facility.

(f) Where State or local authorities decline to enter into such agreements, the owner or operator must document the refusal in the operating record.

(g) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility in a short period of time) with the responsibility for coordinating all emergency response measures specified in these regulations. This employee is the emergency coordinator.

(h) The following information must be posted next to the telephone:

(i) The name and telephone number of the emergency coordinator.

(ii) The location of fire extinguishers and spill control equipment and, if present, the fire alarm.

(iii) The telephone number of the fire department unless the facility has a direct alarm.

(i) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

(j) The emergency coordinator or his designee must respond to any emergencies that arise and initiate the proper response to the emergency.

(k) In the event of a fire, explosion or other release that could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must notify the National Response Center at 1-800-424-8802. The report must contain the following information:

(i) The name, address and EPA identification number of the generator.

(ii) The date, time and type of incident.

(iii) Type and quantity of hazardous waste involved in the incident.

(iv) Extent of injuries, if any.

(v) Estimated quantity and disposition of recovered materials, if any.

3.2.1.a.L If a Small Quantity Generator treats (other than elementary neutralization or other excluded methods), stores for longer than the time frames set forth in Section 3.2.1.a.C or disposes of hazardous waste on-site, the generator becomes subject to the permitting requirements of 40 CFR part 265, part 270 and all other applicable parts.

3.2.1.b Conditionally Exempt Small Quantity Generators.

3.2.1.b.A A Conditionally Exempt Small Quantity Generator is a generator of hazardous waste that produces no more than 100 kilograms of waste per month and that meets the requirements stipulated below.

(a) If the generator generates a total of one (1) kilogram or more of acute hazardous waste identified in 40 CFR part 261 in a calendar month, the waste shall be subject to full regulation.

3.2.1.b.B The Conditionally Exempt Small Quantity Generator must make a proper hazardous waste determination as specified in Section 3.2.1.a.B of these regulations. When

determining the amount of hazardous waste generated, a generator need only include those wastes that are generated on site prior to reclamation, are not excluded under 40 CFR part 261, and are not generated, reclaimed and reused on site.

3.2.1.b.C The Conditionally Exempt Small Quantity Generator must notify the chief of its hazardous waste generation activity. No generator shall treat, store or dispose of, transport or offer for transportation hazardous waste without having received an EPA identification number.

3.2.1.b.D A Conditionally Exempt Small Quantity Generator may accumulate up to 1000 kilograms of hazardous waste on site before becoming subject to the requirements of Sections 3.2.1.a.D and 3.2.1.a.H of these regulations.

(a) A total of 100 kilograms of any residue or contaminated soil, waste or other debris resulting from the clean-up of a spill into or on any land or water of any acute hazardous wastes listed in 40 CFR part 261 may be accumulated before becoming subject to full regulation.

3.2.1.b.E Record Keeping. The generator must establish and maintain on site a written record specifying the quantity and types hazardous wastes disposed of, the dates the wastes were transported off site and the final disposition of the wastes. The preferred method for this requirement is via the manifest.

3.2.1.b.F The generator must either treat or dispose of hazardous waste in an on site facility or ensure delivery to an off site treatment storage or disposal facility which:

(a) Is permitted to treat, store or dispose of hazardous waste by a state or the federal government or both;

(b) Is permitted, licensed or registered by a sate other than West Virginia to manage waste generated by conditionally exempt small quantity facilities;

(c) Beneficially uses or re-uses or legitimately recycles or reclaims the waste; or,

(d) Treats the waste prior to beneficial use or re-use of legitimate recycling or reclamation.

3.2.1.b.G Hazardous waste subject to the reduced requirements of Section 3.2.1.b may be mixed with non-hazardous waste and remain subject to the reduced requirements even though the resultant mixture exceeds the quantity limitations in Section 3.2.1.b.D of these regulations unless the mixture meets any of the

characteristics of hazardous waste identified in 40 CFR part 261 with the following modifications:

(a) If any person mixes a waste with a hazardous waste that exceeds a quantity exclusion level of Section 3.2.1.b.D of these regulations, the mixture is subject to full regulations.

(b) If a conditionally exempt small quantity generator's wastes are mixed with used oil, the mixture is subject to 40 CFR part 266, subpart E if it is designated to be burned for energy recovery. Any material produced from such a mixture by processing, blending or other treatment is also so regulated if it is destined to be burned for energy recovery.

3.2.1.b.H If a Conditionally Exempt Small Quantity Generator does not meet all of the requirements set forth herein, the exemption does not apply and the generator will be subject to full regulation.

§ 47-35-4. NOTIFICATION OF HAZARDOUS WASTE ACTIVITY REGULATIONS.

4.1 *Applicability.* Any person that engages in a hazardous waste activity in the State of West Virginia shall notify the chief of these activities, unless such activities are exempted from the requirements of these regulations.

4.1.1 Any person as described in Section 4.1 of these regulations that has notified the EPA or is subject to the requirements to notify EPA as specified in Volume 45, Number 39 of the Federal Register, dated February 26, 1980, pages 12746 through 12754, is subject to the provision of Section 4 of these regulations.

4.1.2 The purpose of Section 4 of these regulations is to provide a means for the State of West Virginia to utilize the information provided by all who complied with the notification requirements of EPA as described in Section 4.1.1 of these regulations or all who initiated hazardous waste activities subsequent to the requirements of EPA as referenced above in Section 4.1.1 of these regulations shall notify the chief of their hazardous waste activities.

4.2 *Notification.* Any person that notified EPA of hazardous waste activities as referenced above in Section 4.1 of these regulations shall provide a copy of that notification to the chief.

4.2.1 Any person involved in hazardous waste activities that did not comply with the notification requirements of EPA, as referenced above in Section 4.1 of the regulations, but is subject to those requirements shall notify the chief in writing of their hazardous waste activities within thirty (30) days of the effective

date of these regulations. Notification may be accomplished by the use of EPA Form 8700-12 or the provision of the same information in any other manner selected by the notifier.

4.2.2 Any person exempted from the federal notification requirements but subject to West Virginia notification requirements as specified in 40 CFR §§ 261.6(b) and 261.5 shall notify the chief in writing of their hazardous waste activities within ninety (90) days of the effective date of these regulations or the date of initiation of such activities, whichever is later. Notification may be accomplished by use of EPA Form 8700-12 or the provision of the same information in any other manner selected by the notifier.

4.2.3 One notification form is required for each generator.

4.2.4 A notification form is required for each storage, treatment, disposal, or other facility. However, if one facility site includes more than one storage, treatment, or disposal activity, only one notification form for the entire facility site is required.

4.2.5 Generators that store, treat, or dispose of hazardous waste on-site shall file a notification form for generation activities as well as storage, treatment, and disposal activities, unless such activities are exempted from the requirements of these regulations.

4.2.6 New generators and those initiating activities subsequent to the EPA notification period referenced in Section 4.1.1 of these regulations shall comply with the EPA identification number requirements and shall provide a copy of their application for an EPA identification number to the Administrator.

§ 47-35-5. STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE.

5.1 The provisions of 40 CFR part 262 are hereby adopted and incorporated by reference with the modifications, exceptions and additions contained in this section.

5.2 The provisions of 40 CFR § 262.10(e) shall be excepted from incorporation.

5.2.1 A person who generates a hazardous waste as defined by 40 CFR part 261 is subject to the compliance requirements and penalties prescribed in W. Va. Code, § 20-5E-1 et seq. if he does not comply with the requirements of this regulation.

5.2.2 All references to 40 CFR § 262.10(e) shall be deemed references to Section 5.2 and the subparagraphs herein, as appropriate.

5.3 The provisions of 40 CFR part 262, subpart E -- Exports of Hazardous Waste are excepted from incorporation by reference and in addition to the requirements contained therein, any person subject to the provisions of subpart E shall file with the chief copies of all documentation, manifests, exception reports, annual reports or records, inter alia, submitted to EPA, the administrator or the regional administrator as required by and within the timeframes set forth in subpart E.

5.4 The provisions of 40 CFR part 262, subpart F -- Imports of Hazardous Waste are excepted from incorporation by reference and in addition to the requirements contained therein, any person subject to the provisions of subpart F shall file with the chief copies of all documentation, manifests, exception reports, annual reports or records, inter alia, submitted to EPA, the administrator or the regional administrator as required by and within the timeframes set forth in subpart F.

§ 47-35-6. STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE.

6.1 The provisions of 40 CFR part 263 are hereby adopted and incorporated by reference insofar as said regulations relate to the transportation of hazardous waste by air and water.

6.2 Note -- The use of railroads for the transportation of hazardous waste is regulated by the West Virginia Public Service Commission rules, "Rules and Regulations Governing the Transportation of Hazardous Waste by Rail", 150 CSR 11. The use of the state highways for the transportation of hazardous waste is regulated under the West Virginia Division of Highways, "Transportation of Hazardous Wastes Upon the Roads and Highways", 157 CSR 7.

§ 47-35-7. STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES.

7.1 The standards in Section 7 of these regulations apply to owners and operators of all facilities which treat, store, or dispose of hazardous waste except as otherwise provided by law. In addition to the standards in Section 7 of these regulations, the regulation of the Air Pollution Control Commission, 45 CSR 25, apply to management facilities which may emit hazardous waste or the constituents thereof to the atmosphere including incineration facilities except as otherwise provided by law. For purposes of Section 7 of these regulations, the following persons are considered to be incinerating hazardous waste:

7.1.1 Owners or operators of hazardous waste incinerators; and

7.1.2 Owners or operators of boilers or industrial furnaces used to destroy wastes.

7.2 The provisions of 40 CFR part 264 are hereby adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

7.3 The provisions of 40 CFR part 264, subpart F -- Releases From Solid Waste Management Units are incorporated by reference with the following modifications, exceptions and additions.

7.3.1 For purposes of 40 CFR § 264.92, reference to the "Regional Administrator" shall be to the "Water Resources Board." The Water Resources Board establishes ground-water protection standards pursuant to the authority granted the Board in W. Va. Code, § 20-5M-4.

7.3.2 For purposes of 40 CFR § 264.94 and subparagraphs thereof, the Water Resource Board rule on Groundwater Protection Standards, 46 CSR 7 and the subparagraphs therein, shall apply as required pursuant to the authority granted the Water Resource Board in W. Va. Code, § 20-5M-4.

7.4 The provisions of 40 CFR part 264, subpart H -- Financial Requirements are adopted and incorporated by reference with the following modifications:

7.4.1 The provisions of 40 CFR §§ 264.149 and 264.150 are excepted from incorporation by reference.

7.5 The provisions of 40 C.F.R. §§ 264.343, 264.344, 264.345 and 264.347 relating to incinerators are excepted from incorporation by reference. Consult the regulations of the Air Pollution Control Commission regarding emissions from incinerators.

7.5.1 Consult the Air Pollution Control Commission regulations, 45 CSR 25, Regulations to Prevent & Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities.

7.6 The provisions of 40 CFR part 264, subparts AA and BB are excepted from incorporation by reference.

§ 47-35-8. INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES.

8.1 The provisions of 40 CFR part 265 are adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

8.2 The provisions of 40 CFR §§ 265.149 and 265.150 are excepted from incorporation by reference.

8.3 The provisions of 40 CFR part 265, subpart J -- Tank Systems are adopted and incorporated by reference with the following modification:

8.3.1 The provisions of 40 CFR § 265.193(a)(4) is excepted from incorporation by reference and in lieu thereof the following language shall be inserted:

"(4) For those existing tank systems for which the age cannot be documented, within eight years of April 1, 1988; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches 15 years of age, or within two years of April 1, 1988, whichever comes later; and"

8.4 The provisions of 40 C.F.R. § § 265.345, 265.347 and 265.352 relating to incinerators are excepted from incorporation by reference. Consult the regulations of the Air Pollution Control Commission regarding emissions from incinerators.

8.5 The provisions of 40 CFR part 265, subpart P -- Thermal Treatment are incorporated by reference except for 40 CFR § 265.383 which is excepted from incorporation by reference. Consult the regulations of the Air Pollution Control Commission regarding emissions from thermal treatment units.

8.6 The provisions of 40 CFR part 265, subparts AA and BB are excepted from incorporation by reference. Consult the regulations of the Air Pollution Control Commission regarding air emission standards for process vents and air emissions standards for equipment leaks.

§ 47-35-9. STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES.

9.1 The provisions of 40 CFR part 266 are hereby adopted and incorporated by reference. except Subp. H

§ 47-35-10. INTERIM STANDARDS FOR OWNERS AND OPERATORS OF NEW HAZARDOUS WASTE LAND DISPOSAL FACILITIES.

10.1 The provisions of 40 CFR part 267 are hereby adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

10.2 The provisions of 40 CFR part 267, subpart G -- Underground Injection are excepted to the extent the rules set forth therein

conflict or are inconsistent with the provisions of West Virginia Water Resources Board, Underground Injection Control 46 CSR 9.

§ 47-35-11. LAND DISPOSAL RESTRICTIONS.

11.1 The provisions of 40 CFR part 268 are hereby adopted and incorporated by reference.

§ 47-35-12. THE HAZARDOUS WASTE PERMIT PROGRAM.

12.1 The provisions of 40 CFR part 270 are hereby adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

12.2 For purposes of this section, the term "RCRA permit" means "West Virginia Hazardous Waste Permit." The following additional requirements shall apply to obtain a hazardous waste permit in West Virginia. All references in 40 C.F.R. Part 270 to 40 C.F.R. Part 124 shall be deemed to be references to the applicable provisions of Sections 12.2.2 through 12.2.9 of this regulation. To the extent of any inconsistency with 40 CFR part 270, the specific provisions contained herein shall control to the extent of the inconsistency, if any.

12.2.1 Application Fees.

12.2.1.a. Any person who applies for a permit for the construction or operation of a hazardous waste management facility, or both, shall submit as part of said application a money order or cashier's check payable to "The Hazardous Waste Management Fund" of the State Treasury. Persons required to obtain a permit-by-rule pursuant to these regulations are not required to pay a permit application fee.

12.2.1.b. Such fee shall be determined by the schedule set forth in Table I of these regulations.

12.2.1.c. The chief reserves his right to promulgate rules and regulations establishing a permit renewal fee at a later date.

12.2.2 Draft Permits.

12.2.2.a Once an application is complete, the chief shall tentatively decide whether to prepare a draft permit or to deny the application.

12.2.2.b If the chief decides to prepare a draft permit, a draft permit shall be prepared that contains the following information:

12.2.2.b.A All conditions under 40 CFR §§ 270.30 and 270.32;

12.2.2.b.B All compliance schedules under 40 CFR § 270.33;

12.2.2.b.C All monitoring requirements under 40 CFR § 270.31; and

12.2.2.b.D Standards for treatment, storage, and disposal and other permit conditions under 40 CFR part 270.

12.2.2.c A fact sheet prepared in accordance with Section 12.2.3 of these regulations shall accompany the draft permit.

12.2.3 Fact Sheet.

12.2.3.a A fact sheet shall be prepared by the chief for every draft permit for each hazardous waste management facility or activity. The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The chief shall send this fact sheet to the applicant and, upon request, to any other person.

12.2.3.b The fact sheet shall include, when applicable:

12.2.3.b.A A brief description of the type of facility or activity which is the subject of the draft permit;

12.2.3.b.B The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged. A description of the type of wastes, fluids, or pollutants shall include, but not limited to, the characteristics of the waste materials and the potential effects on public health and the environment;

12.2.3.b.C A brief summary of the basis for the draft permit conditions including references to applicable statutory or regulatory provisions;

12.2.3.b.D Reasons why any requested variances or alternatives to required standards do or do not appear justified;

12.2.3.b.E A description of the procedures for reaching a final decision on the draft permit including:

(a) The beginning and ending dates of the comment period and the address where comments will be received;

(b) Procedures for requesting a hearing and the nature of that hearing; and

(c) Any other procedures by which the public may participate in the final decision; and

12.2.3.b.F Name and telephone number of a person to contact for additional information.

12.2.4 Public Access to Information.

12.2.4.a Any records, reports, or information and nay permit, permit applications,a nd related documentation within the chief's possession shall be available to the public for inspection and copying; provided, however, that upon a satisfactory showing to the chief that such records, reports, permit documentation, or information, or any part hereof would, if made public, divulge methods or processes or activities entitled to protection as trade secrets, the chief shall consider, treat, and protect such records as confidential.

12.2.4.b It shall be the responsibility of the person claiming any information as confidential under the provisions of Section 12.2.4 of these regulations to clearly mark each page containing such information with the word "CONFIDENTIAL" and to submit an affidavit setting forth the reasons that said person believes that such information is entitled to protection.

12.2.4.c Any document submitted to the chief which contains information for which claim of confidential information is made shall be submitted in a sealed envelope marked "CONFIDENTIAL" and address to the chief. The document shall be submitted in two (2) separate parts. The first part shall contain all information which is not deemed by the person preparing the report as confidential and shall include appropriate cross-references to the second part which contains data, words, phrases, paragraphs, or pages and appropriate affidavits containing or relating to information which is claimed to be confidential.

12.2.4.d No information shall be protected as confidential information by the chief unless it is submitted in accordance with the provisions of Section 12.2.4.c of these regulations and no information which is submitted in accordance with the provisions of Section 12.2.4.c of these regulations shall be afforded protection as confidential information unless the chief finds that such protection is necessary to protect trade secrets. The person who submits information claimed to be confidential shall receive written notice form the chief as to whether the information has been accepted as confidential or not.

12.2.4.e All information which meets the tests of Section 12.2.4.d of these regulations shall be marked with the term

"ACCEPTED" and shall be protected as confidential information. If said person fails to satisfactorily demonstrate to the chief that such information in the form presented to him meets the criteria of Section 12.2.4.e of these regulations, the chief shall mark the information "REJECTED" and promptly return such information to the person submitting such information.

12.2.4.f Nothing contained herein shall be construed so as to restrict the release of relevant confidential information during situations declared to be emergencies by the chief or his designee.

12.2.4.g Nothing in Section 12.2.4 of these regulations may be construed as limiting the disclosure of information by the division to any officer, employee, or authorized representative of the State or federal government concerned with effecting the purposes of Section 12.2.4 of these regulations.

12.2.4.h Persons interested in obtaining information pursuant to Section 12.2.4 of these regulations should submit a request in accordance with Title 46, Water Resources Board, Series 8 (46 C.S.R. 8).

12.2.4.i Claims of confidentiality for the name and address of any permit applicant or permittee will be denied.

12.2.5 Public Participation in Permit Process.

12.2.5.a Scope. Public notice shall be given that the following actions have occurred:

12.2.5.a.A A draft permit has been prepared; or

12.2.5.a.B A hearing has been scheduled.

12.2.5.b Timing.

12.2.5.b.A Public notice of the preparation of a draft permit required under Section 12.2.5 of these regulations shall allow at least forty-five (45) days for public comment.

12.2.5.b.B Public notice of a public hearing shall be given at least thirty (30) days before the hearing.

12.2.5.c Methods. Public notice of activities described in Section 12.2.5 of these regulations shall be given by the following methods:

12.2.5.c.A By mailing a copy of the notice to the following persons:

(a) The applicant;

(b) Any federal or state agency which the chief knows has issued or is required to issue a RCRA, UIC, PSD, NPDES or 404 permit for the facility or activity including, but not limited to, the U.S. Environmental protection Agency and the U.S. Army Corps of Engineers;

(c) Each State agency having authority under State law with responsibility to the construction or operation of such facility;

(d) Any unit of local government having jurisdiction over the area where the facility is proposed to be located;

(e) Other appropriate federal or State agencies including, but not limited to, the U.S. Fish and Wildlife Service, the U.S. Forest Service, the West Virginia Department of Culture and History, the West Virginia Department of Health, other governmental authorities including any affected states, and the Advisory Council on Historic Preservation (Suite 430, 1522 K Street, N.W., Washington, D.C. 20005); and

(f) Persons on the mailing list developed by:

(i) Including those who request in writing to be on the list.

(ii) Soliciting persons for "area lists" from participants in past permit proceedings in that area.

(iii) Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in appropriate publications of the State. The chief may update the mailing list by requesting written indication of continued interest form those listed. The chief may delete from the list the name of any person who fails to respond to such a request.

(g) By publishing the public notice, in the form of a Class I legal advertisement in a qualified daily or weekly newspaper of general circulation and broadcasting the public notice over local radio stations in the area in which the facility is or is proposed to be located. A qualified daily or weekly newspaper is, for the purpose of Section 12.2.5 of these regulations, any newspaper which meets the provisions of W. Va. Code, § 59-3-1(b).

(h) By any other method reasonably calculated to give actual notice of the action in question to the person potentially affected by it, including press releases or any other forum of medium to elicit public participation.

(i) Any person otherwise entitled to receive notice under Section 12.2.5 of these regulations may waive the right to receive notice for any classes and categories of permits.

12.2.5.d Personal Notification by Facility Owner or Operator to Individual Residents.

12.2.5.d.A Following the submittal of a Part B application which is deemed complete by the chief, and before the public notice of the preparation of a draft permit as required under Section 12.2.5.a of these regulations, the facility owner or operator shall serve notice upon the residence of all persons residing within one-quarter mile of the boundaries of the specific hazardous waste management facility.

12.2.5.d.B Service of such notice as herein provided shall be made by delivering a copy to the residence of each person upon whom service must be made or by mailing it by registered mail to the last known address of each person or by such other reasonable means as the chief and the owner or operator agree will provide an effective and practical method of notification.

12.2.5.d.C Following completion of service of notice as set forth herein, and no later than the date of public notice required in Section 12.2.5.a of these regulations, the owner or operator shall certify in writing to the chief that service has been completed, describe the method of service, and provide a copy of the written notice employed to the chief.

12.2.5.d.D The personal notice required herein shall be a written notice containing at a minimum:

(a) The name and address of the permit applicant;

(b) The name, location, and type of hazardous waste management facility for which the application has been submitted;

(c) A statement advising the recipients of the notice that a complete application for permit has been submitted; and

(d) A statement advising the notice recipients that an opportunity for public comment upon the application and draft permit will be made available to them upon completion of division review of the application and that such notice will be published as a legal advertisement in a local newspaper and broadcast over the radio.

12.2.5.e Contents.

12.2.5.e.A All public notices issued under Section 12.2.5 of these regulations shall contain the following information:

(a) Name and address of the office processing the permit action for which notice is being given;

(b) Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit;

(c) A brief description of the business conducted at the facility described in the permit application or the draft permit;

(d) The name, address, and telephone number of a person from whom interested persons may obtain further information including copies of the draft permit or fact sheet, and the application; and

(e) A brief description of the comment procedures required by Sections 12.2.6 and 12.2.7 of these regulations and the time and place of any hearing that will be held, including a statement of procedures to request a hearing unless already scheduled, and other procedures by which the public may participate in the final permit decision.

12.2.5.e.B In addition to the general public notice described in Section 12.2.5.e.A of these regulations, the public notice of a hearing shall contain the following information:

(a) Reference to the date of previous public notices relating to the permit;

(b) Date, time and place of the hearing;

(c) A brief description of the nature and purpose of the hearing, including the applicable rules and procedures; and

(d) Name and address of the nearest district office where the file will be available for inspection.

12.2.6 Public Comment and Request for Public Hearings. During the public comment period provided that any interested person may submit written comments on the draft permit and may request a public hearing if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments shall be considered in making the final decision and shall be answered as provided in Sections 12.2.8 and 12.2.9 of these regulations.

12.2.7 Public Hearings.

12.2.7.a The chief shall hold a public hearing whenever he finds, on the basis of requests, a significant degree of public interest in a draft permit(s). The chief may also hold a public

hearing at his discretion whenever, for instance, such hearing may clarify one or more issues involved in the permit decision.

12.2.7.b The chief shall hold a public hearing upon receiving written notice of opposition to a draft permit and a request for public hearing within forty-five (45) days of the public notice. Whenever possible the chief shall schedule a hearing under Section 12.2.7 of these regulations at a location convenient to the nearest such proposed facility. Public notice of the hearing shall be given as specified in Section 12.2.5 of these regulations.

12.2.8 Reopening of the Public Comment Period.

12.2.8.a If any data, information, or arguments submitted during the public comment period appear to raise substantial new questions concerning a permit, the chief may take one or more of the following actions:

12.2.8.a.A Prepare a new draft permit, appropriately modified, under Section 12.2 of these regulations.

12.2.8.a.B Prepare a revised fact sheet under Section 12.2 of these regulations and reopen the comment period.

12.2.8.a.C Reopen or extend the comment period under Section 12.2 of these regulations to give interested persons an opportunity to comment on the information or arguments submitted.

12.2.8.b Comments filed during the reopened comment period shall be limited to the substantial new questions that caused its reopening. The public notice under Section 12.2 of these regulations shall define the scope of the reopening.

12.2.9 Response to Comments.

12.2.9.a At the time that any final permit is issued, the chief shall issue a response to comments. This response shall be in writing and shall:

12.2.9.a.A Specify which provisions, if any, of the draft permit have been changed in the final permit and the reasons for change; and

12.2.9.a.B Briefly describe and respond to all significant comments on the draft permit raised during the public comment period or hearing.

12.2.9.b The response to comments shall be delivered to any person who commented or any person who requests the same.

12.3 The provisions of 40 CFR § 270.12 are excepted from incorporation by reference. Availability of information provided under these rules is controlled by the provisions of W. Va. Code, § 20-5E-11 and section 12.2.4 of these regulations.

12.4 The provisions of 40 C.F.R. § 270.24 are excepted from incorporation by reference. Consult the regulations of the Air Pollution Control Commission regarding emissions from process vents.

12.5 The provision of 40 C.F.R. §§ 270.60(b) and 270.64 are excepted from incorporation by reference. Consult the regulations of the Office of Water Resources and the Water Resources Board regarding the requirements for underground injection wells.

§ 47-35-13. DEED AND LEASE DISCLOSURE; NOTICE IN DEED TO PROPERTY.

13.1 The owner of the property on which a hazardous waste management facility is located must record, in accordance with State law, a notation on the deed or lease to the facility property -- or on some other instrument that is normally examined during title search -- that will in perpetuity notify any potential purchaser of the property that:

13.1.1 The land has been used to manage hazardous wastes; and

13.1.2 Its use is restricted under 40 CFR § 264.117(c).

13.2 Upon actual transfer of property which contains hazardous wastes that have been stored, treated, or disposed of, the previous owner shall notify the chief in writing of such transfer.

13.3 Other Requirements. Nothing contained in this Section 13 of these regulations shall relieve any person from complying with the requirements on deed and lease disclosures set forth in W. Va. Code, § 20-5E-20.

§ 47-35-14. STANDARDS FOR THE MANAGEMENT OF USED OIL.

14.1 The provisions of 40 CFR part 279 are hereby adopted and incorporated by reference. Notwithstanding the effective date of this rule, the effective date of the provisions of this Section 14 shall be July 1, 1995.

§ 47-35-15. MISCELLANEOUS PROVISIONS.

15.1 The provisions set forth in Appendix 1 are incorporated as a part of these regulations.

APPENDIX 1

§ 1 The provisions contained in this Appendix apply to existing surface impoundments which met the demonstration requirements set forth below by January 1, 1993.

(a) Notwithstanding the provisions of 40 CFR § 264.113 (b), the owner or operator of a surface impoundment used for disposal of hazardous waste ceasing the receipt of hazardous waste prior to November 8, 1988 need not close such surface impoundment within one hundred and eighty (180) days after receiving the final volume of hazardous waste but may continue to receive waste provided that the owner or operator satisfy the chief that the following requirements are or will be met:

(1) The owner or operator of such surface impoundment will complete closure activities in accordance with the approved closure plan and within one hundred and eighty (180) days after receiving the final volume of waste at the surface impoundment. The chief may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification of the permit and demonstrates that the closure activities will, of necessity, take longer than one hundred and eighty (180) days to complete;

(2) The owner or operator has a hazardous waste management permit with an approved closure plan for such facility requiring compliance with all applicable provisions of these regulations as though it were an operating hazardous waste surface impoundment;

(3) The owner or operator institutes approved operating procedures designed to minimize the head created by any liquid in the surface impoundment; and either,

(4) The owner and operator makes a demonstration which is approved by the chief under § 2(b)(9)(D); or

(5) The surface impoundment contains a liner which is either :

(A) A synthetic liner for which there is no evidence of leakage;

(B) A liner of compacted material at least three (3) feet thick with a permeability of no more than 1 X 10-7 centimeters per second; or

(C) If the owner or operator demonstrates to the chief and the chief finds for the surface impoundment that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous

constituents into the groundwater or surface water beyond the point of compliance at least as effectively as such liners.

§ 2 In addition to the design and operating requirements set forth in 40 CFR § 264.221, the following design and operation requirements shall be applicable to existing surface impoundments which made the demonstration referenced above.

Specific Design and Operating Requirements for Surface Impoundments.

(a) In the event of a conflict or inconsistency between the provisions of 40 CFR § 264.221 and this section, the provisions of this section control to the extent of any conflict or inconsistency.

(b) Design Requirements. (1) A surface impoundment must be designed and constructed to provided maintenance of sufficient freeboard, and to prevent overtopping resulting from wave or wind action; normal and abnormal operation; malfunctions of level controllers, alarms, and other equipment; precipitation; human error; or any combination thereof. The freeboard shall not be less than sixty centimeters (60 cm) (2 feet) or an amount of freeboard other than sixty centimeters (60 cm) based on documentation acceptable to the chief that the specified amount of freeboard will prevent overtopping.

(2) A surface impoundment must be designed and constructed so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.

(3) A surface impoundment must be designed and constructed to prevent discharge into or on the land, and to State waters (except discharges authorized by an NPDES permit during the life of the impoundment) by use of a liner system and leachate detection, collection and removal system which complies with 40 CFR § 264.221.

(4) Dikes must be designed and constructed with sufficient structural integrity to prevent massive failure without dependence on any liner system included in the surface impoundment design.

(5) A leachate detection, collection, and removal system must be designed and constructed so that liquid will flow freely from the collection system to prevent the creation of pressure head within collection system in excess of that necessary to cause the liquid to flow freely.

(6) Existing facilities are exempt from the requirements outlined in §§ 2(b)(3) and (b)(5) of this Appendix,

and 40 CFR §§ 264.221(a), 264.221(d), 264.227(d)(2), provided that the provisions of §2(b)(7) of this Appendix are complied with.

(7) The owners or operator, in order to qualify for the exemption in §2(b)(6), must demonstrate that statistically significant increases of hazardous constituents do not occur in the groundwater or surface water during its active life and the post closure period, except as provided in § 1(a) of this Appendix.

(8) If statistically significant increases of hazardous constituents are detected in the groundwater beneath the facility (including the regulated unit) the owner or operator must comply with the corrective action outlined in 40 CFR § 264.100 (if groundwater contamination has been determined).

(9) If the owner or operator determines that the corrective action plan being implemented under 40 CFR § 264.100 is insufficient for causing cessation of hazardous waste constituents migration, then the unit must be closed. However, if it is determined that the corrective action will adequately arrest and remove the contamination, the owner may choose one of the four (4) options which will become part of the conditions of the permit:

(A) Retrofit the unit with liners in accordance with 40 CFR § 264.221(a);

(B) Stop the leak;

(C) Continue the operation of the unit, while concurrently developing and implementing an alternate treatment, storage or disposal method, for a period of five (5) years at which time the unit must be closed; or

(D) Continue the operation of the unit provided a demonstration can be made and approved by the chief that no adverse impact to human health or the environment will result from the continued operation of the unit during the active life and closure and post-closure period, provided that the facility continues to comply with an approved corrective action program. Such demonstration must include and discuss the following:

(i) Potential adverse effects on groundwater quality, considering:

(A) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity of groundwater and the direction of groundwater flow;

(D) The proximity and withdrawal rates of groundwater users;

(E) The current and future uses of the groundwater in the area;

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

(G) The potential for health risks caused by human exposure to hazardous constituents;

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

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

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

(A) The volume and physical and chemical characteristics of the waste in the regulated unit;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity and quality of groundwater and the direction of groundwater flow;

(D) The patterns of rainfall in the region;

(E) The proximity of the regulated unit to surface waters;

(F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(G) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

(H) The potential for health risks caused by human exposure to waste constituents;

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

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

(iii) In making any determination under section §1(a) concerning the use of groundwater in the area around the facility, the chief will consider any identification of underground sources of drinking water and exempted aquifers made under Title 46, Water Resources Board, Series 9 (46 C.S.R. 9)

(c) Operating Requirements. (1) A surface impoundment must be operated and maintained to prevent any overtopping resulting from wind and wave action; overfilling; normal and abnormal operation; malfunctions of level controllers, alarms, or other equipment; precipitation; human error; or any combination thereof.

(2) A surface impoundment must be operated to maintain at least the amount of freeboard specified by the chief in the permit.

(3) A leachate detection, collection, and removal system installed to comply with 40 CFR § 264.221(a) must be operated so that leachate flows freely from the collection system and is removed as it accumulates or with sufficient frequency to prevent backwater within the collection system.

(4) Earthen dikes must be kept free of:

(A) Perennial woody plants with root systems which could affect the structural integrity of the dike; and

(B) Burrowing mammals which could remove earthen materials upon which the structural integrity of the dike is dependent or creates leaks through burrows in the dike.

(5) Run-on must be diverted away from a surface impoundment.

TABLE 1

PERMIT APPLICATION FEE SCHEDULE

-Storage-

EPA Code	Activity	Fee	
S01	Drum	100 tons capacity $1,000.00	≥100 tons capacity $3,000.00
S02	Tank	100 tons capacity $1,000.00	≥100 tons capacity $3,000.00
S03	Waste Pile	100 tons capacity $1,500.00	≥100 tons capacity $3,000.00
S04	Surface Impoundment	1,000 tons capacity $2,500.00	≥1,000 tons capacity $3,000.00

-Disposal-

EPA Code	Activity	Fee	
D80	Landfill	1,000 tons/year $2,500.00	≥1,000 tons/year $5,000.00
D81	Land Application	1,000 tons/year $2,500.00	≥1,000 tons/year $5,000.00
D83	Surface Impoundment	1,000 tons/year $2,500.00	≥1,000 tons/year $5,000.00

-Treatment-

EPA Code	Activity	Fee	
T01	Tank	100 tons capacity $1,000.00	≥100 tons capacity $3,000.00
T02	Surface Impoundment	1,000 tons/year $2,500.00	≥1,000 tons/year $3,000.00
T03	Incinerator	1,000 tons/year $1,000.00	≥1,000 tons/year $3,000.00
T04	Other	(Reserved)	(Reserved)

information" justifying modification, revocation, or reissuance of a permit under §270.41 of this chapter.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 48 FR 14295, Apr. 1, 1983; 50 FR 2005, Jan. 14, 1985]

264.344 Hazardous waste incinerator permits.

(a) The owner or operator of a hazardous waste incinerator may burn only wastes specified in his permit and only under operating conditions specified for those wastes under §264.345, except:

(1) In approved trial burns under §270.62 of this chapter; or

(2) Under exemptions created by §264.340.

(b) Other hazardous wastes may be burned only after operating conditions have been specified in a new permit or a permit modification as applicable. Operating requirements for new wastes may be be based on either trial burn results or alternative data included with part B of a permit application under §270.19 of this chapter.

(c) The permit for a new hazardous waste incinerator must establish appropriate conditions for each of the applicable requirements of this subpart, including but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of §264.345, sufficient to comply with the following standards:

(1) For the period beginning with initial introduction of hazardous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish operating conditions required in paragraph (c)(2) of this section, not to exceed a duration of 720 hours operating time for treatment of hazardous waste, the operating requirements must be those most likely to ensure compliance with the performance standards of §264.343, based on the Regional Administrator's engineering judgment. The Regional Administrator may extend the duration of this period once for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

(2) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the performance standards of §264.343 and must be in accordance with the approved trial burn plan;

(3) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Regional Administrator, the operating requirements must be those most likely to ensure compliance with the performance standards of §264.343, based on the Regional Administrator's engineering judgement.

(4) For the remaining duration of the permit, the operating requirements must be those demonstrated, in a trial burn or by alternative data specified in §270.19(c) of this chapter, as sufficient to ensure compliance with the performance standards of §264.343.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 48 FR 14295, Apr. 1, 1983; 50 FR 4514, Jan. 31, 1985]

§264.345 Operating requirements.

(a) An incinerator must be operated in accordance with operating requirements specified in the permit. These will be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in §264.344(b) and included with part B of a facility's permit application) to be sufficient to comply with the performance standards of §264.343.

(b) Each set of operating requirements will specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed which will not affect compliance with the performance requirement of §264.343) to which the operating requirements apply. For each such waste feed, the permit will specify acceptable operating limits including the following conditions:

(1) Carbon monoxide (CO) level in the stack exhaust gas;

(2) Waste feed rate;

(3) Combustion temperature;

(4) An appropriate indicator of combustion gas velocity;

(5) Allowable variations in incinerator system design or operating procedures; and

(6) Such other operating requirements as are necessary to ensure that the performance standards of §264.343 are met.

(c) During start-up and shut-down of an incinerator, hazardous waste (except wastes exempted in accordance with §264.340) must not be fed into the incinerator unless the incinerator is operating within the conditions of operation (temperature, air feed rate, etc.) specified in the permit.

(d) Fugitive emissions from the combustion zone must be controlled by:

(1) Keeping the combustion zone totally sealed against fugitive emissions; or

(2) Maintaining a combustion zone pressure lower than atmospheric pressure; or

(3) An alternate means of control demonstrated (with part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(e) An incinerator must be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under paragraph (a) of this section.

(f) An incinerator must cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 50 FR 4514, Jan. 31, 1985]

§264.346 [Reserved]

§264.347 Monitoring and inspections.

(a) The owner or operator must conduct, as a minimum, the following monitoring while incinerating hazardous waste:

(1) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit must be monitored on a continuous basis.

(2) CO must be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere.

(3) Upon request by the Regional Administrator, sampling and analysis of the waste and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the performance standards of §264.343.

(b) The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions, and signs of tampering.

(c) The emergency waste feed cutoff system and associated alarms must be tested at least weekly to verify operability, unless the applicant demonstrates to the Regional Administrator that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted at least monthly.

(d) This monitoring and inspection data must be recorded and the records must be placed in the operating log required by §264.73.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27533, June 24, 1982; 50 FR 4514, Jan. 31, 1985]

§§264.348—264.350 [Reserved]

§264.351 Closure.

At closure the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the incinerator site.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with §261.3(d) of this chapter, that the residue removed from the incinerator is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with applicable requirements of parts 262 through 266 of this chapter.]

[46 FR 7678, Jan. 23, 1981]

FR 2004, Jan. 14, 1985]

Subpart O—Incinerators

64.340 Applicability.

a) The regulations of this subpart ply to owners and operators of haz- ious waste incinerators (as defined §260.10 of t his chapter), except as 4.1 provides otherwise.

b) After consideration of the waste alysis included with part B of the rmit application, the Regional Ad- inistrator, in establishing the permit nditions, must exempt the applicant om all requirements of this subpart cept §264.341 (Waste analysis) and 64.351 (Closure),

(1) If the Regional Administrator nds that the waste to be burned is:

(i) Listed as a hazardous waste in art 261, subpart D, of this chapter olely because it is ignitable (Hazard ode I), corrosive (Hazard Code C), or oth; or

(ii) Listed as a hazardous waste in art 261, subpart D, of this chapter olely because it is reactive (Hazard ode R) for characteristics other than hose listed in §261.23(a) (4) and (5), and ill not be burned when other hazard- us wastes are present in the combus- ion zone; or

(iii) A hazardous waste solely because possesses the characteristic of ignit- bility, corrosivity, or both, as deter- nined by the test for characteristics of azardous wastes under part 261, sub- art C, of this chapter; or

(iv) A hazardous waste solely because t possesses any of the reactivity char- oteristics described by §261.23(a) (1), 2), (3), (6), (7), and (8) of this chapter, nd will not be burned when other haz- rdous wastes are present in the com- bustion zone; and

(2) If the waste analysis shows that the waste contains none of the hazard- ous constituents listed in part 261, ap- pendix VIII, of this chapter, which would reasonably be expected to be in the waste.

(c) If the waste to be burned is one which is described by paragraphs (b)(1)(i), (ii), (iii), or (iv) of this section and contains insignificant concentra- tions of the hazardous constituents listed in part 261, appendix VIII, of this chapter, then the Regional Adminis- trator may, in establishing permit con- ditions, exempt the applicant from all requirements of this subpart, except §264.341 (Waste analysis) and §264.351 (Closure), after consideration of the waste analysis included with part B of the permit application, unless the Re- gional Administrator finds that the waste will pose a threat to human health and the environment when burned in an incinerator.

(d) The owner or operator of an incin- erator may conduct trial burns subject only to the requirements of §270.62 of this chapter (Short term and incinera- tor permits).

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 48 FR 14295, Apr. 1, 1983; 50 FR 665, Jan. 4, 1985; 50 FR 49203, Nov. 29, 1985; 56 FR 7207, Feb. 21, 1991]

§264.341 Waste analysis.

(a) As a portion of the trial burn plan required by §270.62 of this chapter, or with part B of the permit application, the owner or operator must have in- cluded an analysis of the waste feed sufficient to provide all information re- quired by §270.62(b) or §270.19 of this chapter. Owners or operators of new hazardous waste incinerators must pro- vide the information required by §270.62(c) or §270.19 of this chapter to the greatest extent possible.

(b) Throughout normal operation the owner or operator must conduct suffi- cient waste analysis to verify that waste feed to the incinerator is within the physical and chemical composition limits specified in his permit (under §264.345(b)).

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 48 FR 14295, Apr. 1, 1983; 48 FR 30115, June 30, 1983; 50 FR 4514, Jan. 31, 1985]

§264.342 Principal organic hazardous constituents (POHCs).

(a) Principal Organic Hazardous Con- stituents (POHCs) in the waste feed must be treated to the extent required by the performance standard of §264.343.

(b)(1) One or more POHCs will be specified in the facility's permit, from among those constituents listed in part 261, appendix VIII of this chapter, for each waste feed to be burned. This specification will be based on the de-

gree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses and trial burns or alter- native data submitted with part B of the facility's permit application. Or- ganic constituents which represent the greatest degree of difficulty of incinera- tion will be those most likely to be designated as POHCs. Constituents are more likely to be designated as POHCs if they are present in large quantities or concentrations in the waste.

(2) Trial POHCs will be designated for performance of trial burns in accord- ance with the procedure specified in §270.62 of this chapter for obtaining trial burn permits.

[46 FR 7678, Jan. 23, 1981, as amended at 48 FR 14295, Apr. 1, 1983]

§264.343 Performance standards.

An incinerator burning hazardous waste must be designed, constructed, and maintained so that, when operated in accordance with operating require- ments specified under §264.345, it will meet the following performance stand- ards:

(a)(1) Except as provided in para- graph (a)(2) of this section, an incinera- tor burning hazardous waste must achieve a destruction and removal effi- ciency (DRE) of 99.99% for each prin- cipal organic hazardous constituent (POHC) designated (under §264.342) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = \frac{(W_{in} - W_{out})}{W_{in}} \times 100\%$$

where:

W_{in}=mass feed rate of one principal organic hazardous constituent (POHC) in the waste stream feeding the incinerator

and

W_{out}=mass emission rate of the same POHC present in exhaust emissions prior to re- lease to the atmosphere.

(2) An incinerator burning hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic hazardous constituent (POHC) designated (under §264.342) in its permit. This perform- ance must be demonstrated on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-*p*-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in §264.343(a)(1). In addition, the owner or operator of the incinerator must notify the Regional Administrator of his in- tent to incinerate hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27.

(b) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or 1% of the HCl in the stack gas prior to entering any pollution con- trol equipment.

(c) An incinerator burning hazardous waste must not emit particulate mat- ter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when cor- rected for the amount of oxygen in the stack gas according to the formula:

$$P_c = P_m \times \frac{14}{21 - Y}$$

Where P_c is the corrected concentra- tion of particulate matter, P_m is the measured concentration of particulate matter, and Y is the measured con- centration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in part 60, appendix A (Method 3), of this chapter. This correction procedure is to be used by all hazardous waste in- cinerators except those operating under conditions of oxygen enrich- ment. For these facilities, the Regional Administrator will select an appro- priate correction procedure, to be spec- ified in the facility permit.

(d) For purposes of permit enforce- ment, compliance with the operating requirements specified in the permit (under §264.345) will be regarded as compliance with this section. However, evidence that compliance with those permit conditions is insufficient to en- sure compliance with the performance requirements of this section may be

(6) The potential for health risks caused by human exposure to waste constituents; and

(7) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

§ 264.602 Monitoring, analysis, inspection, response, reporting, and corrective action.

Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies must ensure compliance with §§ 264.601, 264.15, 264.33, 264.75, 264.76, 264.77, and 264.101 as well as meet any additional requirements needed to protect human health and the environment as specified in the permit.

§ 264.603 Post-closure care.

A miscellaneous unit that is a disposal unit must be maintained in a manner that complies with § 264.601 during the post-closure care period. In addition, if a treatment or storage unit has contaminated soils or ground water that cannot be completely removed or decontaminated during closure, then that unit must also meet the requirements of § 264.601 during post-closure care. The post-closure plan under § 264.118 must specify the procedures that will be used to satisfy this requirement.

Subparts Y—Z (Reserved)

Subpart AA—Air Emission Standards for Process Vents

SOURCE: 55 FR 25494, June 21, 1990, unless otherwise noted.

§ 264.1030 Applicability.

(a) The regulations in this subpart apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in § 264.1).

(b) Except for §§ 264.1034 (d) and (e), this subpart applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10-ppmw, if these operations are conducted in:

(1) Units that are subject to the permitting requirements of part 270, or

(2) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of part 270.

(c) If the owner or operator of process vents subject to the requirements of §§ 264.1032 through 264.1036 has received a permit under section 3005 of RCRA prior to December 21, 1990 the requirements of §§ 264.1032 through 264.1036 must be incorporated when the permit is reissued under § 124.15 or reviewed under § 270.50.

[NOTE: The requirements of §§ 264.1032 through 264.1036 apply to process vents on hazardous waste recycling units previously exempt under § 261.6(c)(1). Other exemptions under §§ 261.4, 262.34, and 264.1(g) are not affected by these requirements.]

[55 FR 25494, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§ 264.1031 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and parts 260-266.

Air stripping operation is a desorption operation employed to transfer one or more volatile components from a liquid mixture into a gas (air) either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are among the process configurations used for contacting the air and a liquid.

Bottoms receiver means a container or tank used to receive and collect the heavier bottoms fractions of the distillation feed stream that remain in the liquid phase.

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

Condenser means a heat-transfer device that reduces a thermodynamic fluid from its vapor phase to its liquid phase.

Connector means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. For the purposes of reporting and recordkeeping, connector means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

Continuous recorder means a data-recording device recording an instantaneous data value at least once every 15 minutes.

Control device means an enclosed combustion device, vapor recovery system, or flare. Any device the primary function of which is the recovery or capture of solvents or other organics for use, reuse, or sale (e.g., a primary condenser on a solvent recovery unit) is not a control device.

Control device shutdown means the cessation of operation of a control device for any purpose.

Distillate receiver means a container or tank used to receive and collect liquid material (condensed) from the overhead condenser of a distillation unit and from which the condensed liquid is pumped to larger storage tanks or other process units.

Distillation operation means an operation, either batch or continuous, separating one or more feed stream(s) into two or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

Equipment means each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange, and any control devices or systems required by this subpart.

Flame zone means the portion of the combustion chamber in a boiler occupied by the flame envelope.

Flow indicator means a device that indicates whether gas flow is present in a vent stream.

First attempt at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

Fractionation operation means a distillation operation or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

Hazardous waste management unit shutdown means a work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste management unit. An unscheduled work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste management unit for less than 24 hours is not a hazardous waste management unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping operation are not hazardous waste management unit shutdowns.

Hot well means a container for collecting condensate as in a steam condenser serving a vacuum-jet or steam-jet ejector.

In gas/vapor service means that the piece of equipment contains or contacts a hazardous waste stream that is in the gaseous state at operating conditions.

In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.

In light liquid service means that the piece of equipment contains or contacts a waste stream where the vapor pressure of one or more of the components in the stream is greater than 0.3 kilopascals (kPa) at 20 °C, the total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

In situ sampling systems means nonextractive samplers or in-line samplers.

In vacuum service means that equipment is operating at an internal pres-

§ 264.574 Inspections.

(a) During construction or installation, liners and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners must be inspected and certified as meeting the requirements of § 264.573 of this subpart by an independent qualified, registered professional engineer. This certification must be maintained at the facility as part of the facility operating record. After installation, liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

(b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(1) Deterioration, malfunctions or improper operation of run-on and run-off control systems;

(2) The presence of leakage in and proper functioning of leak detection system.

(3) Deterioration or cracking of the drip pad surface.

NOTE: See § 264.573(m) for remedial action required if deterioration or leakage is detected.

§ 264.575 Closure.

(a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in paragraph (a) of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with closure and post-closure care requirements that apply to landfills (§ 264.310). For permitted units, the requirement to have a permit continues throughout the post-closure period. In addition, for the purpose of closure, post-closure, and financial responsibility, such a drip pad is then considered to be landfill, and the owner or operator must meet all of the requirements for landfills specified in subparts G and H of this part.

(c)(1) The owner or operator of an existing drip pad, as defined in § 264.570 of this subpart, that does not comply with the liner requirements of § 264.573(b)(1) must:

(i) Include in the closure plan for the drip pad under § 264.112 both a plan for complying with paragraph (a) of this section and a contingent plan for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure; and

(ii) Prepare a contingent post-closure plan under § 264.118 of this part for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure.

(2) The cost estimates calculated under §§ 264.112 and 264.144 of this part for closure and post-closure care of a drip pad subject to this paragraph must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under paragraph (a) of this section.

Subpart X—Miscellaneous Units

SOURCE: 52 FR 46964, Dec. 10, 1987, unless otherwise noted.

§ 264.600 Applicability.

The requirements in this subpart apply to owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units, except as § 264.1 provide otherwise.

§ 264.601 Environmental performance standards.

A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Permits for miscellaneous units are to contain

such terms and provisions as necessary to protect human health and the environment, including, but not limited to, as appropriate, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of hazardous waste or hazardous constituents from the unit. Permit terms and provisions shall include those requirements of subparts I through O of this part, part 270, and part 146 that are appropriate for the miscellaneous unit being permitted. Protection of human health and the environment includes, but is not limited to:

(a) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in the ground water or subsurface environment, considering:

(1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;

(2) The hydrologic and geologic characteristics of the unit and the surrounding area;

(3) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water;

(4) The quantity and direction of ground-water flow;

(5) The proximity to and withdrawal rates of current and potential ground-water users;

(6) The patterns of land use in the region;

(7) The potential for deposition or migration of waste constituents into subsurface physical structures, and into the root zone of food-chain crops and other vegetation;

(8) The potential for health risks caused by human exposure to waste constituents; and

(9) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(b) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, or wetlands or on the soil surface considering:

(1) The volume and physical and chemical characteristics of the waste in the unit;

(2) The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

(3) The hydrologic characteristics of the unit and the surrounding area, including the topography of the land around the unit;

(4) The patterns of precipitation in the region;

(5) The quantity, quality, and direction of ground-water flow;

(6) The proximity of the unit to surface waters;

(7) The current and potential uses of nearby surface waters and any water quality standards established for those surface waters;

(8) The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;

(9) The patterns of land use in the region;

(10) The potential for health risks caused by human exposure to waste constituents; and

(11) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constitutents.

(c) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering:

(1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols and particulates;

(2) The effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air;

(3) The operating characteristics of the unit;

(4) The atmospheric, meterologic, and topographic characteristics of the unit and the surrounding area;

(5) The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, less than the velocity, V_{max}, as determined by the method specified in paragraph (e)(4) of this section and less than 122 m/s (400 ft/s) is allowed.

(5) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in paragraph (e)(5) of this section.

(6) A flare used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(e)(1) Reference Method 22 in 40 CFR part 60 shall be used to determine the compliance of a flare with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K\left[\sum_{i=1}^{n} C_i H_i\right]$$

where:

H_T=Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol is 20 °C;

K=Constant, 1.74×10^{-7} (1/ppm) (g mol/scm) (MJ/kcal) where standard temperature for (g mol/scm) is 20 °C;

C_i=Concentration of sample component 1 in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR part 60 and measured for hydrogen and carbon monoxide by ASTM D 1946–82 (incorporated by reference as specified in § 260.11); and

H_i=Net heat of combustion of sample component 1, kcal/9 mol at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D 2382–83 (incorporated by reference as specified in § 260.11) if published values are not available or cannot be calculated.

(3) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR part 60 as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(4) The maximum allowed velocity in m/s, V_{max}, for a flare complying with paragraph (d)(4)(iii) of this section shall be determined by the following equation:

$$\text{Log}_{10}(V_{max})=(H_T+28.8)/31.7$$

where:

28.8=Constant,

31.7=Constant,

H_T=The net heating value as determined in paragraph (e)(2) of this section.

(5) The maximum allowed velocity in m/s, V_{max}, for an air-assisted flare shall be determined by the following equation:

$$V_{max}=8.706+0.7084\ (H_T)$$

where:

8.706=Constant,

0.7084=Constant,

H_T=The net heating value as determined in paragraph (e)(2) of this section.

(f) The owner or operator shall monitor and inspect each control device required to comply with this section to ensure proper operation and maintenance of the control device by implementing the following requirements:

(1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet but before the point at which the vent streams are combined.

(2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

(i) 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 location in the combustion chamber downstream of the combustion zone.

(ii) 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.

(iii) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(iv) For a boiler or process heater having a design heat input capacity less than 44 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 location in the furnace downstream of the combustion zone.

(v) 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.

(vi) For a condenser, either:

(A) 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

(B) 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 vent stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser.

(vii) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

(A) 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

(B) 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.

(3) Inspect the readings from each monitoring device required by paragraphs (f)(1) and (2) of this section at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this section.

(g) An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of § 264.1035(b)(4)(iii)(F).

(h) An owner or operator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

(1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of § 264.1035(b)(4)(iii)(G), whichever is longer.

(2) Replace the existing carbon with fresh carbon at a regular, predeter-

sure that is at least 5 kPa below ambient pressure.

Malfunction means any sudden failure of a control device or a hazardous waste management unit or failure of a hazardous waste management unit to operate in a normal or usual manner, so that organic emissions are increased.

Open-ended valve or line means any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

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

Process vent means any open-ended pipe or stack that is vented to the atmosphere either directly, through a vacuum-producing system, or through a tank (e.g., distillate receiver, condenser, bottoms receiver, surge control tank, separator tank, or hot well) associated with hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations.

Repaired means that equipment is adjusted, or otherwise altered, to eliminate a leak.

Sensor means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

Separator tank means a device used for separation of two immiscible liquids.

Solvent extraction operation means an operation or method of separation in which a solid or solution is contacted with a liquid solvent (the two being mutually insoluble) to preferentially dissolve and transfer one or more components into the solvent.

Startup means the setting in operation of a hazardous waste management unit or control device for any purpose.

Steam stripping operation means a distillation operation in which vaporization of the volatile constituents of a liquid mixture takes place by the introduction of steam directly into the charge.

Surge control tank means a large-sized pipe or storage reservoir sufficient to contain the surging liquid discharge of the process tank to which it is connected.

Thin-film evaporation operation means a distillation operation that employs a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

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

Vented means discharged through an opening, typically an open-ended pipe or stack, allowing the passage of a stream of liquids, gases, or fumes into the atmosphere. The passage of liquids, gases, or fumes is caused by mechanical means such as compressors or vacuum-producing systems or by process-related means such as evaporation produced by heating and not caused by tank loading and unloading (working losses) or by natural means such as diurnal temperature changes.

§264.1032 Standards: Process vents.

(a) The owner or operator of a facility with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous wastes with organic concentrations of at least 10 ppmw shall either:

(1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr), or

(2) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.

(b) If the owner or operator installs a closed-vent system and control device to comply with the provisions of paragraph (a) of this section the closed-vent system and control device must meet the requirements of §264.1033.

(c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests must conform with the requirements of §264.1034(c).

(d) When an owner or operator and the Regional Administrator do not agree on determinations of vent emissions and/or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the procedures in §264.1034(c) shall be used to resolve the disagreement.

§264.1033 Standards: Closed-vent systems and control devices.

(a)(1) Owners or operators of closed-vent systems and control devices used to comply with provisions of this part shall comply with the provisions of this section.

(2) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 18 months after the effective date that the facility becomes subject to this subpart for installation and startup. All units that begin operation after December 21, 1990, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 2-year implementation schedule does not apply to these units.

(b) A control device involving vapor recovery (e.g., a condenser or adsorber) shall be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of §264.1032(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.

(c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(d)(1) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (e)(1) of this section, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) A flare shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f)(2)(iii) of this section.

(3) A flare shall be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (e)(2) of this section.

(4)(i) A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, less than 18.3 m/s (60 ft/s), except as provided in paragraphs (d)(4) (ii) and (iii) of this section.

(ii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating

transfer the waste after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated offsite, the grab samples must be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.

(iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060 or 8240 of SW-846 (incorporated by reference under §260.11).

(iv) The arithmetic mean of the results of the analyses of the four samples shall apply for each waste stream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each waste stream managed in the unit.

(2) Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a waste stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

(c) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous wastes with time-weighted, annual average total organic concentrations less than 10 ppmw shall be made as follows:

(1) By the effective date that the facility becomes subject to the provisions of this subpart or by the date when the waste is first managed in a waste management unit, whichever is later, and

(2) For continuously generated waste, annually, or

(3) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.

(f) When an owner or operator and the Regional Administrator do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the procedures in Method 8240 may be used to resolve the dispute.

§ 264.1035 Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

(b) Owners and operators must record the following information in the facility operating record:

(1) For facilities that comply with the provisions of §264.1033(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be in the facility operating record by the effective date that the facility becomes subject to the provisions of this subpart.

(2) Up-to-date documentation of compliance with the process vent standards in §264.1032, including:

(i) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan).

(ii) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action (e.g., managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

(3) Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan must include:

(i) A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

(ii) A detailed engineering description of the closed-vent system and control device including:

(A) Manufacturer's name and model number of control device.

(B) Type of control device.

(C) Dimensions of the control device.

(D) Capacity.

(E) 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.

(4) Documentation of compliance with §264.1033 shall include the following information:

(i) A list of all information references and sources used in preparing the documentation.

(ii) Records, including the dates, of each compliance test required by §264.1033(k).

(iii) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" (incorporated by reference as specified in §260.11) or other engineering texts acceptable to the Regional Administrator that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with paragraphs (b)(4)(iii)(A) through (b)(4)(iii)(G) of this section may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.

(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

mined time interval that is less than the design carbon replacement interval established as a requirement of § 264.1035(b)(4)(iii)(G).

(l) An alternative operational 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.

(j) An owner or operator of an affected facility seeking to comply with the provisions of this part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

(k)(1) Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as § 264.1034(b).

(2) Closed-vent systems shall be monitored to determine compliance with this section during the initial leak detection monitoring, which shall be conducted by the date that the facility becomes subject to the provisions of this section, annually, and at other times as requested by the Regional Administrator.

(3) Detectable emissions, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected.

(4) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected.

(l) Closed-vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

[55 FR 25494, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§ 264.1034 Test methods and procedures.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.

(b) When a closed-vent system is tested for compliance with no detectable emissions, as required in § 264.1033(k), the test shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) (6) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air).

(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 Reference Method 21.

(6) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(c) Performance tests to determine compliance with § 264.1032(a) and with the total organic compound concentration limit of § 264.1033(c) shall comply with the following:

(1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:

(i) Method 2 in 40 CFR part 60 for velocity and volumetric flow rate.

(ii) Method 18 in 40 CFR part 60 for organic content.

(iii) Each performance test shall consist of three separate runs; each run conducted for at least 1 hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.

(iv) Total organic mass flow rates shall be determined by the following equation:

$$E_h = Q_{sd}\left\{\sum_{i=1}^{n} C_i MW_i\right\}(0.0416)(10^{-6})$$

where:

E_h=Total organic mass flow rate, kg/h;

Q_{sd}=Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

n=Number of organic compounds in the vent gas;

C_i=Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;

MW_i=Molecular weight of organic compound i in the vent gas, kg/kg-mol;

0.0416=Conversion factor for molar volume, kg-mol/m³ (@ 293 K and 760 mm Hg);

10^{-6}=Conversion from ppm, ppm^{-1}.

(v) The annual total organic emission rate shall be determined by the following equation:

$E_A = (E_h)(H)$

where:

E_A=Total organic mass emission rate, kg/y;

E_h=Total organic mass flow rate for the process vent, kg/h;

H=Total annual hours of operations for the affected unit, h.

(vi) Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates (E_h as determined in paragraph (c)(1)(iv) of this section) and by summing the annual total organic mass emission rates (E_A, as determined in paragraph (c)(1)(v) of this section) for all affected process vents at the facility.

(2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(3) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(i) Sampling ports adequate for the test methods specified in paragraph (c)(1) of this section.

(ii) Safe sampling platform(s).

(iii) Safe access to sampling platform(s).

(iv) Utilities for sampling and testing equipment.

(4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Regional Administrator's approval, be determined using the average of the results of the two other runs.

(d) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this subpart, the owner or operator must make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one of the following two methods:

(1) Direct measurement of the organic concentration of the waste using the following procedures:

(i) The owner or operator must take a minimum of four grab samples of waste for each waste stream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.

(ii) For waste generated onsite, the grab samples must be collected at a point before the waste is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to

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 combustion 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 § 264.1033(d).

(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 design average temperatures of the coolant fluid at the condenser inlet and outlet.

(F) For a carbon adsorption system such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, 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 such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, 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 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.

(iv) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(v) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of § 264.1032(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of § 264.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

(vi) If performance tests are used to demonstrate compliance, all test results.

(c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of this part shall be recorded and kept up-to-date in the facility operating record. The information shall include:

(1) Description and date of each modification that is made to the closed-vent system or control device design.

(2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with § 264.1033 (f)(1) and (f)(2).

(3) Monitoring, operating, and inspection information required by paragraphs (f) through (k) of § 264.1033.

(4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

(i) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760 °C, period when the combustion temperature is below 760 °C.

(ii) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 weight percent or greater period when the combustion zone temperature is more than 28 °C below the design average combustion zone temperature established as a requirement of paragraph (b)(4)(iii)(A) of this section.

(iii) For a catalytic vapor incinerator, period when:

(A) Temperature of the vent stream at the catalyst bed inlet is more than 28 °C below the average temperature of the inlet vent stream established as a requirement of paragraph (b)(4)(iii)(B) of this section, or

(B) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of paragraph (b)(4)(iii)(B) of this section.

(iv) For a boiler or process heater, period when:

(A) Flame zone temperature is more than 28 °C below the design average flame zone temperature established as a requirement of paragraph (b)(4)(iii)(C) of this section, or

(B) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of paragraph (b)(4)(iii)(C) of this section.

(v) For a flare, period when the pilot flame is not ignited.

(vi) For a condenser that complies with § 264.1033(f)(2)(vi)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(E) of this section.

(vii) For a condenser that complies with § 264.1033(f)(2)(vi)(B), period when:

(A) Temperature of the exhaust vent stream from the condenser is more than 6 °C above the design average exhaust vent stream temperature established as a requirement of paragraph (b)(4)(iii)(E) of this section; or

(B) Temperature of the coolant fluid exiting the condenser is more than 6 °C above the design average coolant fluid temperature at the condenser outlet established as a requirement of paragraph (b)(4)(iii)(E) of this section.

(viii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with § 264.1033(f)(2)(vii)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(F) of this section.

(ix) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with § 264.1033(f)(2)(vii)(B), period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of paragraph (b)(4)(iii)(F) of this section.

(5) Explanation for each period recorded under paragraph (4) of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

(6) For a carbon adsorption system operated subject to requirements specified in § 264.1033(g) or § 264.1033(h)(2), date when existing carbon in the control device is replaced with fresh carbon.

(7) For a carbon adsorption system operated subject to requirements specified in § 264.1033(h)(1), a log that records:

(i) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.

(ii) Date when existing carbon in the control device is replaced with fresh carbon.

(8) Date of each control device start-up and shutdown.

(d) Records of the monitoring, operating, and inspection information re-

quired by paragraphs (c)(3)–(c)(8) of this section need be kept only 3 years.

(e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Regional Administrator will specify the appropriate recordkeeping requirements.

(f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in § 264.1032 including supporting documentation as required by § 264.1034(d)(2) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used, shall be recorded in a log that is kept in the facility operating record.

[55 FR 25494, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§ 264.1036 Reporting requirements.

(a) A semiannual report shall be submitted by owners and operators subject to the requirements of this subpart to the Regional Administrator by dates specified by the Regional Administrator. The report shall include the following information:

(1) The Environmental Protection Agency identification number, name, and address of the facility.

(2) For each month during the semiannual reporting period, dates when the control device exceeded or operated outside of the design specifications as defined in § 264.1035(c)(4) and as indicated by the control device monitoring required by § 264.1033(f) and such exceedances were not corrected within 24 hours, or that a flare operated with visible emissions as defined in § 264.1033(d) and as determined by Method 22 monitoring, the duration and cause of each exceedance or visible emissions, and any corrective measures taken.

(b) If, during the semiannual reporting period, the control device does not exceed or operate outside of the design specifications as defined in § 264.1035(c)(4) for more than 24 hours or a flare does not operate with visible emissions as defined in § 264.1033(d), a report to the Regional Administrator is not required.

§§ 264.1037—264.1049 [Reserved]

Subpart BB—Air Emission Standards for Equipment Leaks

SOURCE: 55 FR 25501, June 21, 1990, unless otherwise noted.

§ 264.1050 Applicability.

(a) The regulations in this subpart apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in § 264.1).

(b) Except as provided in § 264.1064(k), this subpart applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in:

(1) Units that are subject to the permitting requirements of part 270, or

(2) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of part 270.

(c) If the owner or operator of equipment subject to the requirements of §§ 264.1052 through 264.1065 has received a permit under section 3005 of RCRA prior to December 21, 1990, the requirements of §§ 264.1052 through 264.1065 must be incorporated when the permit is reissued under § 124.15 or reviewed under § 270.50.

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

(e) Equipment that is in vacuum service is excluded from the requirements of § 264.1052 to § 264.1060 if it is identified as required in § 264.1064(g)(5).

[NOTE: The requirements of §§ 264.1052 through 264.1065 apply to equipment associated with hazardous waste recycling units previously exempt under § 261.6(c)(1). Other exemptions under §§ 261.4, 262.34, and 264.1(g) are not affected by these requirements.]

§ 264.1051 Definitions.

As used in this subpart, all terms shall have the meaning given them in § 264.1031, the Act, and parts 260–266.

§ 264.1052 Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in § 264.1063(b), except as provided in paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

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

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(1) 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 § 264.1059.

(2) A first attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, *provided* the following requirements are met:

(1) Each dual mechanical seal system must be:

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure, or

(ii) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of § 264.1060, or

(iii) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere.

(2) The barrier fluid system must not be a hazardous waste with organic concentrations 10 percent or greater by weight.

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

(4) Each pump must be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5)(i) Each sensor as described in paragraph (d)(3) of this section must be checked daily or be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly.

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

(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii) of this section, a leak is detected.

(ii) 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 § 264.1059.

(iii) A first attempt at repair (e.g., relapping the seal) shall be made no later than 5 calendar days after each leak is detected.

(e) Any pump that is designated, as described in § 264.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump meets the following requirements:

(1) Must have no externally actuated shaft penetrating the pump housing.

(2) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in § 264.1063(c).

(3) Must be tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.

(f) If any pump 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 § 264.1060, it is exempt from the requirements of paragraphs (a) through (e) of this section.

[55 FR 25501, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§ 264.1053 Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in paragraphs (h) and (i) of this section.

(b) Each compressor seal system as required in paragraph (a) of this section shall be:

(1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure, or

(2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of § 264.1060, or

(3) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to atmosphere.

(c) The barrier fluid must not be a hazardous waste with organic concentrations 10 percent or greater by weight.

(d) Each barrier fluid system as described in paragraphs (a) through (c) of this section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) of this section shall be checked daily or shall be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor must be checked daily.

(2) 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.

(f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.

(g)(1) 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 § 264.1059.

(2) A first attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of § 264.1060, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in § 264.1064(g)(2), for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of paragraphs (a) through (h) of this section if the compressor:

(1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 264.1063(c).

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

§ 264.1054 Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 264.1063(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in § 264.1059.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 264.1063(c).

(c) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in § 264.1060 is exempt from the requirements of paragraphs (a) and (b) of this section.

§ 264.1055 Standards: Sampling connecting systems.

(a) Each sampling connection system shall be equipped with a closed purge system or closed-vent system.

(b) Each closed-purge system or closed-vent system as required in paragraph (a) shall:

(1) Return the purged hazardous waste stream directly to the hazardous waste management process line with no detectable emissions to atmosphere, or

(2) Collect and recycle the purged hazardous waste stream with no detectable emissions to atmosphere, or

(3) Be designed and operated to capture and transport all the purged hazardous waste stream to a control device that complies with the requirements of § 264.1060.

(c) *In situ* sampling systems are exempt from the requirements of paragraphs (a) and (b) of this section. "

§ 264.1056 Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the hazardous waste stream end is closed before the second valve is closed.

(c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of this section at all other times.

§ 264.1057 Standards: Valves in gas/vapor service or in light liquid service.

(a) Each valve in gas/vapor or light liquid service shall be monitored monthly to detect leaks by the methods specified in § 264.1063(b) and shall comply with paragraphs (b) through (e) of this section, except as provided in paragraphs (f), (g), and (h) of this section, and §§ 264.1061 and 264.1062.

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

(c)(1) Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in § 264.1059.

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

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts.

(2) Replacement of bonnet bolts.

(3) Tightening of packing gland nuts.

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in § 264.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this section if the valve:

(1) Has no external actuating mechanism in contact with the hazardous waste stream.

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in § 264.1063(c).

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

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(g) Any valve that is designated, as described in § 264.1064(h)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:

(1) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section.

(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in § 264.1064(h)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:

(1) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The hazardous waste management unit within which the valve is located was in operation before June 21, 1990.

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

§ 264.1058 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors.

(a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in § 264.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

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

(c)(1) 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 § 264.1059.

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

(d) First attempts at repair include, but are not limited to, the best practices described under § 264.1057(e).

§ 264.1059 Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a hazardous waste management unit shutdown. In such a case, repair of this equipment shall occur before the end of the next hazardous waste management unit shutdown.

(b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the hazardous waste management unit and that does not continue to contain or contact hazardous waste with organic concentrations at least 10 percent by weight.

(c) Delay of repair for valves will be allowed if:

(1) The owner or operator determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair.

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with § 264.1060.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system.

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a hazardous waste management unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the hazardous waste management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous waste management unit shutdown will not be allowed unless the next hazardous waste management unit shutdown occurs sooner than 6 months after the first hazardous waste management unit shutdown.

§ 264.1060 Standards: Closed-vent systems and control devices.

Owners or operators of closed-vent systems and control devices shall comply with the provisions of § 264.1033.

§ 264.1061 Alternative standards for valves in gas/vapor service or in light liquid service: percentage of valves allowed to leak.

(a) An owner or operator subject to the requirements of § 264.1057 may elect to have all valves within a hazardous waste management unit comply with an alternative standard that allows no greater than 2 percent of the valves to leak.

(b) The following requirements shall be met if an owner or operator decides to comply with the alternative standard of allowing 2 percent of valves to leak:

(1) An owner or operator must notify the Regional Administrator that the owner or operator has elected to comply with the requirements of this section.

(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Regional Administrator.

(3) If a valve leak is detected, it shall be repaired in accordance with § 264.1057(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves subject to the requirements in § 264.1057 within the hazardous waste management unit shall be monitored within 1 week by the methods specified in § 264.1063(b).

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

(3) The leak percentage shall be determined by dividing the number of valves subject to the requirements in § 264.1057 for which leaks are detected by the total number of valves subject to the requirements in § 264.1057 within the hazardous waste management unit.

(d) If an owner or operator decides to comply with this section no longer, the owner or operator must notify the Regional Administrator in writing that the work practice standard described in § 264.1057(a) through (e) will be followed.

§ 264.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair.

(a)(1) An owner or operator subject to the requirements of § 264.1057 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in paragraphs (b) (2) and (3) of this section.

(2) An owner or operator must notify the Regional Administrator before implementing one of the alternative work practices.

(b)(1) An owner or operator shall comply with the requirements for valves, as described in § 264.1057, except as described in paragraphs (b)(2) and (b)(3) of this section.

(2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves subject to the requirements in § 264.1057.

(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves subject to the requirements in § 264.1057.

(4) If the percentage of valves leaking is greater than 2 percent, the owner or operator shall monitor monthly in compliance with the requirements in § 264.1057, but may again elect to use this section after meeting the requirements of § 264.1057(e)(1).

§ 264.1063 Test methods and procedures.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.

(b) Leak detection monitoring, as required in §§ 264.1052–264.1062, shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air).

(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 instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(c) When equipment is tested for compliance with no detectable emissions, as required in §§ 264.1052(e), 264.1053(i), 264.1054, and 264.1057(f), the test shall comply with the following requirements:

(1) The requirements of paragraphs (b)(1) through (4) of this section shall apply.

(2) The background level shall be determined as set forth in Reference Method 21.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) In accordance with the waste analysis plan required by § 264.13(b), an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:

(1) Methods described in ASTM Methods D 2267–88, E 169–87, E 168–88, E 260–85 (incorporated by reference under § 260.11);

(2) Method 9060 or 8240 of SW–846 (incorporated by reference under § 260.11); or

(3) Application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

(e) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in paragraph (d)(1) or (d)(2) of this section.

(f) When an owner or operator and the Regional Administrator do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in paragraph (d)(1) or (d)(2) of this section can be used to resolve the dispute.

(g) Samples used in determining the percent organic content shall be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.

(h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D–2879–86 (incorporated by reference under § 260.11).

(i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction shall comply with the procedures of § 264.1034(c)(1) through (c)(4).

§ 264.1064 Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

(b) Owners and operators must record the following information in the facility operating record:

(1) For each piece of equipment to which subpart BB of part 264 applies:

(i) Equipment identification number and hazardous waste management unit identification.

(ii) Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan).

(iii) Type of equipment (e.g.. a pump or pipeline valve).

(iv) Percent-by-weight total organics in the hazardous waste stream at the equipment.

(v) Hazardous waste state at the equipment (e.g., gas/vapor or liquid).

(vi) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").

(2) For facilities that comply with the provisions of § 264.1033(a)(2), an implementation schedule as specified in § 264.1033(a)(2).

(3) Where an owner or operator chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan as specified in § 264.1035(b)(3).

(4) Documentation of compliance with § 264.1060, including the detailed design documentation or performance test results specified in § 264.1035(b)(4).

(c) When each leak is detected as specified in §§ 264.1052, 264.1053, 264.1057, and 264.1058, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with § 264.1058(a), and the date the leak was detected, shall be attached to the leaking equipment.

(2) The identification on equipment, except on a valve, may be removed after it has been repaired.

(3) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §§ 264.1057(c) and no leak has been detected during those 2 months.

(d) When each leak is detected as specified in §§ 264.1052, 264.1053, 264.1057, and 264.1058, the following information shall be recorded in an inspection log and shall be kept in the facility operating record:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date evidence of a potential leak was found in accordance with § 264.1058(a).

(3) The date the leak was detected and the dates of each attempt to repair the leak.

(4) Repair methods applied in each attempt to repair the leak.

(5) "Above 10,000" if the maximum instrument reading measured by the methods specified in § 264.1063(b) after each repair attempt is equal to or greater than 10,000 ppm.

(6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(7) Documentation supporting the delay of repair of a valve in compliance with § 264.1059(c).

(8) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown.

(9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

(10) The date of successful repair of the leak.

(e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of § 264.1060 shall be recorded and kept up-to-date in the facility operating record as specified in § 264.1035(c). Design documentation is specified in § 264.1035 (c)(1) and (c)(2) and monitoring, operating, and inspection information in § 264.1035 (c)(3)–(c)(8).

(f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Regional Administrator will specify the appropriate recordkeeping requirements.

(g) The following information pertaining to all equipment subject to the requirements in §§ 264.1052 through 264.1060 shall be recorded in a log that is kept in the facility operating record:

(1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of §§ 264.1052(e), 264.1053(i), and 264.1057(f).

(ii) The designation of this equipment as subject to the requirements of §§ 264.1052(e), 264.1053(i), or 264.1057(f) shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with § 264.1054(a).

(4)(i) The dates of each compliance test required in §§ 264.1052(e), 264.1053(i), 264.1054, and 264.1057(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(h) The following information pertaining to all valves subject to the requirements of § 264.1057 (g) and (h) shall be recorded in a log that is kept in the facility operating record:

(1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

(2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

(i) The following information shall be recorded in the facility operating record for valves complying with § 264.1062:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

(j) The following information shall be recorded in a log that is kept in the facility operating record:

(1) Criteria required in § 264.1052(d)(5)(ii) and § 264.1053(e)(2) and an explanation of the design criteria.

(2) Any changes to these criteria and the reasons for the changes.

(k) The following information shall be recorded in a log that is kept in the facility operating record for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:

(1) An analysis determining the design capacity of the hazardous waste management unit.

(2) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in §§ 264.1052 through 264.1060 and an analysis determining whether these hazardous wastes are heavy liquids.

(3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in §§ 264.1052 through 264.1060. The record shall include supporting documentation as required by § 264.1063(d)(3) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used. If the owner or operator takes any action (e.g., changing the process that produced the waste) that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be subject to the requirements in §§ 264.1052 through 264.1060, then a new determination is required.

(l) Records of the equipment leak information required by paragraph (d) of this section and the operating information required by paragraph (e) of this section need be kept only 3 years.

(m) The owner or operator of any facility that is subject to this subpart and to regulations at 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, may elect to determine compliance with this subpart by documentation either pursuant to § 264.1064 of this subpart, or pursuant to those provisions of 40 CFR part 60 or 61, to the extent that the documentation under the regulation at 40 CFR part 60 or part 61 duplicates the documentation required under this subpart. The documentation under the regulation at 40 CFR part 60 or part 61 shall be kept with or made readily available with the facility operating record.

§ 264.1065 Reporting requirements.

(a) A semiannual report shall be submitted by owners and operators subject to the requirements of this subpart to the Regional Administrator by dates specified by the Regional Administrator. The report shall include the following information:

(1) The Environmental Protection Agency identification number, name, and address of the facility.

(2) For each month during the semiannual reporting period:

(i) The equipment identification number of each valve for which a leak was not repaired as required in § 264.1057(d).

(ii) The equipment identification number of each pump for which a leak was not repaired as required in § 264.1052 (c) and (d)(6).

(iii) The equipment identification number of each compressor for which a leak was not repaired as required in § 264.1053(g).

(3) Dates of hazardous waste management unit shutdowns that occurred within the semiannual reporting period.

(4) For each month during the semiannual reporting period, dates when the control device installed as required by § 264.1052, 264.1053, 264.1054, or 264.1055 exceeded or operated outside of the design specifications as defined in § 264.1064(e) and as indicated by the control device monitoring required by § 264.1060 and was not corrected within 24 hours, the duration and cause of each exceedance, and any corrective measures taken.

(b) If, during the semiannual reporting period, leaks from valves, pumps, and compressors are repaired as required in §§ 264.1057 (d), 264.1052 (c) and (d)(6), and 264.1053 (g), respectively, and the control device does not exceed or operate outside of the design specifications as defined in § 264.1064(e) for more than 24 hours, a report to the Regional Administrator is not required.

§§ 264.1066—264.1079 [Reserved]

Subpart DD—Containment Buildings

SOURCE: ; 57 FR 37265, Aug. 18, 1992, unless otherwise noted.

§ 264.1100 Applicability.

The requirements of this subpart apply to owners or operators who store or treat hazardous waste in units designed and operated under § 264.1101 of this subpart. These provisions will become effective on February 18, 1993, although owner or operator may notify the Regional Administrator of his intent to be bound by this subpart at an earlier time. The owner or operator is not subject to the definition of land disposal in RCRA section 3004(k) provided that the unit:

(a) Is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls;

(b) Has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel, wastes, and handling equipment within the unit;

(c) If the unit is used to manage liquids, has:

(1) A primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;

(2) A liquid collection system designed and constructed of materials to

(2) Placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in § 144.3 of this chapter).

[45 FR 33232, May 19, 1980, as amended at 47 FR 12318, Mar. 22, 1982; 47 FR 32369, July 26, 1982; 50 FR 10374, Apr. 30, 1985; 50 FR 28750, July 15, 1985; 51 FR 19177, May 28, 1986; 57 FR 54461, Nov. 18, 1992]

§ 265.315 Special requirements for containers.

Unless they are very small, such as an ampule, containers must be either:

(a) At least 90 percent full when placed in the landfill; or

(b) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

[50 FR 16048, Apr. 23, 1985]

§ 265.316 Disposal of small containers of hazardous waste in overpacked drums (lab packs).

Small containers of hazardous waste in overpacked drums (lab packs) may be placed in a landfull if the following requirements are met:

(a) Hazardous waste must be packaged in non-leaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the waste held therein. Inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the Department of Transportation (DOT) hazardous materials regulations (49 CFR parts 173, 178 and 179), if those regulations specify a particular inside container for the waste.

(b) The inside containers must be overpacked in an open head DOT-specification metal shipping container (49 CFR parts 178 and 179) of no more than 416-liter (110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of sorbent material, determined to be nonbiodegradable in accordance with § 265.314(f), to completely sorb all of the liquid contents of the inside containers. The metal outer container must be full after it has been packed with inside containers and sorbent material.

(c) The sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside container's in accordance with § 265.17(b).

(d) Incompatible wastes, as defined in § 260.10(a) of this chapter, must not be placed in the same outside container.

(e) Reactive waste, other than cyanide- or sulfide-bearing waste as defined in § 261.23(a)(5) of this chapter, must be treated or rendered non-reactive prior to packaging in accordance with paragraphs (a) through (d) of this section. Cyanide- and sulfide-bearing reactive waste may be packaged in accordance with paragraphs (a) through (d) of this section without first being treated or rendered non-reactive.

(f) Such disposal is in compliance with the requirements of 40 CFR part 268. Persons who incinerate lab packs according to the requirements in 40 CFR 268.42(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums must meet the DOT specifications in 49 CFR 173.12 and be overpacked according to the requirements in paragraph (b) of this section.

[46 FR 56596, Nov. 17, 1981, as amended at 55 FR 22686, June 1, 1990; 57 FR 54461, Nov. 18, 1992]

Subpart O—Incinerators

SOURCE: 46 FR 7680, Jan. 23, 1981, unless otherwise noted.

§ 265.340 Applicability.

(a) The regulations of this subpart apply to owners and operators of hazardous waste incinerators (as defined in § 260.10 of this chapter), except as § 265.1 provides otherwise.

(b) Owners and operators of incinerators burning hazardous waste are exempt from all of the requirements of this subpart, except § 265.351 (Closure), provided that the owner or operator has documented, in writing, that the waste would not reasonably be expected to contain any of the hazardous constituents listed in part 261, appendix VIII, of this chapter, and such documentation is retained at the facility, if the waste to be burned is:

(1) Listed as a hazardous waste in part 261, subpart D, of this chapter solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

(2) Listed as a hazardous waste in part 261, subpart D, of this chapter solely because it is reactive (Hazard Code R) for characteristics other than those listed in § 261.23(a) (4) and (5), and will not be burned when other hazardous wastes are present in the combustion zone; or

(3) A hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under part 261, subpart C, of this chapter; or

(4) A hazardous waste solely because it possesses the reactivity characteristics described by § 261.23(a) (1), (2), (3), (6), (7), or (8) of this chapter, and will not be burned when other hazardous wastes are present in the combustion zone.

[47 FR 27533, June 24, 1982 and 50 FR 666, Jan. 4, 1985, as amended at 50 FR 49203, Nov. 29, 1985; 56 FR 7208, Feb. 21, 1991]

§ 265.341 Waste analysis.

In addition to the waste analyses required by § 265.13, the owner or operator must sufficiently analyze any waste which he has not previously burned in his incinerator to enable him to establish steady state (normal) operating conditions (including waste and auxiliary fuel feed and air flow) and to determine the type of pollutants which might be emitted. At a minimum, the analysis must determine:

(a) Heating value of the waste;

(b) Halogen content and sulfur content in the waste; and

(c) Concentrations in the waste of lead and mercury, unless the owner or operator has written, documented data that show that the element is not present.

[*Comment:* As required by § 265.73, the owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility.]

§§ 265.342—265.344 [Reserved]

§ 265.345 General operating requirements.

During start-up and shut-down of an incinerator, the owner or operator must not feed hazardous waste unless the incinerator is at steady state (normal) conditions of operation, including steady state operating temperature and air flow.

§ 265.346 [Reserved]

§ 265.347 Monitoring and inspections.

The owner or operator must conduct, as a minimum, the following monitoring and inspections when incinerating hazardous waste:

(a) Existing instruments which relate to combustion and emission control must be monitored at least every 15 minutes. Appropriate corrections to maintain steady state combustion conditions must be made immediately either automatically or by the operator. Instruments which relate to combustion and emission control would normally include those measuring waste feed, auxiliary fuel feed, air flow, incinerator temperature, scrubber flow, scrubber pH, and relevant level controls.

(b) The complete incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills, and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27533, June 24, 1982]

§§ 265.348—265.350 [Reserved]

§ 265.351 Closure.

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including but not limited to ash, scrubber waters, and scrubber sludges) from the incinerator.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3(d) of this chapter, that the residue removed from his incinerator is not a hazard-

ous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262 through 266 of this chapter.]

§ 265.352 Interim status incinerators burning particular hazardous wastes.

(a) Owners or operators of incinerators subject to this subpart may burn EPA Hazardous Wastes FO20, FO21, FO22, FO23, FO26, or FO27 if they receive a certification from the Assistant Administrator for Solid Waste and Emergency Response that they can meet the performance standards of subpart O of part 264 when they burn these wastes.

(b) The following standards and procedures will be used in determining whether to certify an incinerator:

(1) The owner or operator will submit an application to the Assistant Administrator for Solid Waste and Emergency Response containing applicable information in §§270.19 and 270.62 demonstrating that the incinerator can meet the performance standards in subpart O of part 264 when they burn these wastes.

(2) The Assistant Administrator for Solid Waste and Emergency Response will issue a tentative decision as to whether the incinerator can meet the performance standards in subpart O of part 264. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the incinerator is located. The Assistant Administrator for Solid Waste and Emergency Response will accept comment on the tentative decision for 60 days. The Assistant Administrator for Solid Waste and Emergency Response also may hold a public hearing upon request or at his discretion.

(3) After the close of the public comment period, the Assistant Administrator for Solid Waste and Emergency Response will issue a decision whether or not to certify the incinerator.

[50 FR 2005, Jan. 14, 1985]

§§ 265.353—265.369 [Reserved]

Subpart P—Thermal Treatment

§ 265.370 Other thermal treatment.

The regulations in this subpart apply to owners or operators of facilities that thermally treat hazardous waste in devices other than enclosed devices using controlled flame combustion, except as § 265.1 provides otherwise. Thermal treatment in enclosed devices using controlled flame combustion is subject to the requirements of subpart O if the unit is an incinerator, and subpart H of part 266, if the unit is a boiler or an industrial furnace as defined in § 260.10.

[50 FR 666, Jan. 4, 1985, as amended at 56 FR 32692, July 17, 1991]

§§ 265.371—265.372 [Reserved]

§ 265.373 General operating requirements.

Before adding hazardous waste, the owner or operator must bring his thermal treatment process to steady state (normal) conditions of operation—including steady state operating temperature—using auxiliary fuel or other means, unless the process is a non-continuous (batch) thermal treatment process which requires a complete thermal cycle to treat a discrete quantity of hazardous waste.

§ 265.374 [Reserved]

§ 265.375 Waste analysis.

In addition to the waste analyses required by § 265.13, the owner or operator must sufficiently analyze any waste which he has not previously treated in his thermal process to enable him to establish steady state (normal) or other appropriate (for a non-continuous process) operating conditions (including waste and auxiliary fuel feed) and to determine the type of pollutants which might be emitted. At a minimum, the analysis must determine:

(a) Heating value of the waste;

(b) Halogen content and sulfur content in the waste; and

(c) Concentrations in the waste of lead and mercury, *unless* the owner or operator has written, documented data that show that the element is not present.

[*Comment:* As required by § 265.73, the owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility.]

§ 265.376 [Reserved]

§ 265.377 Monitoring and inspections.

(a) The owner or operator must conduct, as a minimum, the following monitoring and inspections when thermally treating hazardous waste:

(1) Existing instruments which relate to temperature and emission control (if an emission control device is present) must be monitored at least every 15 minutes. Appropriate corrections to maintain steady state or other appropriate thermal treatment conditions must be made immediately either automatically or by the operator. Instruments which relate to temperature and emission control would normally include those measuring waste feed, auxiliary fuel feed, treatment process temperature, and relevant process flow and level controls.

(2) The stack plume (emissions), where present, must be observed visually at least hourly for normal appearance (color and opacity). The operator must immediately make any indicated operating corrections necessary to return any visible emissions to their normal appearance.

(3) The complete thermal treatment process and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills, and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

§§ 265.378—265.380 [Reserved]

§ 265.381 Closure.

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash) from the thermal treatment process or equipment.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3 (c) or (d) of this chapter, that any solid waste removed from his thermal treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, and 265 of this chapter.]

§ 265.382 Open burning; waste explosives.

Open burning of hazardous waste is prohibited except for the open burning and detonation of waste explosives. Waste explosives include waste which has the potential to detonate and bulk military propellants which cannot safely be disposed of through other modes of treatment. Detonation is an explosion in which chemical transformation passes through the material faster than the speed of sound (0.33 kilometers/second at sea level). Owners or operators choosing to open burn or detonate waste explosives must do so in accordance with the following table and in a manner that does not threaten human health or the environment.

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others
0 to 100	204 meters (670 feet).
101 to 1,000	380 meters (1,250 feet).
1,001 to 10,000	530 meters (1,730 feet).
10,001 to 30,000	690 meters (2,260 feet).

§ 265.383 Interim status thermal treatment devices burning particular hazardous waste.

(a) Owners or operators of thermal treatment devices subject to this subpart may burn EPA Hazardous Wastes FO20, FO21, FO22, FO23, FO26, or FO27 if they receive a certification from the Assistant Administrator for Solid Waste and Emergency Response that they can meet the performance standards of subpart O of part 264 when they burn these wastes.

(b) The following standards and procedures will be used in determining whether to certify a thermal treatment unit:

(1) The owner or operator will submit an application to the Assistant Administrator for Solid Waste and Emergency Response containing the applicable information in §§270.19 and 270.62 demonstrating that the thermal treatment unit can meet the performance

standard in subpart O of part 264 when they burn these wastes.

(2) The Assistant Administrator for Solid Waste and Emergency Response will issue a tentative decision as to whether the thermal treatment unit can meet the performance standards in subpart O of part 264. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the thermal treatment device is located. The Assistant Administrator for Solid Waste and Emergency Response will accept comment on the tentative decision for 60 days. The Assistant Administrator for Solid Waste and Emergency Response also may hold a public hearing upon request or at his discretion.

(3) After the close of the public comment period, the Assistant Administrator for Solid Waste and Emergency Response will issue a decision whether or not to certify the thermal treatment unit.

[50 FR 2005, Jan. 14, 1985]

Subpart Q—Chemical, Physical, and Biological Treatment

§ 265.400 Applicability.

The regulations in this subpart apply to owners and operators of facilities which treat hazardous wastes by chemical, physical, or biological methods in other than tanks, surface impoundments, and land treatment facilities, except as § 265.1 provides otherwise. Chemical, physical, and biological treatment of hazardous waste in tanks, surface impoundments, and land treatment facilities must be conducted in accordance with subparts J, K, and M, respectively.

§ 265.401 General operating requirements.

(a) Chemical, physical, or biological treatment of hazardous waste must comply with § 265.17(b).

(b) Hazardous wastes or treatment reagents must not be placed in the treatment process or equipment if they could cause the treatment process or equipment to rupture, leak, corrode, or otherwise fail before the end of its intended life.

(c) Where hazardous waste is continuously fed into a treatment process or equipment, the process or equipment must be equipped with a means to stop this inflow (e.g., a waste feed cut-off system or by-pass system to a standby containment device).

[*Comment:* These systems are intended to be used in the event of a malfunction in the treatment process or equipment.]

§ 265.402 Waste analysis and trial tests.

(a) In addition to the waste analysis required by § 265.13, whenever:

(1) A hazardous waste which is substantially different from waste previously treated in a treatment process or equipment at the facility is to be treated in that process or equipment, or

(2) A substantially different process than any previously used at the facility is to be used to chemically treat hazardous waste;

the owner or operator must, before treating the different waste or using the different process or equipment:

(i) Conduct waste analyses and trial treatment tests (e.g., bench scale or pilot plant scale tests); or

(ii) Obtain written, documented information on similar treatment of similar waste under similar operating conditions;

to show that this proposed treatment will meet all applicable requirements of § 265.401 (a) and (b).

[*Comment:* As required by § 265.13, the waste analysis plan must include analyses needed to comply with §§ 265.405 and 265.406. As required by § 265.73, the owner or operator must place the results from each waste analysis and trial test, or the documented information, in the operating record of the facility.]

§ 265.403 Inspections.

(a) The owner or operator of a treatment facility must inspect, where present:

(1) Discharge control and safety equipment (e.g., waste feed cut-off systems, by-pass systems, drainage systems, and pressure relief systems) at least once each operating day, to ensure that it is in good working order;

(2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges), at least once each operating day, to ensure that the treatment process or equipment is being operated according to its design;

(3) The construction materials of the treatment process or equipment, at least weekly, to detect corrosion or leaking of fixtures or seams; and

(4) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes), at least weekly, to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

[*Comment:* As required by § 265.15(c), the owner or operator must remedy any deterioration or malfunction he finds.]

§ 265.404 Closure.

At closure, all hazardous waste and hazardous waste residues must be removed from treatment processes or equipment, discharge control equipment, and discharge confinement structures.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3 (e) or (d) of this chapter, that any solid waste removed from his treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, and 265 of this chapter.]

§ 265.405 Special requirements for ignitable or reactive waste.

(a) Ignitable or reactive waste must not be placed in a treatment process or equipment unless:

(1) The waste is treated, rendered, or mixed before or immediately after placement in the treatment process or equipment so that (i) the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under § 261.21 or 261.23 or this chapter, and (ii) § 265.17(b) is complied with; or

(2) The waste is treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react.

§ 265.406 Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, (see appendix V for examples) must not be placed in the same treatment process or equipment, unless § 265.17(b) is complied with.

(b) Hazardous waste must not be placed in unwashed treatment equipment which previously held an incompatible waste or material, unless § 265.17(b) is complied with.

Subpart R—Underground Injection

§ 265.430 Applicability.

Except as § 265.1 provides otherwise:

(a) The owner or operator of a facility which disposes of hazardous waste by underground injection is excluded from the requirements of subparts G and H of this part.

(b) The requirements of this subpart apply to owners and operators of wells used to dispose of hazardous waste which are classified as Class I under § 144.6(a) of this chapter and which are classified as Class IV under § 144.6(d) of this chapter.

[*Comment:* In addition to the requirements of subparts A through E of this part, the owner or operator of a facility which disposes of hazardous waste by underground injection ultimately must comply with the requirements of §§ 265.431 through 265.437. These sections are reserved at this time. The Agency will propose regulations that would establish those requirements.]

[45 FR 33232, May 19, 1980, as amended at 48 FR 30115, June 30, 1983]

Subparts S—V (Reserved)

Subpart W—Drip Pads

SOURCE: 55 FR 50486, Dec. 6, 1990, unless otherwise noted.

§ 265.440 Applicability.

(a) The requirements of this subpart apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water run-off to an associated collection system. Existing drip pads are those constructed before December 6, 1990 and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads. The requirement at § 265.443(b)(3) to install

(i) Include in the closure plan for the drip pad under § 265.112 both a plan for complying with paragraph (a) of this section and a contingent plan for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure; and

(ii) Prepare a contingent post-closure plan under § 265.118 of this part for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure.

(2) The cost estimates calculated under §§ 265.112 and 265.144 of this part for closure and post-closure care of a drip pad subject to this paragraph must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under paragraph (a) of this section.

Subparts X—Z (Reserved)

Subpart AA—Air Emission Standards for Process Vents

SOURCE: 55 FR 25507, June 21, 1990, unless otherwise noted.

§ 265.1030 Applicability.

(a) The regulations in this subpart apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in § 265.1).

(b) Except for §§ 265.1034(d) and (e), this subpart applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in:

(1) Units that are subject to the permitting requirements of part 270, or

(2) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of part 270.

[NOTE: The requirements of §§ 265.1032 through 265.1036 apply to process vents on hazardous waste recycling units previously exempt under paragraph 261.6(c)(1). Other exemptions under §§ 261.4, 262.34, and 265.1(c) are not affected by these requirements.]

[55 FR 25507, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§ 265.1031 Definitions.

As used in this subpart, all terms shall have the meaning given them in § 264.1031, the Act, and parts 260–266.

§ 265.1032 Standards: Process vents.

(a) The owner or operator of a facility with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction or air or steam stripping operations managing hazardous wastes with organic concentrations at least 10 ppmw shall either:

(1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr), or

(2) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.

(b) If the owner or operator installs a closed-vent system and control device to comply with the provisions of paragraph (a) of this section, the closed-vent system and control device must meet the requirements of § 265.1033.

(c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests must conform with the requirements of § 265.1034(c).

(d) When an owner or operator and the Regional Administrator do not agree on determinations of vent emissions and/or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the test methods in § 265.1034(c) shall be used to resolve the disagreement.

§ 265.1033 Standards: Closed-vent systems and control devices.

(a)(1) Owners or operators of closed-vent systems and control devices used to comply with provisions of this part shall comply with the provisions of this section.

(2) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 18 months after the effective date that the facility becomes subject to this subpart for installation and startup. All units that begin operation after December 21, 1990 must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 2-year implementation schedule does not apply to these units.

(b) A control device involving vapor recovery (e.g., a condenser or adsorber) shall be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of § 265.1032(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.

(c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame combustion zone of the boiler or process heater.

(d)(1) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (e)(1) of this section, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) A flare shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f)(2)(iii) of this section.

(3) A flare shall be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater, if the flare is steam-assisted or air-assisted; or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (e)(2) of this section.

(4)(i) A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, of less than 18.3 m/s (60 ft/s), except as provided in paragraphs (d)(4) (ii) and (iii) of this section.

(ii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, less than the velocity, V_{max}, as determined by the method specified in paragraph (e)(4) of this section, and less than 122 m/s (400 ft/s) is allowed.

(5) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in paragraph (e)(5) of this section.

(6) A flare used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(e)(1) Reference Method 22 in 40 CFR part 60 shall be used to determine the compliance of a flare with the visible emission provisions of this subpart.

The observation period is 2 hours and shall be used according to Method 22.

(2) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \left[\sum_{i=1}^{n} C_i H_i \right]$$

where:

H_T=Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol is 20 °C;

K=Constant, 1.74×10^{-7} (1/ppm) (g mol/scm) (MJ/kcal) where standard temperature for (g mol/scm) is 20 °C;

C_i=Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR part 60 and measured for hydrogen and carbon monoxide by ASTM D 1946-82 (incorporated by reference as specified in §260.11); and

H_i=Net heat of combustion of sample component i, kcal/g mol at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D 2382–83 (incorporated by reference as specified in §260.11) if published values are not available or cannot be calculated.

(3) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR part 60 as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(4) The maximum allowed velocity in m/s, V_{max}, for a flare complying with paragraph (d)(4)(iii) of this section shall be determined by the following equation:

$$\text{Log}_{10}(V_{max}) = (H_T + 28.8)/31.7$$

where:

H_T=The net heating value as determined in paragraph (e)(2) of this section.

28.8=Constant,

31.7=Constant.

(5) The maximum allowed velocity in m/s, V_{max}, for an air-assisted flare shall be determined by the following equation:

$$V_{max} = 8.706 + 0.7084\ (H_T)$$

where:

8.706 = Constant.

0.7084 = Constant.

H_T = The net heating value as determined in paragraph (e)(2) of this section.

(f) The owner or operator shall monitor and inspect each control device required to comply with this section to ensure proper operation and maintenance of the control device by implementing the following requirements:

(1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor 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.

(2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

(i) 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 location in the combustion chamber downstream of the combustion zone.

(ii) 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.

(iii) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(iv) For a boiler or process heater having a design heat input capacity less than 44 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 location in the furnace downstream of the combustion zone.

(v) 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.

(vi) For a condenser, either:

(A) 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

(B) 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 vent stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser.

(vii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly in the control device, either:

(A) 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

(B) 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.

(3) Inspect the readings from each monitoring device required by paragraphs (f) (1) and (2) of this section at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this section.

(g) An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device, shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of §265.1035(b)(4)(iii)(F).

(h) An owner or operator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

(1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of §265.1035(b)(4)(iii)(G), whichever is longer.

(2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of §265.1035(b)(4)(iii)(G).

(i) An owner or operator of an affected facility seeking to comply with the provisions of this part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

(j)(1) Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as §265.1034(b).

(2) Closed-vent systems shall be monitored to determine compliance with this section during the initial leak detection monitoring which shall be conducted by the date that the facility becomes subject to the provisions of this section, annually, and at other times as requested by the Regional Administrator.

(3) Detectable emissions, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected.

(4) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected.

(k) Closed-vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

§ 265.1034 Test methods and procedures.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.

(b) When a closed-vent system is tested for compliance with no detectable emissions, as required in § 265.1033(j), the test shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air).

(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 Reference Method 21.

(6) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(c) Performance tests to determine compliance with § 265.1032(a) and with the total organic compound concentration limit of § 265.1033(c) shall comply with the following:

(1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:

(i) Method 2 in 40 CFR part 60 for velocity and volumetric flow rate.

(ii) Method 18 in 40 CFR part 60 for organic content.

(iii) Each performance test shall consist of three separate runs; each run conducted for at least 1 hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.

(iv) Total organic mass flow rates shall be determined by the following equation:

$$E_h = Q_{sd}\left[\sum_{i=1}^{n} C_i MW_i\right](0.0416)(10^{-6})$$

where:

E_h=Total organic mass flow rate, kg/h;

Q_{sd}=Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

n=Number of organic compounds in the vent gas;

C_i=Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;

MW_i=Molecular weight of organic compound i in the vent gas, kg/kg-mol;

0.0416=Conversion factor for molar volume, kg-mol/m³ (@ 293 K and 760 mm Hg);

10^{-6}=Conversion from ppm, ppm^{-1}.

(v) The annual total organic emission rate shall be determined by the following equation:

$$E_A = (E_h)(H)$$

where:

E_A=Total organic mass emission rate, kg/y;

E_h=Total organic mass flow rate for the process vent, kg/h;

H=Total annual hours of operations for the affected unit, h.

(vi) Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates (E_h, as determined in paragraph (c)(1)(iv) of this section) and by summing the annual total organic mass emission rates (E_A, as determined in paragraph (c)(1)(v) of this section) for all affected process vents at the facility.

(2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(3) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(i) Sampling ports adequate for the test methods specified in paragraph (c)(1) of this section.

(ii) Safe sampling platform(s).

(iii) Safe access to sampling platform(s).

(iv) Utilities for sampling and testing equipment.

(4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Regional Administrator's approval, be determined using the average of the results of the two other runs.

(d) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this subpart, the owner or operator must make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one of the following two methods:

(1) Direct measurement of the organic concentration of the waste using the following procedures:

(i) The owner or operator must take a minimum of four grab samples of waste for each waste stream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.

(ii) For waste generated onsite, the grab samples must be collected at a point before the waste is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated offsite, the grab samples must be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.

(iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060 or 8240 of SW–846 (incorporated by reference under § 260.11).

(iv) The arithmetic mean of the results of the analyses of the four samples shall apply for each waste stream managed in the unit in determining the

time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each waste stream managed in the unit.

(2) Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a waste stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

(e) The determination that distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous wastes with time-weighted annual average total organic concentrations less than 10 ppmw shall be made as follows:

(1) By the effective date that the facility becomes subject to the provisions of this subpart or by the date when the waste is first managed in a waste management unit, whichever is later; and

(2) For continuously generated waste, annually; or

(3) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.

(f) When an owner or operator and the Regional Administrator do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the procedures in Method 8240 can be used to resolve the dispute.

[55 FR 25507, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§ 265.1035 Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

(b) Owners and operators must record the following information in the facility operating record:

(1) For facilities that comply with the provisions of § 265.1033(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be in the facility operating record by the effective date that the facility becomes subject to the provisions of this subpart.

(2) Up-to-date documentation of compliance with the process vent standards in § 265.1032, including:

(i) Information and data identifying all affected process vents, annual throughput end operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan); and

(ii) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action (e.g., managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

(3) Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan must include:

(i) A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

(ii) A detailed engineering description of the closed-vent system and control device including:

(A) Manufacturer's name and model number of control device.

(B) Type of control device.

(C) Dimensions of the control device.

(D) Capacity.

(E) 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.

(4) Documentation of compliance with § 265.1033 shall include the following information:

(i) A list of all information references and sources used in preparing the documentation.

(ii) Records, including the dates, of each compliance test required by § 265.1033(j).

(iii) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" (Incorporated by reference as specified in § 260.11) or other engineering texts acceptable to the Regional Administrator that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with paragraphs (b)(4)(iii)(A) through (b)(4)(iii)(G) of this section may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.

(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 combustion 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 § 265.1033(d).

(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 design average temperatures of the coolant fluid at the condenser inlet and outlet.

(F) For a carbon adsorption system such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, 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 such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, 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 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.

(iv) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(v) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of §265.1032(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of §265.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

(vi) If performance tests are used to demonstrate compliance, all test results.

(c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of this part shall be recorded and kept up-to-date in the facility operating record. The information shall include:

(1) Description and date of each modification that is made to the closed-vent system or control device design.

(2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with §265.1033(f)(1) and (f)(2).

(3) Monitoring, operating and inspection information required by paragraphs (f) through (j) of §265.1033.

(4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

(i) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C, period when the combustion temperature is below 760 °C.

(ii) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 percent or greater, period when the combustion zone temperature is more than 28 °C below the design average combustion zone temperature established as a requirement of paragraph (b)(4)(iii)(A) of this section.

(iii) For a catalytic vapor incinerator, period when:

(A) Temperature of the vent stream at the catalyst bed inlet is more than 28 °C below the average temperature of the inlet vent stream established as a requirement of paragraph (b)(4)(iii)(B) of this section; or

(B) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of paragraph (b)(4)(iii)(B) of this section.

(iv) For a boiler or process heater, period when:

(A) Flame zone temperature is more than 28 °C below the design average flame zone temperature established as a requirement of paragraph (b)(4)(iii)(C) of this section; or

(B) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of paragraph (b)(4)(iii)(C) of this section.

(v) For a flare, period when the pilot flame is not ignited.

(vi) For a condenser that complies with §265.1033(f)(2)(vi)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(E) of this section.

(vii) For a condenser that complies with §265.1033(f)(2)(vi)(B), period when:

(A) Temperature of the exhaust vent stream from the condenser is more than 6 °C above the design average exhaust vent stream temperature established as a requirement of paragraph (b)(4)(iii)(E) of this section; or

(B) Temperature of the coolant fluid exiting the condenser is more than 6 °C above the design average coolant fluid temperature at the condenser outlet established as a requirement of paragraph (b)(4)(iii)(E) of this section.

(viii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with §265.1033(f)(2)(vii)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(F) of this section.

(ix) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with §265.1033(f)(2)(vii)(B), period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of paragraph (b)(4)(iii)(F) of this section.

(5) Explanation for each period recorded under paragraph (c)(4) of this section of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

(6) For carbon adsorption systems operated subject to requirements specified in §265.1033(g) or §265.1033(h)(2), date when existing carbon in the control device is replaced with fresh carbon.

(7) For carbon adsorption systems operated subject to requirements specified in §265.1033(h)(1), a log that records:

(i) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.

(ii) Date when existing carbon in the control device is replaced with fresh carbon.

(8) Date of each control device start-up and shutdown.

(d) Records of the monitoring, operating, and inspection information required by paragraphs (c)(3) through (c)(8) of this section need be kept only 3 years.

(e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device must be recorded in the facility operating record.

(f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in §265.1032 including supporting documentation as required by §265.1034(d)(2) when application of the knowledge of the nature of the hazard-

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ous waste stream or the process by which it was produced is used, shall be recorded in a log that is kept in the facility operating record.

[55 FR 25507, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§§ 265.1036—265.1049 [Reserved]

Subpart BB—Air Emission Standards for Equipment Leaks

SOURCE: 55 FR 25512, June 21, 1990, unless otherwise noted.

§ 265.1050 Applicability.

(a) The regulations in this subpart apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in § 265.1).

(b) Except as provided in § 265.1064(j), this subpart applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in:

(1) Units that are subject to the permitting requirements of part 270, or

(2) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of part 270.

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

(d) Equipment that is in vacuum service is excluded from the requirements of § 265.1052 to § 265.1060 if it is identified as required in § 265.1064(g)(5).

[NOTE: The requirements of §§ 265.1052 through 265.1064 apply to equipment associated with hazardous waste recycling units previously exempt under paragraph 261.6(c)(1). Other exemptions under §§ 261.4, 262.34, and 265.1(c) are not affected by these requirements.]

§ 265.1051 Definitions.

As used in this subpart, all terms shall have the meaning given them in § 264.1031, the Act, and parts 260–266.

§ 265.1052 Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in § 265.1063(b), except as provided in paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

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

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(1) 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 § 265.1059.

(2) A first attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), *provided* the following requirements are met:

(1) Each dual mechanical seal system must be:

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure, or

(ii) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of § 265.1060, or

(iii) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere.

(2) The barrier fluid system must not be a hazardous waste with organic concentrations 10 percent or greater by weight.

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

(4) Each pump must be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5)(i) Each sensor as described in paragraph (d)(3) of this section must be checked daily or be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly.

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

(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii) of this section, a leak is detected.

(ii) 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 § 265.1059.

(iii) A first attempt at repair (e.g., relapping the seal) shall be made no later than 5 calendar days after each leak is detected.

(e) Any pump that is designated, as described in § 265.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump meets the following requirements:

(1) Must have no externally actuated shaft penetrating the pump housing.

(2) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in § 265.1063(c).

(3) Must be tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.

(f) If any pump 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 § 265.1060, it is exempt from the requirements of paragraphs (a) through (e) of this section.

[55 FR 25512, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§ 265.1053 Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in paragraphs (h) and (i) of this section.

(b) Each compressor seal system as required in paragraph (a) of this section shall be:

(1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure, or

(2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of § 265.1060, or

(3) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to atmosphere.

(c) The barrier fluid must not be a hazardous waste with organic concentrations 10 percent or greater by weight.

(d) Each barrier fluid system as described in paragraphs (a) through (c) of this section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) of this section shall be checked daily or shall be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor must be checked daily.

(2) 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.

(f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.

(g)(1) 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 § 265.1059.

(2) A first attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of § 265.1060, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in § 265.1064(g)(2), for no detectable emission as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of paragraphs (a) through (h) of this section if the compressor:

(1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 265.1063(c).

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

§ 265.1054 Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 265.1063(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in § 265.1059.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 265.1063(c).

(c) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in § 265.1060 is exempt from the requirements of paragraphs (a) and (b) of this section.

§ 265.1055 Standards: Sampling connecting systems.

(a) Each sampling connection system shall be equipped with a closed-purge system or closed-vent system.

(b) Each closed-purge system or closed-vent system as required in paragraph (a) shall:

(1) Return the purged hazardous waste stream directly to the hazardous waste management process line with no detectable emissions to atmosphere, or

(2) Collect and recycle the purged hazardous waste stream with no detectable emissions to atmosphere, or

(3) Be designed and operated to capture and transport all the purged hazardous waste stream to a control device that complies with the requirements of § 265.1060.

(c) *In situ* sampling systems are exempt from the requirements of paragraphs (a) and (b) of this section.

§ 265.1056 Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the hazardous waste stream end is closed before the second valve is closed.

(c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of this section at all other times.

§ 265.1057 Standards: Valves in gas/vapor service or in light liquid service.

(a) Each valve in gas/vapor or light liquid service shall be monitored monthly to detect leaks by the methods specified in § 265.1063(b) and shall comply with paragraphs (b) through (e) of this section, except as provided in paragraphs (f), (g), and (h) of this section and §§ 265.1061 and 265.1062.

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

(c)(1) Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in § 265.1059.

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

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts.

(2) Replacement of bonnet bolts.

(3) Tightening of packing gland nuts.

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in § 265.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this section if the valve:

(1) Has no external actuating mechanism in contact with the hazardous waste stream.

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in § 265.1063(c).

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

(g) Any valve that is designated, as described in § 265.1064(h)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:

(1) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section.

(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in § 265.1064(h)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:

(1) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The hazardous waste management unit within which the valve is located was in operation before June 21, 1990.

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

§ 265.1058 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors.

(a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in § 265.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

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

(c)(1) 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 § 265.1059.

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

(d) First attempts at repair include, but are not limited to, the best practices described under §265.1057(c).

§265.1059 Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a hazardous waste management unit shutdown. In such a case, repair of this equipment shall occur before the end of the next hazardous waste management unit shutdown.

(b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the hazardous waste management unit and that does not continue to contain or contact hazardous waste with organic concentrations at least 10 percent by weight.

(c) Delay of repair for valves will be allowed if:

(1) The owner or operator determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair.

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §265.1060.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system.

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a hazardous waste management unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the hazardous waste management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous waste management unit shutdown will not be allowed unless the next hazardous waste management unit shutdown occurs sooner than 6 months after the first hazardous waste management unit shutdown.

§265.1060 Standards: Closed-vent systems and control devices.

Owners or operators of closed-vent systems and control devices shall comply with the provisions of §265.1033.

§265.1061 Alternative standards for valves in gas/vapor service or in light liquid service: percentage of valves allowed to leak.

(a) An owner or operator subject to the requirements of §265.1057 may elect to have all valves within a hazardous waste management unit comply with an alternative standard which allows no greater than 2 percent of the valves to leak.

(b) The following requirements shall be met if an owner or operator decides to comply with the alternative standard of allowing 2 percent of valves to leak:

(1) An owner or operator must notify the Regional Administrator that the owner or operator has elected to comply with the requirements of this section.

(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Regional Administrator.

(3) If a valve leak is detected, it shall be repaired in accordance with §265.1057 (d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves subject to the requirements in §265.1057 within the hazardous waste management unit shall be monitored within 1 week by the methods specified in §265.1063(b).

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

(3) The leak percentage shall be determined by dividing the number of valves subject to the requirements in §265.1057 for which leaks are detected by the total number of valves subject to the requirements in §265.1057 within the hazardous waste management unit.

(d) If an owner or operator decides no longer to comply with this section, the owner or operator must notify the Regional Administrator in writing that the work practice standard described in §265.1057 (a) through (e) will be followed.

§265.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair.

(a)(1) An owner or operator subject to the requirements of §265.1057 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in paragraphs (b) (2) and (3) of this section.

(2) An owner or operator must notify the Regional Administrator before implementing one of the alternative work practices.

(b)(1) An owner or operator shall comply with the requirements for valves, as described in §265.1057, except as described in paragraphs (b)(2) and (b)(3) of this section.

(2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves subject to the requirements in §265.1057.

(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves subject to the requirements in §265.1057.

(4) If the percentage of valves leaking is greater than 2 percent, the owner or operators shall monitor monthly in compliance with the requirements in §265.1057, but may again elect to use this section after meeting the requirements of §265.1057(c)(1).

§265.1063 Test methods and procedures.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.

(b) Leak detection monitoring, as required in §§265.1052 through 265.1062, shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air).

(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 instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(c) When equipment is tested for compliance with no detectable emissions, as required in §§265.1052(e), 265.1053(1), 265.1054, and 265.1057(f), the test shall comply with the following requirements:

(1) The requirements of paragraphs (b) (1) through (4) of this section shall apply.

(2) The background level shall be determined, as set forth in Reference Method 21.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) In accordance with the waste analysis plan required by §265.13(b), an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:

(1) Methods described in ASTM Methods D 2267–88, E 169–87, E 168–88, E 260–85 (incorporated by reference under §260.11);

(2) Method 9060 or 8240 of SW–846 (incorporated by reference under §260.11); or

(3) Application of the knowledge of the nature of the hazardous waste

stream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

(e) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in paragraph (d)(1) or (d)(2) of this section.

(f) When an owner or operator and the Regional Administrator do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in paragraph (d)(1) or (d)(2) of this section can be used to resolve the dispute.

(g) Samples used in determining the percent organic content shall be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.

(h) *To determine if pumps or valves* are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D-2879-86 (incorporated by reference under § 260.11).

(i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction shall comply with the procedures of § 265.1034 (c)(1) through (c)(4).

§ 265.1064 Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

(b) Owners and operators must record the following information in the facility operating record:

(1) For each piece of equipment to which subpart BB of part 265 applies:

(i) Equipment identification number and hazardous waste management unit identification.

(ii) Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan).

(iii) Type of equipment (e.g., a pump or pipeline valve).

(iv) Percent-by-weight total organics in the hazardous waste stream at the equipment.

(v) Hazardous waste state at the equipment (e.g., gas/vapor or liquid).

(vi) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").

(2) For facilities that comply with the provisions of § 265.1033(a)(2), an implementation schedule as specified in § 265.1033(a)(2).

(3) Where an owner or operator chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan as specified in § 265.1035(b)(3).

(4) Documentation of compliance with § 265.1060, including the detailed design documentation or performance test results specified in § 265.1035(b)(4).

(c) When each leak is detected as specified in §§ 265.1052, 265.1053, 265.1057, and 265.1058, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with § 265.1058(a), and the date the leak was detected, shall be attached to the leaking equipment.

(2) The identification on equipment, except on a valve, may be removed after it has been repaired.

(3) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in § 265.1057(c) and no leak has been detected during those 2 months.

(d) When each leak is detected as specified in §§ 265.1052, 265.1053, 265.1057, and 265.1058, the following information shall be recorded in an inspection log and shall be kept in the facility operating record:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date evidence of a potential leak was found in accordance with § 265.1058(a).

(3) The date the leak was detected and the dates of each attempt to repair the leak.

(4) Repair methods applied in each attempt to repair the leak.

(5) "Above 10,000" if the maximum instrument reading measured by the methods specified in § 265.1063(b) after each repair attempt is equal to or greater than 10,000 ppm.

(6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(7) Documentation supporting the delay of repair of a valve in compliance with § 265.1059(c).

(8) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown.

(9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

(10) The date of successful repair of the leak.

(e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of § 265.1060 shall be recorded and kept up-to-date in the facility operating record as specified in § 265.1035(c). Design documentation is specified in § 265.1035 (c)(1) and (c)(2) and monitoring, operating, and inspection information in § 265.1035 (c)(3)–(c)(8).

(f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device must be recorded in the facility operating record.

(g) The following information pertaining to all equipment subject to the requirements in §§ 265.1052 through 265.1060 shall be recorded in a log that is kept in the facility operating record:

(1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of §§ 265.1052(e), 265.1053(i), and 265.1057(f).

(ii) The designation of this equipment as subject to the requirements of §§ 265.1052(e), 265.1053(i), or 265.1057(f) shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with § 265.1054(a).

(4)(i) The dates of each compliance test required in §§ 265.1052(e), 265.1053(i), 265.1054, and 265.1057(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(h) The following information pertaining to all valves subject to the requirements of § 265.1057 (g) and (h) shall be recorded in a log that is kept in the facility operating record:

(1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

(2) A list of identification numbers for valves that are designated as dif-

ficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

(i) The following information shall be recorded in the facility operating record for valves complying with § 265.1062:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

(j) The following information shall be recorded in a log that is kept in the facility operating record:

(1) Criteria required in §§ 265.1052 (d)(5)(ii) and 265.1053(e)(2) and an explanation of the criteria.

(2) Any changes to these criteria and the reasons for the changes.

(k) The following information shall be recorded in a log that is kept in the facility operating record for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:

(1) An analysis determining the design capacity of the hazardous waste management unit.

(2) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in §§ 265.1052 through 265.1060 and an analysis determining whether these hazardous wastes are heavy liquids.

(3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in §§ 265.1052 through 265.1060. The record shall include supporting documentation as required by § 265.1063(d)(3) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used. If the owner or operator takes any action (e.g., changing the process that produced the waste) that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be subject to the requirements in §§ 265.1052 through 265.1060, then a new determination is required.

(l) Records of the equipment leak information required by paragraph (d) of this section and the operating information required by paragraph (e) of this section need be kept only 3 years.

(m) The owner or operator of any facility that is subject to this subpart and to regulations at 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, may elect to determine compliance with this subpart by documentation either pursuant to § 265.1064 of this subpart, or pursuant to those provisions of 40 CFR part 60 or 61, to the extent that the documentation under the regulation at 40 CFR part 60 or part 61 duplicates the documentation required under this subpart. The documentation under the regulation at 40 CFR part 60 or part 61 shall be kept with or made readily available with the facility operating record.

[55 FR 25512, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§§ 265.1065—265.1079 [Reserved]

Subpart CC—(Reserved)

Subpart DD—Containment Buildings

Source: 57 FR 37268, Aug. 18, 1992, unless otherwise noted.

§ 265.1100 Applicability.

The requirements of this subpart apply to owners or operators who store or treat hazardous waste in units designed and operated under § 265.1101 of this subpart. These provisions will become effective on February 18, 1993, although the owner or operator may notify the Regional Administrator of his intent to be bound by this subpart at an earlier time. The owner or operator is not subject to the definition of land disposal in RCRA section 3004(k) provided that the unit:

(a) Is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the units, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls;

(b) Has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel and handling equipment within the unit;

(c) If the unit is used to manage liquids, has:

(1) A primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;

(2) A liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and

(3) A secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest possible time, unless the unit has been granted a variance from the secondary containment system requirements under § 265.1101(b)(4);

(d) Has controls as needed to permit fugitive dust emissions; and

(e) Is designed and operated to ensure containment and prevent the tracking of materials from the unit by personnel or equipment.

§ 265.1101 Design and operating standards.

(a) All containment buildings must comply with the following design standards:

(1) The containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, run-on), and to assure containment of managed wastes.

(2) The floor and containment walls of the unit, including the secondary containment system if required under paragraph (b) of this section, must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. EPA will consider standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirements of this paragraph. If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:

(i) They provide an effective barrier against fugitive dust emissions under paragraph (c)(1)(iv); and

(ii) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.

(3) Incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail.

(4) A containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.

(b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include:

(1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g. a geomembrane covered by a concrete wear surface).

Subparts A—B (Reserved)

Subpart C—Recyclable Materials Used in a Manner Constituting Disposal

§ 266.20 Applicability.

(a) The regulations of this subpart apply to recyclable materials that are applied to or placed on the land:

(1) Without mixing with any other substance(s); or

(2) After mixing or combination with any other substance(s). These materials will be referred to throughout this subpart as "materials used in a manner that constitutes disposal."

(b) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in subpart D of part 268 (or applicable prohibition levels in § 268.32 or RCRA section 3004(d), where no treatment standards have been established) for each recyclable material (i.e., hazardous waste) that they contain. Commercial fertilizers that are produced for the general public's use that contain recyclable materials also are not presently subject to regulation provided they meet these same treatment standards or prohibition levels for each recyclable material that they contain. However, zinc-containing fertilizers using hazardous waste K061 that are produced for the general public's use are not presently subject to regulation.

[50 FR 666, Jan. 4, 1985, as amended at 52 FR 21307, June 5, 1987; 54 FR 36970, Sept. 6, 1989]

§ 266.21 Standards applicable to generators and transporters of materials used in a manner that constitute disposal.

Generators and transporters of materials that are used in a manner that constitutes disposal are subject to the applicable requirements of parts 262 and 263 of this chapter, and the notification requirement under section 3010 of RCRA.

§ 266.22 Standards applicable to storers of materials that are to be used in a manner that constitutes disposal who are not the ultimate users.

Owners or operators of facilities that store recyclable materials that are to be used in a manner that constitutes disposal, but who are not the ultimate users of the materials, are regulated under all applicable provisions of subparts A through L of parts 264 and 265 and parts 270 and 124 of this chapter and the notification requirement under section 3010 of RCRA.

§ 266.23 Standards applicable to users of materials that are used in a manner that constitutes disposal.

(a) Owners or operators of facilities that use recyclable materials in a manner that constitutes disposal are regulated under all applicable provisions of subparts A through N of parts 264 and 265 and parts 270 and 124 of this chapter and the notification requirement under section 3010 of RCRA. (These requirements do not apply to products which contain these recyclable materials under the provisions of § 266.20(b) of this chapter.)

(b) The use of waste or used oil or other material, which is contaminated with dioxin or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment is prohibited.

[50 FR 666, Jan. 4, 1985, as amended at 50 FR 28750, July 15, 1985]

Subpart D–E—(Reserved)

Subpart F—Recyclable Materials Utilized for Precious Metal Recovery

§ 266.70 Applicability and requirements.

(a) The regulations of this subpart apply to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, paladium, irridium, osmium, rhodium, ruthenium, or any combination of these.

(b) Persons who generate, transport, or store recyclable materials that are regulated under this subpart are subject to the following requirements:

(1) Notification requirements under section 3010 of RCRA;

(2) Subpart B of part 262 (for generators), §§ 263.20 and 263.21 (for transporters), and §§ 265.71 and 265.72 (for persons who store) of this chapter;

(c) Persons who store recycled materials that are regulated under this subpart must keep the following records to document that they are not accumulating these materials speculatively (as defined in § 261.1(c) of this chapter):

(1) Records showing the volume of these materials stored at the beginning of the calendar year;

(2) The amount of these materials generated or received during the calendar year; and

(3) The amount of materials remaining at the end of the calendar year.

(d) Recyclable materials that are regulated under this subpart that are accumulated speculatively (as defined in § 261.1(c) of this chapter) are subject to all applicable provisions of parts 262 through 265, 270 and 124 of this chapter.

Subpart G—Spent Lead-Acid Batteries Being Reclaimed

§ 266.80 Applicability and requirements.

(a) The regulations of this subpart apply to persons who reclaim spent lead-acid batteries that are recyclable materials ("spent batteries"). Persons who generate, transport, or collect spent batteries, or who store spent batteries but do not reclaim them are not subject to regulation under parts 262 through 266 or part 270 or 124 of this chapter, and also are not subject to the requirements of section 3010 of RCRA.

(b) Owners or operators of facilities that store spent batteries before reclaiming them are subject to the following requirements,

(1) Notification requirements under section 3010 of RCRA;

(2) All applicable provisions in subparts A, B (but not § 264.13 (waste analysis)), C, D, E (but not § 264.71 or § 264.72 (dealing with the use of the manifest and manifest discrepancies)), and F through L of part 264 of this chapter;

(3) All applicable provisions in subparts A, B (but not § 265.13 (waste analysis)), C, D, E (but not §§ 265.71 and 265.72 (dealing with use of the manifest and manifest discrepancies)), and F through L of part 265 of this chapter;

(4) All applicable provisions in parts 270 and 124 of this chapter.

[50 FR 666, Jan. 4, 1985, as amended at 50 FR 33543, Aug. 20, 1985]

Subpart H—Hazardous Waste Burned in Boilers and Industrial Furnaces

SOURCE: 56 FR 7208, Feb. 21, 1991, unless otherwise noted.

§ 266.100 Applicability.

(a) The regulations of this subpart apply to hazardous waste burned or processed in a boiler or industrial furnace (as defined in § 260.10 of this chapter) irrespective of the purpose of burning or processing, except as provided by paragraphs (b), (c), (d), and (f) of this section. In this subpart, the term "burn" means burning for energy recovery or destruction, or processing for materials recovery or as an ingredient. The emissions standards of §§ 266.104, 266.105, 266.106, and 266.107 apply to facilities operating under interim status or under a RCRA permit as specified in §§ 266.102 and 266.103.

(b) The following hazardous wastes and facilities are not subject to regulation under this subpart:

(1) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in subpart C of part 261 of this chapter. Such used oil is subject to regulation under part 279 of this chapter;

(2) Gas recovered from hazardous or solid waste landfills when such gas is burned for energy recovery;

(3) Hazardous wastes that are exempt from regulation under §§ 261.4 and 261.6(a)(3) (v-viii) of this chapter, and hazardous wastes that are subject to the special requirements for conditionally exempt small quantity generators under § 261.5 of this chapter; and

(4) Coke ovens, if the only hazardous waste burned is EPA Hazardous Waste No. K087, decanter tank tar sludge from coking operations.

(c) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces, but not including cement kilns, aggregate kilns, or halogen acid furnaces burning hazardous waste) that process hazardous waste solely for metal recovery are conditionally exempt from regulation under this subpart, except for §§ 266.101 and 266.112.

(1) To be exempt from §§ 266.102 through 266.111, an owner or operator of a metal recovery furnace must comply with the following requirements, except that an owner or operator of a lead or a nickel-chromium recovery furnace, or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing, must comply with the requirements of paragraph (c)(3) of this section:

(i) Provide a one-time written notice to the Director indicating the following:

(A) The owner or operator claims exemption under this paragraph;

(B) The hazardous waste is burned solely for metal recovery consistent with the provisions of paragraph (c)(2) of this section;

(C) The hazardous waste contains recoverable levels of metals; and

(D) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this paragraph;

(ii) Sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of this paragraph under procedures specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in § 260.11 of this chapter or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner or operator shall use the best available method; and

(iii) Maintain at the facility for at least three years records to document compliance with the provisions of this paragraph including limits on levels of toxic organic constituents and Btu value of the waste, and levels of recoverable metals in the hazardous waste compared to normal nonhazardous waste feedstocks.

(2) A hazardous waste meeting either of the following criteria is not processed solely for metal recovery:

(i) The hazardous waste has a total concentration of organic compounds listed in part 261, appendix VIII, of this chapter exceeding 500 ppm by weight, as-fired, and so is considered to be burned for destruction. The concentration of organic compounds in a waste as-generated may be reduced to the 500 ppm limit by *bona fide* treatment that removes or destroys organic constituents. Blending for dilution to meet the 500 ppm limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the records required by paragraph (c)(1)(iii) of this section; or

(ii) The hazardous waste has a heating value of 5,000 Btu/lb or more, as-fired, and so is considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by *bona fide* treatment that removes or destroys organic constituents. Blending for dilution to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the records required by paragraph (c)(1)(iii) of this section.

(3) To be exempt from §§ 266.102 through 266.111, an owner or operator of a lead or nickel-chromium recovery furnace, or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing, must provide a one-time written notice to the Director identifying each hazardous waste burned and specifying whether the owner or operator claims an exemption for each waste under this paragraph or paragraph (c)(1) of this section. The owner or operator must comply with the requirements of paragraph (c)(1) of this section for those wastes claimed to be exempt under that paragraph and must comply with the requirements below for those wastes claimed to be exempt under this paragraph.

(i) The hazardous wastes listed in appendices XI and XII, part 266, and baghouse bags used to capture metallic

dusts emitted by steel manufacturing are exempt from the requirements of paragraph (c)(1) of this section, provided that:

(A) A waste listed in appendix XI must contain recoverable levels of lead, a waste listed in appendix XII must contain recoverable levels of nickel or chromium, and baghouse bags used to capture metallic dusts emitted by steel manufacturing must contain recoverable levels of metal; and

(B) The waste does not exhibit the Toxicity Characteristic of § 261.24 of this chapter for an organic constituent; and

(C) The waste is not a hazardous waste listed in subpart D of part 261 of this chapter because it is listed for an organic constituent as identified in appendix VII of part 261 of this chapter; and

(D) The owner or operator certifies in the one-time notice that hazardous waste is burned under the provisions of paragraph (c)(3) of this section and that sampling and analysis will be conducted or other information will be obtained as necessary to ensure continued compliance with these requirements. Sampling and analysis shall be conducted according to paragraph (c)(1)(ii) of this section and records to document compliance with paragraph (c)(3) of this section shall be kept for at least three years.

(ii) The Director may decide on a case-by-case basis that the toxic organic constituents in a material listed in appendix XI or XII of this part that contains a total concentration of more than 500 ppm toxic organic compounds listed in appendix VIII, part 261 of this chapter, may pose a hazard to human health and the environment when burned in a metal recovery furnace exempt from the requirements of this subpart. In that situation, after adequate notice and opportunity for comment, the metal recovery furnace will become subject to the requirements of this subpart when burning that material. In making the hazard determination, the Director will consider the following factors:

(A) The concentration and toxicity of organic constituents in the material; and

(B) The level of destruction of toxic organic constituents provided by the furnace; and

(C) Whether the acceptable ambient levels established in appendices IV or V of this part may be exceeded for any toxic organic compound that may be emitted based on dispersion modeling to predict the maximum annual average off-site ground level concentration.

(d) The standards for direct transfer operations under § 266.111 apply only to facilities subject to the permit standards of § 266.102 or the interim status standards of § 266.103.

(e) The management standards for residues under § 266.112 apply to any boiler or industrial furnace burning hazardous waste.

(f) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces) that process hazardous waste for recovery of economically significant amounts of the precious metals gold, silver, platinum, paladium, irridium, osmium, rhodium, or ruthenium, or any combination of these are conditionally exempt from regulation under this subpart, except for § 266.112. To be exempt from §§ 266.101 through 266.111, an owner or operator must:

(1) Provide a one-time written notice to the Director indicating the following:

(i) The owner or operator claims exemption under this paragraph;

(ii) The hazardous waste is burned for legitimate recovery of precious metal; and

(iii) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this paragraph; and

(2) Sample and analyze the hazardous waste as necessary to document that the waste is burned for recovery of economically significant amounts of precious metal using procedures specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in § 260.11 of this chapter or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner

or operator shall use the best available method; and

(3) Maintain at the facility for at least three years records to document that all hazardous wastes burned are burned for recovery of economically significant amounts of precious metal.

[56 FR 7208, Feb. 21, 1991; 56 FR 32688, July 17, 1991, as amended at 56 FR 42513, Aug. 27, 1991; 56 FR 43877, Sept. 5, 1991; 57 FR 27888, June 22, 1992; 57 FR 38564, Aug. 25, 1992; 57 FR 41612, Sept. 10, 1992]

§ 266.101 Management prior to burning.

(a) *Generators.* Generators of hazardous waste that is burned in a boiler or industrial furnace are subject to part 262 of this chapter.

(b) *Transporters.* Transporters of hazardous waste that is burned in a boiler or industrial furnace are subject to part 263 of this chapter.

(c) *Storage facilities.* (1) Owners and operators of facilities that store hazardous waste that is burned in a boiler or industrial furnace are subject to the applicable provisions of parts 264, 265, and 270 of this chapter, except as provided by paragraph (c)(2) of this section. These standards apply to storage by the burner as well as to storage facilities operated by intermediaries (processors, blenders, distributors, etc.) between the generator and the burner.

(2) Owners and operators of facilities that burn, in an onsite boiler or industrial furnace exempt from regulation under the small quantity burner provisions of § 266.108, hazardous waste that they generate are exempt from the regulations of parts 264, 265, and 270 of this chapter applicable to storage units for those storage units that store mixtures of hazardous waste and the primary fuel to the boiler or industrial furnace in tanks that feed the fuel mixture directly to the burner. Storage of hazardous waste prior to mixing with the primary fuel is subject to regulation as prescribed in paragraph (c)(1) of this section.

[56 FR 7208, Feb. 21, 1991, as amended at 57 FR 38564, Aug. 25, 1992]

§ 266.102 Permit standards for burners.

(a) *Applicability*—(1) *General.* Owners and operators of boilers and industrial furnaces burning hazardous waste and not operating under interim status must comply with the requirements of this section and §§ 270.22 and 270.66 of this chapter, unless exempt under the small quantity burner exemption of § 266.108.

(2) *Applicability of part 264 standards.* Owners and operators of boilers and industrial furnaces that burn hazardous waste are subject to the following provisions of part 264 of this chapter, except as provided otherwise by this subpart:

(i) In subpart A (General), 264.4;

(ii) In subpart B (General facility standards), §§ 264.11–264.18;

(iii) In subpart C (Preparedness and prevention), §§ 264.31–264.37;

(iv) In subpart D (Contingency plan and emergency procedures), §§ 264.51–264.56;

(v) In subpart E (Manifest system, recordkeeping, and reporting), the applicable provisions of §§ 264.71–264.77;

(vi) In subpart F (Corrective Action), §§ 264.90 and 264.101;

(vii) In subpart G (Closure and post-closure), §§ 264.111–264.115;

(viii) In subpart H (Financial requirements), §§ 264.141, 264.142, 264.143, and 264.147–264.151, except that States and the Federal government are exempt from the requirements of subpart H; and

(ix) Subpart BB (Air emission standards for equipment leaks), except §§ 264.1050(a).

(b) *Hazardous waste analysis.* (1) The owner or operator must provide an analysis of the hazardous waste that quantifies the concentration of any constituent identified in appendix VIII of part 261 of this chapter that may reasonably be expected to be in the waste. Such constituents must be identified and quantified if present, at levels detectable by analytical procedures prescribed by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (incorporated by reference, see § 260.11 of this chapter). Alternative methods that meet or exceed the method performance capabilities of SW–846 methods may be used. If SW–846 does not prescribe a method for a particular determination, the owner or operator shall use the best available method. The appendix VIII, part 261 constituents excluded from this analysis must be identified and the basis for their exclusion explained. This analysis will be used to provide all information required by this subpart and § 270.22 and § 270.66 of this chapter and to enable the permit writer to prescribe such permit conditions as necessary to protect human health and the environment. Such analysis must be included as a portion of the part B permit application, or, for facilities operating under the interim status standards of this subpart, as a portion of the trial burn plan that may be submitted before the part B application under provisions of § 270.66(g) of this chapter as well as any other analysis required by the permit authority in preparing the permit. Owners and operators of boilers and industrial furnaces not operating under the interim status standards must provide the information required by §§ 270.22 or 270.66(c) of this chapter in the part B application to the greatest extent possible.

(2) Throughout normal operation, the owner or operator must conduct sampling and analysis as necessary to ensure that the hazardous waste, other fuels, and industrial furnace feedstocks fired into the boiler or industrial furnace are within the physical and chemical composition limits specified in the permit.

(c) *Emissions standards.* Owners and operators must comply with emissions standards provided by §§ 266.104 through 266.107.

(d) *Permits.* (1) The owner or operator may burn only hazardous wastes specified in the facility permit and only under the operating conditions specified under paragraph (e) of this section, except in approved trial burns under the conditions specified in § 270.66 of this chapter.

(2) Hazardous wastes not specified in the permit may not be burned until operating conditions have been specified under a new permit or permit modification, as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with part B of a permit application under § 270.22 of this chapter.

(3) Boilers and industrial furnaces operating under the interim status standards of § 266.103 are permitted under procedures provided by § 270.66(g) of this chapter.

(4) A permit for a new boiler or industrial furnace (those boilers and industrial furnaces not operating under the interim status standards) must establish appropriate conditions for each of the applicable requirements of this section, including but not limited to allowable hazardous waste firing rates and operating conditions necessary to meet the requirements of paragraph (e) of this section, in order to comply with the following standards:

(i) For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the device to a point of operational readiness to conduct a trial burn, not to exceed a duration of 720 hours operating time when burning hazardous waste, the operating requirements must be those most likely to ensure compliance with the emission standards of §§ 266.104 through 266.107, based on the Director's engineering judgment. If the applicant is seeking a waiver from a trial burn to demonstrate conformance with a particular emission standard, the operating requirements during this initial period of operation shall include those specified by the applicable provisions of § 266.104, § 266.105, § 266.106, or § 266.107. The Director may extend the duration of this period for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

(ii) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the emissions standards of §§ 266.104 through 266.107 and must be in accordance with the approved trial burn plan;

(iii) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, submission of the trial burn results by the applicant, review of the trial burn results and modification of the facility permit by the Director to reflect the trial burn results, the operating requirements must be those most likely to ensure compliance with the emission standards §§ 266.104

through 266.107 based on the Director's engineering judgment.

(iv) For the remaining duration of the permit, the operating requirements must be those demonstrated in a trial burn or by alternative data specified in § 270.22 of this chapter, as sufficient to ensure compliance with the emissions standards of §§ 266.104 through 266.107.

(c) *Operating requirements*—(1) *General.* A boiler or industrial furnace burning hazardous waste must be operated in accordance with the operating requirements specified in the permit at all times where there is hazardous waste in the unit.

(2) *Requirements to ensure compliance with the organic emissions standards*—(i) *DRE standard.* Operating conditions will be specified either on a case-by-case basis for each hazardous waste burned as those demonstrated (in a trial burn or by alternative data as specified in § 270.22) to be sufficient to comply with the destruction and removal efficiency (DRE) performance standard of § 266.104(a) or as those special operating requirements provided by § 266.104(a)(4) for the waiver of the DRE trial burn. When the DRE trial burn is not waived under § 266.104(a)(4), each set of operating requirements will specify the composition of the hazardous waste (including acceptable variations in the physical and chemical properties of the hazardous waste which will not affect compliance with the DRE performance standard) to which the operating requirements apply. For each such hazardous waste, the permit will specify acceptable operating limits including, but not limited to, the following conditions as appropriate:

(A) Feed rate of hazardous waste and other fuels measured and specified as prescribed in paragraph (c)(6) of this section;

(B) Minimum and maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in paragraph (c)(6) of this section;

(C) Appropriate controls of the hazardous waste firing system;

(D) Allowable variation in boiler and industrial furnace system design or operating procedures;

(E) Minimum combustion gas temperature measured at a location indicative of combustion chamber temperature, measured and specified as prescribed in paragraph (c)(6) of this section;

(F) An appropriate indicator of combustion gas velocity, measured and specified as prescribed in paragraph (c)(6) of this section, unless documentation is provided under § 270.66 of this chapter demonstrating adequate combustion gas residence time; and

(G) Such other operating requirements as are necessary to ensure that the DRE performance standard of § 266.104(a) is met.

(ii) *Carbon monoxide and hydrocarbon standards.* The permit must incorporate a carbon monoxide (CO) limit and, as appropriate, a hydrocarbon (HC) limit as provided by paragraphs (b), (c), (d), (e) and (f) of § 266.104. The permit limits will be specified as follows:

(A) When complying with the CO standard of § 266.104(b)(1), the permit limit is 100 ppmv;

(B) When complying with the alternative CO standard under § 266.104(c), the permit limit for CO is based on the trial burn and is established as the average over all valid runs of the highest hourly rolling average CO level of each run, and the permit limit for HC is 20 ppmv (as defined in § 266.104(c)(1)), except as provided in § 266.104(f).

(C) When complying with the alternative HC limit for industrial furnaces under § 266.104(f), the permit limit for HC and CO is the baseline level when hazardous waste is not burned as specified by that paragraph.

(iii) *Start-up and shut-down.* During start-up and shut-down of the boiler or industrial furnace, hazardous waste (except waste fed solely as an ingredient under the Tier I (or adjusted Tier I) feed rate screening limits for metals and chloride/chlorine, and except low risk waste exempt from the trial burn requirements under §§ 266.104(a)(5), 266.105, 266.106, and 266.107) must not be fed into the device unless the device is operating within the conditions of operation specified in the permit.

(3) *Requirements to ensure conformance with the particulate standard.* (i) Except as provided in paragraphs (c)(3) (ii) and (iii) of this section, the permit shall

specify the following operating requirements to ensure conformance with the particulate standard specified in § 266.105:

(A) Total ash feed rate to the device from hazardous waste, other fuels, and industrial furnace feedstocks, measured and specified as prescribed in paragraph (c)(6) of this section;

(B) Maximum device production rate when producing normal product expressed in appropriate units, and measured and specified as prescribed in paragraph (c)(6) of this section;

(C) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

(D) Allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

(E) Such other operating requirements as are necessary to ensure that the particulate standard in § 266.111(b) is met.

(ii) Permit conditions to ensure conformance with the particulate matter standard shall not be provided for facilities exempt from the particulate matter standard under § 266.105(b);

(iii) For cement kilns and lightweight aggregate kilns, permit conditions to ensure compliance with the particulate standard shall not limit the ash content of hazardous waste or other feed materials.

(4) *Requirements to ensure conformance with the metals emissions standard.* (i) For conformance with the Tier I (or adjusted Tier I) metals feed rate screening limits of paragraphs (b) or (c) of § 266.106, the permit shall specify the following operating requirements:

(A) Total feed rate of each metal in hazardous waste, other fuels, and industrial furnace feedstocks measured and specified under provisions of paragraph (c)(6) of this section;

(B) Total feed rate of hazardous waste measured and specified as prescribed in paragraph (c)(6) of this section;

(C) A sampling and metals analysis program for the hazardous waste, other fuels, and industrial furnace feedstocks;

(ii) For conformance with the Tier II metals emission rate screening limits under § 266.106(c) and the Tier III metals controls under § 266.106(d), the permit shall specify the following operating requirements:

(A) Maximum emission rate for each metal specified as the average emission rate during the trial burn;

(B) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in paragraph (c)(6)(i) of this section;

(C) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in paragraphs (c)(6) of this section:

(*1*) Total feedstreams;

(*2*) Total hazardous waste feed; and

(*3*) Total pumpable hazardous waste feed;

(D) Total feed rate of chlorine and chloride in total feedstreams measured and specified as prescribed in paragraph (c)(6) of this section;

(E) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in paragraph (c)(6) of this section;

(F) Maximum flue gas temperature at the inlet to the particulate matter air pollution control system measured and specified as prescribed in paragraph (c)(6) of this section;

(G) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in paragraph (c)(6) of this section;

(H) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

(I) Allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

(J) Such other operating requirements as are necessary to ensure that the metals standards under §§ 266.106(c) or 266.106(d) are met.

(iii) For conformance with an alternative implementation approach approved by the Director under § 266.106(f), the permit will specify the following operating requirements:

(A) Maximum emission rate for each metal specified as the average emission rate during the trial burn;

(B) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in paragraph (e)(6)(i) of this section;

(C) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in paragraph (e)(6) of this section:

(*1*) Total hazardous waste feed; and

(*2*) Total pumpable hazardous waste feed;

(D) Total feed rate of chlorine and chloride in total feedstreams measured and specified prescribed in paragraph (e)(6) of this section;

(E) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in paragraph (e)(6) of this section;

(F) Maximum flue gas temperature at the inlet to the particulate matter air pollution control system measured and specified as prescribed in paragraph (e)(6) of this section;

(G) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in paragraph (e)(6) of this section;

(H) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

(I) Allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

(J) Such other operating requirements as are necessary to ensure that the metals standards under §§ 266.106(c) or 266.106(d) are met.

(5) *Requirements to ensure conformance with the hydrogen chloride and chlorine gas standards.* (i) For conformance with the Tier I total chloride and chlorine feed rate screening limits of §266.107(b)(1), the permit will specify the following operating requirements:

(A) Feed rate of total chloride and chlorine in hazardous waste, other fuels, and industrial furnace feedstocks measured and specified as prescribed in paragraph (e)(6) of this section;

(B) Feed rate of total hazardous waste measured and specified as prescribed in paragraph (e)(6) of this section;

(C) A sampling and analysis program for total chloride and chorline for the hazardous waste, other fuels, and industrial furnace feestocks;

(ii) For conformance with the Tier II HCl and Cl_2 emission rate screening limits under §266.107(b)(2) and the Tier III HCl and Cl_2 controls under §266.107(c), the permit will specify the following operating requirements:

(A) Maximum emission rate for HCl and for Cl_2 specified as the average emission rate during the trial burn;

(B) Feed rate of total hazardous waste measured and specified as prescribed in paragraph (e)(6) of this section;

(C) Total feed rate of chlorine and chloride in total feedstreams, measured and specified as prescribed in paragraph (e)(6) of this section;

(D) Maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in paragraph (e)(6) of this section;

(E) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

(F) Allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

(G) Such other operating requirements as are necessary to ensure that the HCl and Cl_2 standards under §266.107 (b)(2) or (c) are met.

(6) *Measuring parameters and establishing limits based on trial burn data*—(i) *General requirements.* As specified in paragraphs (e)(2) through (e)(5) of this section, each operating parameter shall be measured, and permit limits on the parameter shall be established, according to either of the following procedures:

(A) *Instantaneous limits.* A parameter may be measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the permit limit specified as the time-weighted average during all valid runs of the trial burn; or

(B) *Hourly rolling average.* (*1*) The limit for a parameter may be established and continuously monitored on an hourly rolling average basis defined as follows:

(*i*) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(*ii*) An hourly rolling average is the arithmetic mean of the 60 most recent 1-minute average values recorded by the continuous monitoring system.

(*2*) The permit limit for the parameter shall be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average value for each run.

(ii) *Rolling average limits for carcinogenic metals and lead.* Feed rate limits for the carcinogenic metals (i.e., arsenic, beryllium, cadmium and chromium) and lead may be established either on an hourly rolling average basis as prescribed by paragraph (e)(6)(i) of this section or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an average period from 2 to 24 hours:

(A) The feed rate of each metal shall be limited at any time to ten times the feed rate that would be allowed on an hourly rolling average basis;

(B) The continuous monitor shall meet the following specifications:

(*1*) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(*2*) The rolling average for the selected averaging period is defined as the arithmetic mean of one hour block averages for the averaging period. A one hour block average is the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour; and

(C) The permit limit for the feed rate of each metal shall be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average feed rate for each run.

(iii) *Feed rate limits for metals, total chloride and chlorine, and ash.* Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of paragraphs (e)(6) (i) and (ii) of this section.

(iv) *Conduct of trial burn testing.* (A) If compliance with all applicable emissions standards of §§ 266.104 through 266.107 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.

(B) Prior to obtaining test data for purposes of demonstrating compliance with the emissions standards of §§ 266.104 through 266.107 or establishing limits on operating parameters under this section, the facility must operate under trial burn conditions for a sufficient period to reach steady-state operations. The Director may determine, however, that industrial furnaces that recycle collected particulate matter back into the furnace and that comply with an alternative implementation approach for metals under §266.106(f) need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals emissions.

(C) Trial burn data on the level of an operating parameter for which a limit must be established in the permit must be obtained during emissions sampling for the pollutant(s) (i.e., metals, PM, HCl/Cl_2, organic compounds) for which the parameter must be established as specified by paragraph (e) of this section.

(7) *General requirements*—(i) *Fugitive emissions.* Fugitive emissions must be controlled by:

(A) Keeping the combustion zone totally sealed against fugitive emissions; or

(B) Maintaining the combustion zone pressure lower than atmospheric pressure; or

(C) An alternate means of control demonstrated (with part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(ii) *Automatic waste feed cutoff.* A boiler or industrial furnace must be operated with a functioning system that automatically cuts off the hazardous waste feed when operating conditions deviate from those established under this section. The Director may limit the number of cutoffs per an operating period on a case-by-case basis. In addition:

(A) The permit limit for (the indicator of) minimum combustion chamber temperature must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber,

(B) Exhaust gases must be ducted to the air pollution control system operated in accordance with the permit requirements while hazardous waste or hazardous waste residues remain in the combustion chamber; and

(C) Operating parameters for which permit limits are established must continue to be monitored during the cutoff, and the hazardous waste feed shall not be restarted until the levels of those parameters comply with the permit limits. For parameters that may be monitored on an instantaneous basis, the Director will establish a minimum period of time after a waste feed cutoff during which the parameter must not exceed the permit limit before the hazardous waste feed may be restarted.

(iii) *Changes.* A boiler or industrial furnace must cease burning hazardous waste when changes in combustion properties, or feed rates of the hazardous waste, other fuels, or industrial furnace feedstocks, or changes in the boiler or industrial furnace design or operating conditions deviate from the limits as specified in the permit.

(8) *Monitoring and Inspections.* (i) The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:

(A) If specified by the permit, feed rates and composition of hazardous waste, other fuels, and industrial furnace feedstocks, and feed rates of ash, metals, and total chloride and chlorine;

(B) If specified by the permit, carbon monoxide (CO), hydrocarbons (HC), and oxygen on a continuous basis at a common point in the boiler or industrial furnace downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with operating requirements specified in paragraph (e)(2)(ii) of this section. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in appendix IX of this part.

(C) Upon the request of the Director, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feedstocks as appropriate), residues, and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the applicable standards of §§ 266.104, 266.105, 266.106, and 266.107.

(ii) All monitors shall record data in units corresponding to the permit limit unless otherwise specified in the permit.

(iii) The boiler or industrial furnace and associated equipment (pumps, valves, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when it contains hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.

(iv) The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every 7 days when hazardous waste is burned to verify operability, unless the applicant demonstrates to the Director that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. At a minimum, operational testing must be conducted at least once every 30 days.

(v) These monitoring and inspection data must be recorded and the records must be placed in the operating record required by § 264.73 of this chapter.

(9) *Direct transfer to the burner.* If hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit, the owner and operator must comply with § 266.111.

(10) *Recordkeeping.* The owner or operator must keep in the operating record of the facility all information and data required by this section until closure of the facility.

(11) *Closure.* At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the boiler or industrial furnace.

[56 FR 7208, Feb. 21, 1991; 56 FR 32688, July 17, 1991, as amended at 56 FR 42512, 42514, Aug. 27, 1991]

§ 266.103 Interim status standards for burners.

(a) *Purpose, scope, applicability*—(1) *General.* (i) The purpose of this section is to establish minimum national standards for owners and operators of "existing" boilers and industrial furnaces that burn hazardous waste where such standards define the acceptable management of hazardous waste during the period of interim status. The standards of this section apply to owners and operators of existing facilities until either a permit is issued under § 266.102(d) or until closure responsibilities identified in this section are fulfilled.

(ii) *Existing or in existence* means a boiler or industrial furnace that on or before August 21, 1991 is either in operation burning or processing hazardous waste or for which construction (including the ancillary facilities to burn or to process the hazardous waste) has commenced. A facility has commenced construction if the owner or operator has obtained the Federal, State, and local approvals or permits necessary to begin physical construction; and either:

(A) A continuous on-site, physical construction program has begun; or

(B) The owner or operator has entered into contractual obligations—which cannot be canceled or modified without substantial loss—for physical construction of the facility to be completed within a reasonable time.

(iii) If a boiler or industrial furnace is located at a facility that already has a permit or interim status, then the facility must comply with the applicable regulations dealing with permit modifications in § 270.42 or changes in interim status in § 270.72 of this chapter.

(2) *Exemptions.* The requirements of this section do not apply to hazardous waste and facilities exempt under §§ 266.100(b), or 266.108.

(3) *Prohibition on burning dioxin-listed wastes.* The following hazardous waste listed for dioxin and hazardous waste derived from any of these wastes may not be burned in a boiler or industrial furnace operating under interim status: F020, F021, F022, F023, F026, and F027.

(4) *Applicability of part 265 standards.* Owners and operators of boilers and industrial furnaces that burn hazardous waste and are operating under interim status are subject to the following provisions of part 265 of this chapter, except as provided otherwise by this section:

(i) In subpart A (General), § 265.4;

(ii) In subpart B (General facility standards), §§ 265.11–265.17;

(iii) In subpart C (Preparedness and prevention), §§ 265.31–265.37;

(iv) In subpart D (Contingency plan and emergency procedures), §§ 265.51–265.56;

(v) In subpart E (Manifest system, recordkeeping, and reporting), §§ 265.71–265.77, except that §§ 265.71, 265.72, and 265.76 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources;

(vi) In subpart G (Closure and post-closure), §§ 265.111–265.115;

(vii) In subpart H (Financial requirements), §§ 265.141, 265.142, 265.143, and 265.147–265.151, except that States and the Federal government are exempt from the requirements of subpart H; and

(viii) Subpart BB (Air emission standards for equipment leaks), except § 265.1050(a).

(5) *Special requirements for furnaces.* The following controls apply during interim status to industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see paragraph (a)(5)(ii) of this section) at any location other than the hot end where products are normally discharged or where fuels are normally fired:

(i) *Controls.* (A) The hazardous waste shall be fed at a location where combustion gas temperatures are at least 1800 °F;

(B) The owner or operator must determine that adequate oxygen is present in combustion gases to combust organic constituents in the waste and retain documentation of such determination in the facility record;

(C) For cement kiln systems, the hazardous waste shall be fed into the kiln; and

(D) The hydrocarbon controls of § 266.104(c) or paragraph (c)(5) of this section apply upon certification of compliance under paragraph (c) of this section irrespective of the CO level achieved during the compliance test.

(ii) *Burning hazardous waste solely as an ingredient.* A hazardous waste is burned for a purpose other than solely as an ingredient if it meets either of these criteria:

(A) The hazardous waste has a total concentration of nonmetal compounds listed in part 261, appendix VIII, of this chapter exceeding 500 ppm by weight, as-fired, and so is considered to be burned for destruction. The concentration of nonmetal compounds in a waste as-generated may be reduced to the 500 ppm limit by *bona fide* treatment that removes or destroys nonmetal constituents. Blending for dilution to meet the 500 ppm limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the facility record; or

(B) The hazardous waste has a heating value of 5,000 Btu/lb or more, as-fired, and so is considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by *bona fide* treatment that removes or destroys organic constituents. Blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly blended must be retained in the facility record.

(6) *Restrictions on burning hazardous waste that is not a fuel.* Prior to certification of compliance under paragraph (c) of this section, owners and operators shall not feed hazardous waste that has a heating value less than 5,000 Btu/lb, as-generated, (except that the heating value of a waste as-generated may be increased to above the 5,000 Btu/lb limit by *bona fide* treatment; however, blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and records must be kept to document that impermissible blending has not occurred) in a boiler or industrial furnace, except that:

(i) Hazardous waste may be burned solely as an ingredient; or

(ii) Hazardous waste may be burned for purposes of compliance testing (or testing prior to compliance testing) for a total period of time not to exceed 720 hours; or

(iii) Such waste may be burned if the Director has documentation to show that, prior to August 21, 1991:

(A) The boiler or industrial furnace is operating under the interim status standards for incinerators provided by subpart O of part 265 of this chapter, or the interim status standards for thermal treatment units provided by subpart P of part 265 of this chapter; and

(B) The boiler or industrial furnace met the interim status eligibility requirements under § 270.70 of this chapter for subpart O or subpart P of part 265 of this chapter; and

(C) Hazardous waste with a heating value less than 5,000 Btu/lb was burned prior to that date; or

(iv) Such waste may be burned in a halogen acid furnace if the waste was burned as an excluded ingredient under § 261.2(e) of this chapter prior to February 21, 1991 and documentation is kept on file supporting this claim.

(7) *Direct transfer to the burner.* If hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit, the owner and operator must comply with § 266.111.

(b) *Certification of precompliance*—(1) *General.* The owner or operator must provide complete and accurate information specified in paragraph (b)(2) of this section to the Director on or before August 21, 1991, and must establish limits for the operating parameters specified in paragraph (b)(3) of this section. Such information is termed a "certification of precompliance" and constitutes a certification that the owner or operator has determined that, when the facility is operated within

the limits specified in paragraph (b)(3) of this section, the owner or operator believes that, using best engineering judgment, emissions of particulate matter, metals, and HCl and Cl_2 are not likely to exceed the limits provided by §§ 266.105, 266.106, and 266.107. The facility may burn hazardous waste only under the operating conditions that the owner or operator establishes under paragraph (b)(3) of this section until the owner or operator submits a revised certification of precompliance under paragraph (b)(8) of this section or a certification of compliance under paragraph (c) of this section, or until a permit is issued.

(2) *Information required.* The following information must be submitted with the certification of precompliance to support the determination that the limits established for the operating parameters identified in paragraph (b)(3) of this section are not likely to result in an exceedance of the allowable emission rates for particulate matter, metals, and HCl and Cl_2:

(i) General facility information:

(A) EPA facility ID number;

(B) Facility name, contact person, telephone number, and address;

(C) Description of boilers and industrial furnaces burning hazardous waste, including type and capacity of device;

(D) A scaled plot plan showing the entire facility and location of the boilers and industrial furnaces burning hazardous waste; and

(E) A description of the air pollution control system on each device burning hazardous waste, including the temperature of the flue gas at the inlet to the particulate matter control system.

(ii) Except for facilities complying with the Tier I or Adjusted Tier I feed rate screening limits for metals or total chlorine and chloride provided by §§ 266.106 (b) or (e) and 266.107 (b)(1) or (e), respectively, the estimated uncontrolled (at the inlet to the air pollution control system) emissions of particulate matter, each metal controlled by § 266.106, and hydrogen chloride and chlorine, and the following information to support such determinations:

(A) The feed rate (lb/hr) of ash, chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium in each feedstream (hazardous waste, other fuels, industrial furnace feedstocks);

(B) The estimated partitioning factor to the combustion gas for the materials identified in paragraph (b)(2)(ii)(A) of this section and the basis for the estimate and an estimate of the partitioning to HCl and Cl_2 of total chloride and chlorine in feed materials. To estimate the partitioning factor, the owner or operator must use either best engineering judgment or the procedures specified in appendix IX of this part.

(C) For industrial furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions standards under paragraph (c)(3)(ii)(A), the estimated enrichment factor for each metal. To estimate the enrichment factor, the owner or operator must use either best engineering judgment or the procedures specified in "Alternative Methodology for Implementing Metals Controls" in appendix IX of this part.

(D) If best engineering judgment is used to estimate partitioning factors or enrichment factors under paragraphs (b)(2)(ii)(B) or (b)(2)(ii)(C) respectively, the basis for the judgment. When best engineering judgment is used to develop or evaluate data or information and make determinations under this section, the determinations must be made by a qualified, registered professional engineer and a certification of his/her determinations in accordance with § 270.11(d) of this chapter must be provided in the certification of precompliance.

(iii) For facilities complying with the Tier I or Adjusted Tier I feed rate screening limits for metals or total chlorine and chloride provided by §§ 266.106 (b) or (e) and 266.107 (b)(1) or (e), the feed rate (lb/hr) of total chloride and chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium in each feed stream (hazardous waste, other fuels, industrial furnace feedstocks).

(iv) For facilities complying with the Tier II or Tier III emission limits for metals or HCl and Cl_2 (under §§ 266.106 (c) or (d) or 266.107(b)(2) or (c)), the estimated controlled (outlet of the air pol-

lution control system) emissions rates of particulate matter, each metal controlled by §266.106, and HCl and Cl_2, and the following information to support such determinations:

(A) The estimated air pollution control system (APCS) removal efficiency for particulate matter, HCl, Cl_2, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium.

(B) To estimate APCS removal efficiency, the owner or operator must use either best engineering judgment or the procedures prescribed in appendix IX of this part.

(C) If best engineering judgment is used to estimate APCS removal efficiency, the basis for the judgment. Use of best engineering judgment must be in conformance with provisions of paragraph (b)(2)(ii)(D) of this section.

(v) Determination of allowable emissions rates for HCl, Cl_2, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium, and the following information to support such determinations:

(A) For all facilities:

(*1*) Physical stack height;

(*2*) Good engineering practice stack height as defined by 40 CFR 51.100(ii);

(*3*) Maximum flue gas flow rate;

(*4*) Maximum flue gas temperature;

(*5*) Attach a US Geological Service topographic map (or equivalent) showing the facility location and surrounding land within 5 km of the facility;

(*6*) Identify terrain type: complex or noncomplex; and

(*7*) Identify land use: urban or rural.

(B) For owners and operators using Tier III site specific dispersion modeling to determine allowable levels under §266.106(d) or §266.107(c), or adjusted Tier I feed rate screening limits under §§266.106(e) or 266.107(e):

(*1*) Dispersion model and version used;

(*2*) Source of meterological data;

(*3*) The dilution factor in micrograms per cubic meter per gram per second of emissions for the maximum annual average off-site (unless on-site is required) ground level concentration (MEI location); and

(*4*) Indicate the MEI location on the map required under paragraph (b)(2)(v)(A)(*5*);

(vi) For facilities complying with the Tier II or III emissions rate controls for metals or HCl and Cl_2, a comparison of the estimated controlled emissions rates determined under paragraph (b)(2)(iv) with the allowable emission rates determined under paragraph (b)(2)(v);

(vii) For facilities complying with the Tier I (or adjusted Tier I) feed rate screening limits for metals or total chloride and chlorine, a comparison of actual feed rates of each metal and total chlorine and chloride determined under paragraph (b)(2)(iii) of this section to the Tier I allowable feed rates; and

(viii) For industrial furnaces that feed hazardous waste for any purpose other than solely as an ingredient (as defined by paragraph (a)(5)(ii) of this section) at any location other than the product discharge end of the device, documentation of compliance with the requirements of paragraphs (a)(5)(i)(A), (B), and (C) of this section.

(ix) For industrial furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions standards under paragraph (c)(3)(ii)(A) of this section:

(A) The applicable particulate matter standard in lb/hr; and

(B) The precompliance limit on the concentration of each metal in collected PM.

(3) *Limits on operating conditions.* The owner and operator shall establish limits on the following parameters consistent with the determinations made under paragraph (b)(2) of this section and certify (under provisions of paragraph (b)(9) of this section) to the Director that the facility will operate within the limits during interim status when there is hazardous waste in the unit until revised certification of precompliance under paragraph (b)(8) of this section or certification of compliance under paragraph (c) of this section:

(i) Feed rate of total hazardous waste and (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under §266.106 (b) or (e)) pumpable hazardous waste;

(ii) Feed rate of each metal in the following feed streams:

(A) Total feed streams, except that industrial furnaces that comply with the alternative metals implementation approach under paragraph (b)(4) of this section must specify limits on the concentration of each metal in collected particulate matter in lieu of feed rate limits for total feedstreams;

(B) Total hazardous waste feed, unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under §266.106 (b) or (e); and

(C) Total pumpable hazardous waste feed, unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under §266.106 (b) or (e);

(iii) Total feed rate of chlorine and chloride in total feed streams;

(iv) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited; and

(v) Maximum production rate of the device in appropriate units when producing normal product, unless complying with the Tier I or Adjusted Tier I feed rate screening limits for chlorine under §266.107 (b)(1) or (e) and for all metals under §266.106 (b) or (e), and the uncontrolled particulate emissions do not exceed the standard under §266.105.

(4) *Operating requirements for furnaces that recycle PM.* Owners and operators of furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions controls under paragraph (c)(3)(ii)(A) of this section must comply with the special operating requirements provided in "Alternative Methodology for Implementing Metals Controls" in appendix IX of this part.

(5) *Measurement of feed rates and production rate*—(i) *General requirements.* Limits on each of the parameters specified in paragraph (b)(3) of this section (except for limits on metals concentrations in collected particulate matter (PM) for industrial furnaces that recycle collected PM) shall be established and continuously monitored under either of the following methods:

(A) *Instantaneous limits.* A limit for a parameter may be established and continuously monitored and recorded on an instantaneous basis (i.e., the value that occurs at any time) not to be exceeded at any time; or

(B) *Hourly rolling average limits.* A limit for a parameter may be established and continuously monitored on an hourly rolling average basis defined as follows:

(*1*) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(*2*) An hourly rolling average is the arithmetic mean of the 60 most recent 1-minute average values recorded by the continuous monitoring system.

(ii) *Rolling average limits for carcinogenic metals and lead.* Feed rate limits for the carcinogenic metals (arsenic, beryllium, cadmium, and chromium) and lead may be established either on an hourly rolling average basis as prescribed by paragraph (b)(5)(i)(B) or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an averaging period from 2 to 24 hours:

(A) The feed rate of each metal shall be limited at any time to ten times the feed rate that would be allowed on a hourly rolling average basis;

(B) The continuous monitor shall meet the following specifications:

(*1*) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(*2*) The rolling average for the selected averaging period is defined as the arithmetic mean of one hour block averages for the averaging period. A one hour block average is the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour.

(iii) *Feed rate limits for metals, total chloride and chlorine, and ash.* Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of

those substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of paragraphs (b)(5) (i) and (ii) of this section.

(6) *Public notice requirements at precompliance.* On or before August 21, 1991 the owner or operator must submit a notice with the following information for publication in a major local newspaper of general circulation and send a copy of the notice to the appropriate units of State and local government. The owner and operator must provide to the Director with the certification of precompliance evidence of submitting the notice for publication. The notice, which shall be entitled "Notice of Certification of Precompliance with Hazardous Waste Burning Requirements of 40 CFR 266.103(b)", must include:

(i) Name and address of the owner and operator of the facility as well as the location of the device burning hazardous waste;

(ii) Date that the certification of precompliance is submitted to the Director;

(iii) Brief description of the regulatory process required to comply with the interim status requirements of this section including required emissions testing to demonstrate conformance with emissions standards for organic compounds, particulate matter, metals, and HCl and Cl_2;

(iv) Types and quantities of hazardous waste burned including, but not limited to, source, whether solids or liquids, as well as an appropriate description of the waste;

(v) Type of device(s) in which the hazardous waste is burned including a physical description and maximum production rate of each device;

(vi) Types and quantities of other fuels and industrial furnace feedstocks fed to each unit;

(vii) Brief description of the basis for this certification of precompliance as specified in paragraph (b)(2) of this section;

(viii) Locations where the record for the facility can be viewed and copied by interested parties. These records and locations shall at a minimum include:

(A) The administrative record kept by the Ageny office where the supporting documentation was submitted or another location designated by the Director; and

(B) The BIF correspondence file kept at the facility site where the device is located. The correspondence file must include all correspondence between the facility and the Director, State and local regulatory officials, including copies of all certifications and notifications, such as the precompliance certification, precompliance public notice, notice of compliance testing, compliance test report, compliance certification, time extension requests and approvals or denials, enforcement notifications of violations, and copies of EPA and State site visit reports submitted to the owner or operator.

(ix) Notification of the establishment of a facility mailing list whereby interested parties shall notify the Agency that they wish to be placed on the mailing list to receive future information and notices about this facility; and

(x) Location (mailing address) of the applicable EPA Regional Office, Hazardous Waste Division, where further information can be obtained on EPA regulation of hazardous waste burning.

(7) *Monitoring other operating parameters.* When the monitoring systems for the operating parameters listed in paragraphs (c)(1) (v through xiii) of this section are installed and operating in conformance with vendor specifications or (for CO, HC, and oxygen) specifications provided by appendix IX of this part, as appropriate, the parameters shall be continuously monitored and records shall be maintained in the operating record.

(8) *Revised certification of precompliance.* The owner or operator may revise at any time the information and operating conditions documented under paragraphs (b)(2) and (b)(3) of this section in the certification of precompliance by submitting a revised certification of precompliance under procedures provided by those paragraphs.

(i) The public notice requirements of paragraph (b)(6) of this section do not apply to recertifications.

(ii) The owner and operator must operate the facility within the limits established for the operating parameters under paragraph (b)(3) of this section until a revised certification is submitted under this paragraph or a certification of compliance is submitted under paragraph (c) of this section.

(9) *Certification of precompliance statement.* The owner or operator must include the following signed statement with the certification of precompliance submitted to the Director:

> "I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results and other information used to determine conformance with the requirements of §266.103(b) are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manages the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
>
> I also acknowledge that the operating limits established in this certification pursuant to §266.103(b) (3) and (4) are enforceable limits at which the facility can legally operate during interim status until: (1) A revised certification of precompliance is submitted, (2) a certification of compliance is submitted, or (3) an operating permit is issued."

(c) *Certification of compliance.* The owner or operator shall conduct emissions testing to document compliance with the emissions standards of §§266.104 (b) through (e), 266.105, 266.106, 266.107, and paragraph (a)(5)(i)(D) of this section, under the procedures prescribed by this paragraph, except under extensions of time provided by paragraph (c)(7). Based on the compliance test, the owner or operator shall submit to the Director on or before August 21, 1992 a complete and accurate "certification of compliance" (under paragraph (c)(4) of this section) with those emission standards establishing limits on the operating parameters specified in paragraph (c)(1).

(1) *Limits on operating conditions.* The owner or operator shall establish limits on the following parameters based on operations during the compliance test (under procedures prescribed in paragraph (c)(4)(iv) of this section) or as otherwise specified and include these limits with the certification of compliance. The boiler or industrial furnace must be operated in accordance with these operating limits and the applicable emissions standards of §§266.104(b) through (e), 266.105, 266.106, 266.107, and 266.103(a)(5)(i)(D) at all times when there is hazardous waste in the unit.

(i) Feed rate of total hazardous waste and (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under §266.106(b) or (e) and the total chlorine and chloride feed rate screening limits under §266.107(b) or (e)), pumpable hazardous waste;

(ii) Feed rate of each metal in the following feedstreams:

(A) Total feedstreams, except that:

(*1*) Facilities that comply with Tier I or Adjusted Tier I metals feed rate screening limits may set their operating limits at the metals feed rate screening limits determined under §266.106(b) or (e); and

(*2*) Industrial furnaces that must comply with the alternative metals implementation approach under paragraph (c)(3)(ii) of this section must specify limits on the concentration of each metal in the collected particulate matter in lieu of feed rate limits for total feedsteams;

(B) Total hazardous waste feed (unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under §266.106(b) or (e)); and

(C) Total pumpable hazardous waste feed (unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under §266.106(b) or (e));

(iii) Total feed rate of chlorine and chloride in total feed streams, except that facilities that comply with Tier I or Adjusted Tier I feed rate screening limits may set their operating limits at the total chlorine and chloride feed rate screening limits determined under §266.107(b)(1) or (e);

(iv) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited;

(v) Carbon monoxide concentration, and where required, hydrocarbon con-

centration in stack gas. When complying with the CO controls of § 266.104(b), the CO limit is 100 ppmv, and when complying with the HC controls of § 266.104(c), the HC limit is 20 ppmv. When complying with the CO controls of § 266.104(c), the CO limit is established based on the compliance test;

(vi) Maximum production rate of the device in appropriate units when producing normal product, unless complying with the Tier I or Adjusted Tier I feed rate screening limits for chlorine under § 266.107(b)(1) or (e) and for all metals under § 266.106(b) or (e), and the uncontrolled particulate emissions do not exceed the standard under § 266.105;

(vii) Maximum combustion chamber temperature where the temperature measurement is as close to the combustion zone as possible and is upstream of any quench water injection (unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under § 266.106(b) or (e));

(viii) Maximum flue gas temperature entering a particulate matter control device (unless complying with Tier I or Adjusted Tier I metals feed rate screening limits under § 266.106(b) or (e) and the total chlorine and chloride feed rate screening limits under § 266.107(b) or (e));

(ix) For systems using wet scrubbers, including wet ionizing scrubbers (unless complying with Tier I or Adjusted Tier I metals feed rate screening limits under § 266.106(b)(1) or (e));

(A) Minimum liquid to flue gas ration;

(B) Minimum scrubber blowdown from the system or maximum suspended solids content of scrubber water; and

(C) Minimum pH level of the scrubber water;

(x) For systems using venturi scrubbers, the minimum differential gas pressure across the venturi (unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under § 266.106(b) or (e) and the total chlorine and chloride feed rate screening limits under § 266.107(b)(1) or (e));

(xi) For systems using dry scrubbers (unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under § 266.106(b) or (e) and the total chlorine and chloride feed rate screening limits under § 266.107(b)(1) or (e)):

(A) Minimum caustic feed rate; and

(B) Maximum flue gas flow rate;

(xii) For systems using wet ionizing scrubbers or electrostatic precipitators (unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under § 266.106(b) or (e) and the total chlorine and chloride feed rate screening limits under § 266.107(b)(1) or (e)):

(A) Minimum electrical power in kilovolt amperes (kVA) to the precipitator plates; and

(B) Maximum flue gas flow rate;

(xiii) For systems using fabric filters (baghouses), the minimum pressure drop (unless complying with the Tier I or Adjusted Tier I metal feed rate screening limits under § 266.106(b) or (e) and the total chlorine and chloride feed rate screening limits under § 266.107(b)(1) or (e)).

(2) *Prior notice of compliance testing.* At least 30 days prior to the compliance testing required by paragraph (c)(3) of this section, the owner or operator shall notify the Director and submit the following information:

(i) General facility information including:

(A) EPA facility ID number;

(B) Facility name, contact person, telephone number, and address;

(C) Person responsible for conducting compliance test, including company name, address, and telephone number, and a statement of qualifications;

(D) Planned date of the compliance test;

(ii) Specific information on each device to be tested including:

(A) Description of boiler or industrial furnace;

(B) A scaled plot plan showing the entire facility and location of the boiler or industrial furnace;

(C) A description of the air pollution control system;

(D) Identification of the continuous emission monitors that are installed, including:

(*1*) Carbon monoxide monitor;

(*2*) Oxygen monitor;

(*3*) Hydrocarbon monitor, specifying the minimum temperature of the system and, if the temperature is less than 150 °C, an explanation of why a heated system is not used (see paragraph (c)(5) of this section) and a brief description of the sample gas conditioning system;

(E) Indication of whether the stack is shared with another device that will be in operation during the compliance test;

(F) Other information useful to an understanding of the system design or operation.

(iii) Information on the testing planned, including a complete copy of the test protocol and Quality Assurance/Quality Control (QA/QC) plan, and a summary description for each test providing the following information at a minimum:

(A) Purpose of the test (e.g., demonstrate compliance with emissions of particulate matter); and

(B) Planned operating conditions, including levels for each pertinent parameter specified in paragraph (c)(1) of this section.

(3) *Compliance testing.*—(i) *General.* Compliance testing must be conducted under conditions for which the owner or operator has submitted a certification of precompliance under paragraph (b) of this section and under conditions established in the notification of compliance testing required by paragraph (c)(2) of this section. The owner or operator may seek approval on a case-by-case basis to use compliance test data from one unit in lieu of testing a similar onsite unit. To support the request, the owner or operator must provide a comparison of the hazardous waste burned and other feedstreams, and the design, operation, and maintenance of both the tested unit and the similar unit. The Director shall provide a written approval to use compliance test data in lieu of testing a similar unit if he finds that the hazardous wastes, the devices, and the operating conditions are sufficiently similar, and the data from the other compliance test is adequate to meet the requirements of § 266.103(c).

(ii) *Special requirements for industrial furnaces that recycle collected PM.* Owners and operators of industrial furnaces that recycle back into the furnace particulate matter (PM) from the air pollution control system must comply with one of the following procedures for testing to determine compliance with the metals standards of § 266.106(c) or (d):

(A) The special testing requirements prescribed in "Alternative Method for Implementing Metals Controls" in appendix IX of this part; or

(B) Stack emissions testing for a minimum of 6 hours each day while hazardous waste is burned during interim status. The testing must be conducted when burning normal hazardous waste for that day at normal feed rates for that day and when the air pollution control system is operated under normal conditions. During interim status, hazardous waste analysis for metals content must be sufficient for the owner or operator to determine if changes in metals content may affect the ability of the facility to meet the metals emissions standards established under § 266.106(c) or (d). Under this option, operating limits (under paragraph (c)(1) of this section) must be established during compliance testing under paragraph (c)(3) of this section only on the following parameters;

(*1*) Feed rate of total hazardous waste;

(*2*) Total feed rate of chlorine and chloride in total feed streams;

(*3*) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited;

(*4*) Carbon monoxide concentration, and where required, hydrocarbon concentration in stack gas;

(*5*) Maximum production rate of the device in appropriate units when producing normal product; or

(C) Conduct compliance testing to determine compliance with the metals standards to establish limits on the operating parameters of paragraph (c)(1) of this section only after the kiln system has been conditioned to enable it to reach equilibrium with respect to metals fed into the system and metals emissions. During conditioning, hazardous waste and raw materials having the same metals content as will be fed during the compliance test must be fed at the feed rates that will be fed during the compliance test.

(iii) *Conduct of compliance testing.* (A) If compliance with all applicable emissions standards of §§ 266.104 through

266.107 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.

(B) Prior to obtaining test data for purposes of demonstrating compliance with the applicable emissions standards of §§266.104 through 266.107 or establishing limits on operating parameters under this section, the facility must operate under compliance test conditions for a sufficient period to reach steady-state operations. Industrial furnaces that recycle collected particulate matter back into the furnace and that comply with paragraphs (c)(3)(ii)(A) or (B) of this section, however, need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals.

(C) Compliance test data on the level of an operating parameter for which a limit must be established in the certification of compliance must be obtained during emissions sampling for the pollutant(s) (i.e., metals, PM, HCl/Cl_2, organic compounds) for which the parameter must be established as specified by paragraph (c)(1) of this section.

(4) *Certification of compliance.* Within 90 days of completing compliance testing, the owner or operator must certify to the Director compliance with the emissions standards of §§266.104 (b), (c), and (e), 266.105, 266.106, 266.107, and paragraph (a)(5)(i)(D) of this section. The certification of compliance must include the following information:

(i) General facility and testing information including:

(A) EPA facility ID number;

(B) Facility name, contact person, telephone number, and address;

(C) Person responsible for conducting compliance testing, including company name, address, and telephone number, and a statement of qualifications;

(D) Date(s) of each compliance test;

(E) Description of boiler or industrial furnace tested;

(F) Person responsible for quality assurance/quality control (QA/QC), title, and telephone number, and statement that procedures prescribed in the QA/QC plan submitted under §266.103(c)(2)(iii) have been followed, or a description of any changes and an explanation of why changes were necessary.

(G) Description of any changes in the unit configuration prior to or during testing that would alter any of the information submitted in the prior notice of compliance testing under paragraph (c)(2) of this section, and an explanation of why the changes were necessary;

(H) Description of any changes in the planned test conditions prior to or during the testing that alter any of the information submitted in the prior notice of compliance testing under paragraph (c)(2) of this section, and an explanation of why the changes were necessary; and

(I) The complete report on results of emissions testing.

(ii) Specific information on each test including:

(A) Purpose(s) of test (e.g., demonstrate conformance with the emissions limits for particulate matter, metals, HCl, Cl_2, and CO)

(B) Summary of test results for each run and for each test including the following information:

(*1*) Date of run;

(*2*) Duration of run;

(*3*) Time-weighted average and highest hourly rolling average CO level for each run and for the test;

(*4*) Highest hourly rolling average HC level, if HC monitoring is required for each run and for the test;

(*5*) If dioxin and furan testing is required under §266.104(e), time-weighted average emissions for each run and for the test of chlorinated dioxin and furan emissions, and the predicted maximum annual average ground level concentration of the toxicity equivalency factor;

(*6*) Time-weighted average particulate matter emissions for each run and for the test;

(*7*) Time-weighted average HCl and Cl_2 emissions for each run and for the test;

(*8*) Time-weighted average emissions for the metals subject to regulation under §266.106 for each run and for the test; and

(*9*) QA/QC results.

(iii) Comparison of the actual emissions during each test with the emissions limits prescribed by §§266.104 (b), (c), and (e), 266.105, 266.106, and 266.107 and established for the facility in the certification of precompliance under paragraph (b) of this section.

(iv) Determination of operating limits based on all valid runs of the compliance test for each applicable parameter listed in paragraph (c)(1) of this section using either of the following procedures:

(A) *Instantaneous limits.* A parameter may be measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the operating limit specified as the time-weighted average during all runs of the compliance test; or

(B) *Hourly rolling average basis.* (*1*) The limit for a parameter may be established and continuously monitored on an hourly rolling average basis defined as follows:

(*i*) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(*ii*) An hourly rolling average is the arithmetic mean of the 60 most recent 1-minute average values recorded by the continuous monitoring system.

(*2*) The operating limit for the parameter shall be established based on compliance test data as the average over all test runs of the highest hourly rolling average value for each run.

(C) *Rolling average limits for carcinogenic metals and lead.* Feed rate limits for the carcinogenic metals (i.e., arsenic, beryllium, cadmium and chromium) and lead may be established either on an hourly rolling average basis as prescribed by paragraph (c)(4)(iv)(B) of this section or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an averaging period from 2 to 24 hours:

(*1*) The feed rate of each metal shall be limited at any time to ten times the feed rate that would be allowed on a hourly rolling average basis;

(*2*) The continuous monitor shall meet the following specifications:

(*i*) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(*ii*) The rolling average for the selected averaging period is defined as arithmetic mean of one hour block averages for the averaging period. A one hour block average is the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour; and

(*3*) The operating limit for the feed rate of each metal shall be established based on compliance test data as the average over all test runs of the highest hourly rolling average feed rate for each run.

(D) *Feed rate limits for metals, total chloride and chlorine, and ash.* Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of paragraphs (c)(4)(iv) (A) through (C) of this section.

(v) *Certification of compliance statement.* The following statement shall accompany the certification of compliance:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results and other information used to determine conformance with the requirements of §266.103(c) are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manages the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also acknowledge that the operating conditions established in this certification pursuant to §266.103(c)(4)(iv) are enforceable

limits at which the facility can legally operate during interim status until a revised certification of compliance is submitted."

(5) *Special requirements for HC monitoring systems.* When an owner or operator is required to comply with the hydrocarbon (HC) controls provided by § 266.104(c) or paragraph (a)(5)(i)(D) of this section, a conditioned gas monitoring system may be used in conformance with specifications provided in appendix IX of this part provided that the owner or operator submits a certification of compliance without using extensions of time provided by paragraph (c)(7) of this section. However, owners and operators of facilities electing to comply with the alternative hydrocarbon provision of § 266.104(f) and requesting a time extension under § 266.103(c)(7)(ii)(B) may establish the baseline HC level and comply with the interim HC limit established by the time extension using a conditioned gas monitoring system if the Director determines that the owner or operator has demonstrated that they have made a good faith effort to operate a heated monitoring system but found it to be impracticable.

(6) *Special operating requirements for industrial furnaces that recycle collected PM.* Owners and operators of industrial furnaces that recycle back into the furnace particulate matter (PM) from the air pollution control system must:

(i) When complying with the requirements of paragraph (c)(3)(ii)(A) of this section, comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in appendix IX of this part; and

(ii) When complying with the requirements of paragraph (c)(3)(ii)(B) of this section, comply with the operating requirements prescribed by that paragraph.

(7) *Extensions of time.* (i) If the owner or operator does not submit a complete certification of compliance for all of the applicable emissions standards of §§ 266.104, 266.105, 266.106, and 266.107 by August 21, 1992, he/she must either:

(A) Stop burning hazardous waste and begin closure activities under paragraph (l) of this section for the hazardous waste portion of the facility; or

(B) Limit hazardous waste burning only for purposes of compliance testing (and pretesting to prepare for compliance testing) a total period of 720 hours for the period of time beginning August 21, 1992, submit a notification to the Director by August 21, 1992 stating that the facility is operating under restricted interim status and intends to resume burning hazardous waste, and submit a complete certification of compliance by August 23, 1993; or

(C) Obtain a case-by-case extension of time under paragraph (c)(7)(ii) of this section.

(ii) The owner or operator may request a case-by-case extension of time to extend any time limit provided by paragraph (c) of this section if compliance with the time limit is not practicable for reasons beyond the control of the owner or operator.

(A) In granting an extension, the Director may apply conditions as the facts warrant to ensure timely compliance with the requirements of this section and that the facility operates in a manner that does not pose a hazard to human health and the environment;

(B) When an owner or operator requests an extension of time to enable the facility to comply with the alternative hydrocarbon provisions of § 266.104(f) and obtain a RCRA operating permit because the facility cannot meet the HC limit of § 266.104(c) of this chapter:

(*1*) The Director shall, in considering whether to grant the extension:

(*i*) Determine whether the owner and operator have submitted in a timely manner a complete part B permit application that includes information required under § 270.22(b) of this chapter; and

(*ii*) Consider whether the owner and operator have made a good faith effort to certify compliance with all other emission controls, including the controls on dioxins and furans of § 266.104(e) and the controls on PM, metals, and HCl/Cl_2.

(*2*) If an extension is granted, the Director shall, as a condition of the extension, require the facility to operate under flue gas concentration limits on CO and HC that, based on available information, including information in the part B permit application, are baseline CO and HC levels as defined by § 266.104(f)(1).

(8) *Revised certification of compliance.* The owner or operator may submit at any time a revised certification of compliance (recertification of compliance) under the following procedures:

(i) Prior to submittal of a revised certification of compliance, hazardous waste may not be burned for more than a total of 720 hours under operating conditions that exceed those established under a current certification of compliance, and such burning may be conducted only for purposes of determining whether the facility can operate under revised conditions and continue to meet the applicable emissions standards of §§ 266.104, 266.105, 266.106, and 266.107;

(ii) At least 30 days prior to first burning hazardous waste under operating conditions that exceed those established under a current certification of compliance, the owner or operator shall notify the Director and submit the following information:

(A) EPA facility ID number, and facility name, contact person, telephone number, and address;

(B) Operating conditions that the owner or operator is seeking to revise and description of the changes in facility design or operation that prompted the need to seek to revise the operating conditions;

(C) A determination that when operating under the revised operating conditions, the applicable emissions standards of §§ 266.104, 266.105, 266.106, and 266.107 are not likely to be exceeded. To document this determination, the owner or operator shall submit the applicable information required under paragraph (b)(2) of this section; and

(D) Complete emissions testing protocol for any pretesting and for a new compliance test to determine compliance with the applicable emissions standards of §§ 266.104, 266.105, 266.106, and 266.107 when operating under revised operating conditions. The protocol shall include a schedule of pre-testing and compliance testing. If the owner and operator revises the scheduled date for the compliance test, he/she shall notify the Director in writing at least 30 days prior to the revised date of the compliance test;

(iii) Conduct a compliance test under the revised operating conditions and the protocol submitted to the Director to determine compliance with the applicable emissions standards of §§ 266.104, 266.105, 266.106, and 266.107; and

(iv) Submit a revised certification of compliance under paragraph (c)(4) of this section.

(d) *Periodic Recertifications.* The owner or operator must conduct compliance testing and submit to the Director a recertification of compliance under provisions of paragraph (c) of this section within three years from submitting the previous certification or recertification. If the owner or operator seeks to recertify compliance under new operating conditions, he/she must comply with the requirements of paragraph (c)(8) of this section.

(e) *Noncompliance with certification schedule.* If the owner or operator does not comply with the interim status compliance schedule provided by paragraphs (b), (c), and (d) of this section, hazardous waste burning must terminate on the date that the deadline is missed, closure activities must begin under paragraph (l) of this section, and hazardous waste burning may not resume except under an operating permit issued under § 270.66 of this chapter. For purposes of compliance with the closure provisions of paragraph (l) of this section and §§ 265.112(d)(2) and 265.113 of this chapter the boiler or industrial furnace has received "the known final volume of hazardous waste" on the date that the deadline is missed.

(f) *Start-up and shut-down.* Hazardous waste (except waste fed solely as an ingredient under the Tier I (or adjusted Tier I) feed rate screening limits for metals and chloride/chlorine) must not be fed into the device during start-up and shut-down of the boiler or industrial furnace, unless the device is operating within the conditions of operation specified in the certification of compliance.

(g) *Automatic waste feed cutoff.* During the compliance test required by paragraph (c)(3) of this section, and upon certification of compliance under paragraph (c) of this section, a boiler or industrial furnace must be operated with a functioning system that automatically cuts off the hazardous waste feed when the applicable operating condi-

tions specified in paragraphs (c)(1) (i) and (v through xiii) of this section deviate from those established in the certification of compliance. In addition:

(1) To minimize emissions of organic compounds, the minimum combustion chamber temperature (or the indicator of combustion chamber temperature) that occurred during the compliance test must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber, with the minimum temperature during the compliance test defined as either:

(i) If compliance with the combustion chamber temperature limit is based on a hourly rolling average, the minimum temperature during the compliance test is considered to be the average over all runs of the lowest hourly rolling average for each run; or

(ii) If compliance with the combustion chamber temperature limit is based on an instantaneous temperature measurement, the minimum temperature during the compliance test is considered to be the time-weighted average temperature during all runs of the test; and

(2) Operating parameters limited by the certification of compliance must continue to be monitored during the cutoff, and the hazardous waste feed shall not be restarted until the levels of those parameters comply with the limits established in the certification of compliance.

(h) *Fugitive emissions.* Fugitive emissions must be controlled by:

(1) Keeping the combustion zone totally sealed against fugitive emissions; or

(2) Maintaining the combustion zone pressure lower than atmospheric pressure; or

(3) An alternate means of control that the owner or operator can demonstrate provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure. Support for such demonstration shall be included in the operating record.

(i) *Changes.* A boiler or industrial furnace must cease burning hazardous waste when changes in combustion properties, or feed rates of the hazardous waste, other fuels, or industrial furnace feedstocks, or changes in the boiler or industrial furnace design or operating conditions deviate from the limits specified in the certification of compliance.

(j) *Monitoring and Inspections.* (1) The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:

(i) Feed rates and composition of hazardous waste, other fuels, and industrial furnace feed stocks, and feed rates of ash, metals, and total chloride and chlorine as necessary to ensure conformance with the certification of precompliance or certification of compliance;

(ii) Carbon monoxide (CO), oxygen, and if applicable, hydrocarbons (HC), on a continuous basis at a common point in the boiler or industrial furnace downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with the operating limits specified in the certification of compliance. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in appendix IX of this part.

(iii) Upon the request of the Director, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feed stocks as appropriate) and the stack gas emissions must be conducted to verify that the operating conditions established in the certification of precompliance or certification of compliance achieve the applicable standards of §§266.104, 266.105, 266.106, and 266.107.

(2) The boiler or industrial furnace and associated equipment (pumps, valves, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when they contain hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.

(3) The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every 7 days when hazardous waste is burned to verify operability, unless the owner or operator can demonstrate that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. Support for such demonstration shall be included in the operating record. At a minimum, operational testing must be conducted at least once every 30 days.

(4) These monitoring and inspection data must be recorded and the records must be placed in the operating log.

(k) *Recordkeeping.* The owner or operator must keep in the operating record of the facility all information and data required by this section until closure of the boiler or industrial furnace unit.

(l) *Closure.* At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the boiler or industrial furnace and must comply with §§265.111–265.115 of this chapter.

[56 FR 7208, Feb. 21, 1991; 56 FR 32689, July 17, 1991, as amended at 56 FR 42512, 42514, Aug. 27, 1991; 57 FR 38564, Aug. 25, 1992; 57 FR 45000, Sept. 30, 1992]

§266.104 Standards to control organic emissions.

(a) *DRE standard*—(1) *General.* Except as provided in paragraph (a)(3) of this section, a boiler or industrial furnace burning hazardous waste must achieve a destruction and removal efficiency (DRE) of 99.99% for all organic hazardous constituents in the waste feed. To demonstrate conformance with this requirement, 99.99% DRE must be demonstrated during a trial burn for each principal organic hazardous constituent (POHC) designated (under paragraph (a)(2) of this section) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = \left[1 - \frac{W_{out}}{W_{in}}\right] \times 100$$

where:

W_{in} = Mass feed rate of one principal organic hazardous constituent (POHC) in the hazardous waste fired to the boiler or industrial furnace; and

W_{out} = Mass emission rate of the same POHC present in stack gas prior to release to the atmosphere.

(2) *Designation of POHCs.* Principal organic hazardous constituents (POHCs) are those compounds for which compliance with the DRE requirements of this section shall be demonstrated in a trial burn in conformance with procedures prescribed in §270.66 of this chapter. One or more POHCs shall be designated by the Director for each waste feed to be burned. POHCs shall be designated based on the degree of difficulty of destruction of the organic constituents in the waste and on their concentrations or mass in the waste feed considering the results of waste analyses submitted with part B of the permit application. POHCs are most likely to be selected from among those compounds listed in part 261, appendix VIII of this chapter that are also present in the normal waste feed. However, if the applicant demonstrates to the Regional Administrator's satisfaction that a compound not listed in appendix VIII or not present in the normal waste feed is a suitable indicator of compliance with the DRE requirements of this section, that compound may be designated as a POHC. Such POHCs need not be toxic or organic compounds.

(3) *Dioxin-listed waste.* A boiler or industrial furnace burning hazardous waste containing (or derived from) EPA Hazardous Wastes Nos. F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each POHC designated (under paragraph (a)(2) of this section) in its permit. This performance must be demonstrated on POHCs that are more difficult to burn than tetra-, penta-, and hexachlorodibenzo-*p*-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in paragraph (a)(1) of this section. In addition, the owner or operator of the boiler or industrial furnace must notify the Director of intent to burn EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027.

(4) *Automatic waiver of DRE trial burn.* Owners and operators of boilers operated under the special operating requirements provided by §266.110 are considered to be in compliance with the DRE standard of paragraph (a)(1) of this section and are exempt from the DRE trial burn.

(5) *Low risk waste.* Owners and operators of boilers or industrial furnaces that burn hazardous waste in compliance with the requirements of

§ 266.109(a) are considered to be in compliance with the DRE standard of paragraph (a)(1) of this section and are exempt from the DRE trial burn.

(b) *Carbon monoxide standard.* (1) Except as provided in paragraph (c) of this section, the stack gas concentration of carbon monoxide (CO) from a boiler or industrial furnace burning hazardous waste cannot exceed 100 ppmv on an hourly rolling average basis (i.e., over any 60 minute period), continuously corrected to 7 percent oxygen, dry gas basis.

(2) CO and oxygen shall be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Carbon Monoxide and Oxygen for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in appendix IX of this part.

(3) Compliance with the 100 ppmv CO limit must be demonstrated during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). To demonstrate compliance, the highest hourly rolling average CO level during any valid run of the trial burn or compliance test must not exceed 100 ppmv.

(c) *Alternative carbon monoxide standard.* (1) The stack gas concentration of carbon monoxide (CO) from a boiler or industrial furnace burning hazardous waste may exceed the 100 ppmv limit provided that stack gas concentrations of hydrocarbons (HC) do not exceed 20 ppmv, except as provided by paragraph (f) of this section for certain industrial furnaces.

(2) HC limits must be established under this section on an hourly rolling average basis (i.e., over any 60 minute period), reported as propane, and continuously corrected to 7 percent oxygen, dry gas basis.

(3) HC shall be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Hydrocarbons for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in appendix IX of this part. CO and oxygen shall be continuously monitored in conformance with paragraph (b)(2) of this section.

(4) The alternative CO standard is established based on CO data during the trial burn (for a new facility) and the compliance test (for an interim status facility). The alternative CO standard is the average over all valid runs of the highest hourly average CO level for each run. The CO limit is implemented on an hourly rolling average basis, and continuously corrected to 7 percent oxygen, dry gas basis.

(d) *Special requirements for furnaces.* Owners and operators of industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see § 266.103(a)(5)(ii)) at any location other than the end where products are normally discharged and where fuels are normally fired must comply with the hydrocarbon limits provided by paragraphs (c) or (f) of this section irrespective of whether stack gas CO concentrations meet the 100 ppmv limit of paragraph (b) of this section.

(e) *Controls for dioxins and furans.* Owners and operators of boilers and industrial furnaces that are equipped with a dry particulate matter control device that operates within the temperature range of 450–750 °F, and industrial furnaces operating under an alternative hydrocarbon limit established under paragraph (f) of this section must conduct a site-specific risk assessment as follows to demonstrate that emissions of chlorinated dibenzo-*p*-dioxins and dibenzofurans do not result in an increased lifetime cancer risk to the hypothetical maximum exposed individual (MEI) exceeding 1 in 100,000:

(1) During the trial burn (for new facilities or an interim status facility applying for a permit) or compliance test (for interim status facilities), determine emission rates of the tetra-octa congeners of chlorinated dibenzo-*p*-dioxins and dibenzofurans (CDDs/CDFs) using Method 23, "Determination of Polychlorinated Dibenzo-p-Dioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) from Stationary Sources", in appendix IX of this part;

(2) Estimate the 2,3,7,8-TCDD toxicity equivalence of the tetra-octa CDDs/CDFs congeners using "Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners" in appendix IX of this part. Multiply the emission rates of CDD/CDF congeners with a toxicity equivalence greater than zero (see the procedure) by the calculated toxicity equivalence factor to estimate the equivalent emission rate of 2,3,7,8-TCDD;

(3) Conduct dispersion modeling using methods recommended in *Guideline on Air Quality Models (Revised)* or the "Hazardous Waste Combustion Air Quality Screening Procedure", which are provided in appendices X and IX, respectively, of this part, or "EPA SCREEN Screening Procedure" as described in *Screening Procedures for Estimating Air Quality Impact of Stationary Sources* (incorporated by reference in § 260.11) to predict the maximum annual average off-site ground level concentration of 2,3,7,8-TCDD equivalents determined under paragraph (e)(2) of this section. The maximum annual average on-site concentration must be used when a person resides on-site; and

(4) The ratio of the predicted maximum annual average ground level concentration of 2,3,7,8-TCDD equivalents to the risk-specific dose for 2,3,7,8-TCDD provided in appendix V of this part (2.2×10^{-9}) shall not exceed 1.0.

(f) *Alternative HC limit for furnaces with organic matter in raw material.* For industrial furnaces that cannot meet the 20 ppmv HC limit because of organic matter in normal raw material, the Director may establish an alternative HC limit on a case-by-case basis (under a part B permit proceeding) at a level that ensures that flue gas HC (and CO) concentrations when burning hazardous waste are not greater than when not burning hazardous waste (the baseline HC level) provided that the owner or operator complies with the following requirements. However, cement kilns equipped with a by-pass duct meeting the requirements of paragraph (g) of this section, are not eligible for an alternative HC limit.

(1) When the baseline HC (and CO) level is determined, the owner or operator must demonstrate that the facility is designed and operated to minimize hydrocarbon emissions from fuels and raw materials and that the facility is producing normal products under normal operating conditions feeding normal feedstocks and fuels. The baseline HC level is defined as the average over all valid test runs of the highest hourly rolling average HC value for each run when the facility does not burn hazardous waste, adjusted as appropriate to consider the variability of hydrocarbon levels under good combustion operating conditions. The baseline CO level is determined based on the test runs used to establish the baseline HC level and is defined as the average over all test runs of the highest hourly rolling average CO value for each run. More than one baseline level must be determined if the facility operates under different modes that may generate significantly lower HC (and CO) levels;

(2) The owner or operator must develop an approach to monitor over time changes in the operation of the facility that could reduce the baseline HC level;

(3) The owner or operator must conduct emissions testing during the trial burn to:

(i) Determine the baseline HC (and CO) level;

(ii) Demonstrate that, when hazardous waste is burned, HC (and CO) levels do not exceed the baseline level; and

(iii) Identify the types and concentrations of organic compounds listed in appendix VIII, part 261 of this chapter, that are emitted and conduct dispersion modeling to predict the maximum annual average ground level concentration of each organic compound. On-site ground level concentrations must be considered for this evaluation if a person resides on site.

(A) Sampling and analysis of organic emissions shall be conducted using procedures prescribed by the Director.

(B) Dispersion modeling shall be conducted according to procedures provided by paragraph (e)(2) of this section; and

(iv) Demonstrate that maximum annual average ground level concentrations of the organic compounds identified in paragraph (f)(3)(iii) of this section do not exceed the following levels:

(A) For the noncarcinogenic compounds listed in appendix IV of this part, the levels established in appendix IV;

(B) For the carcinogenic compounds listed in appendix V of this part, the sum for all compounds of the ratios of the actual ground level concentration to the level established in appendix V cannot exceed 1.0. To estimate the health risk from chlorinated dibenzo-p-dioxins and dibenzofuran congeners, use the procedures prescribed by paragraph (e)(3) of this section to estimate the 2,3,7,8-TCDD toxicity equivalence of the congeners.

(C) For compounds not listed in appendix IV or V, 0.1 micrograms per cubic meter.

(4) All hydrocarbon levels specified under this paragraph are to be monitored and reported as specified in paragraphs (c)(1) and (c)(2) of this section.

(g) *Monitoring CO and HC in the by-pass duct of a cement kiln.* Cement kilns may comply with the carbon monoxide and hydrocarbon limits provided by paragraphs (b), (c), and (d) of this section by monitoring in the by-pass duct provided that:

(1) Hazardous waste is fired only into the kiln and not at any location downstream from the kiln exit relative to the direction of gas flow; and

(2) The by-pass duct diverts a minimum of 10% of kiln off-gas into the duct.

(h) *Use of emissions test data to demonstrate compliance and establish operating limits.* Compliance with the requirements of this section must be demonstrated simultaneously by emissions testing or during separate runs under identical operating conditions. Further, data to demonstrate compliance with the CO and HC limits of this section or to establish alternative CO or HC limits under this section must be obtained during the time that DRE testing, and where applicable, CDD/CDF testing under paragraph (e) of this section and comprehensive organic emissions testing under paragraph (f) is conducted.

(i) *Enforcement.* For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under §266.102) will be regarded as compliance with this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this section may be "information" justifying modification or revocation and re-issuance of a permit under §270.41 of this chapter.

[56 FR 7208, Feb. 21, 1991; 56 FR 32689, July 17, 1991, as amended at 57 FR 38565, Aug. 25, 1992]

§266.105 Standards to control particulate matter.

(a) A boiler or industrial furnace burning hazardous waste may not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) after correction to a stack gas concentration of 7% oxygen, using procedures prescribed in 40 CFR part 60, appendix A, methods 1 through 5, and appendix IX of this part.

(b) An owner or operator meeting the requirements of §266.109(b) for the low risk waste exemption is exempt from the particulate matter standard.

(c) For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under §266.102) will be regarded as compliance with this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this section may be "information" justifying modification or revocation and re-issuance of a permit under §270.41 of this chapter.

§266.106 Standards to control metals emissions.

(a) *General.* The owner or operator must comply with the metals standards provided by paragraphs (b), (c), (d), (e), or (f) of this section for each metal listed in paragraph (b) of this section that is present in the hazardous waste at detectable levels using analytical procedures specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), incorporated by reference in §260.11 of this chapter.

(b) *Tier I feed rate screening limits.* Feed rate screening limits for metals are specified in appendix I of this part as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are

provided in paragraph (b)(7) of this section.

(1) *Noncarcinogenic metals.* The feed rates of antimony, barium, lead, mercury, thallium, and silver in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks shall not exceed the screening limits specified in appendix I of this part.

(i) The feed rate screening limits for antimony, barium, mercury, thallium, and silver are based on either:

(A) An hourly rolling average as defined in §266.102(e)(6)(i)(B); or

(B) An instantaneous limit not to be exceeded at any time.

(ii) The feed rate screening limit for lead is based on one of the following:

(A) An hourly rolling average as defined in §266.102(e)(6)(i)(B);

(B) An averaging period of 2 to 24 hours as defined in §266.102(e)(6)(ii) with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis; or

(C) An instantaneous limit not to be exceeded at any time.

(2) *Carcinogenic metals.* (i) The feed rates of arsenic, cadmium, beryllium, and chromium in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks shall not exceed values derived from the screening limits specified in appendix I of this part. The feed rate of each of these metals is limited to a level such that the sum of the ratios of the actual feed rate to the feed rate screening limit specified in appendix I shall not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^{n} \frac{AFR_{(i)}}{FRSL_{(i)}} \leq 1.0$$

where:

n=number of carcinogenic metals

AFR=actual feed rate to the device for metal "I"

FRSL=feed rate screening limit provided by appendix I of this part for metal "I".

(ii) The feed rate screening limits for the carcinogenic metals are based on either:

(A) An hourly rolling average; or

(B) An averaging period of 2 to 24 hours as defined in §266.102(e)(6)(ii) with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis.

(3) *TESH.* (i) The terrain-adjusted effective stack height is determined according to the following equation:

TESH=Ha+Hl−Tr

where:

Ha=Actual physical stack height

Hl=Plume rise as determined from appendix VI of this part as a function of stack flow rate and stack gas exhaust temperature.

Tr=Terrain rise within five kilometers of the stack.

(ii) The stack height (Ha) may not exceed good engineering practice as specified in 40 CFR 51.100(ii).

(iii) If the TESH for a particular facility is not listed in the table in the appendices, the nearest lower TESH listed in the table shall be used. If the TESH is four meters or less, a value of four meters shall be used.

(4) *Terrain type.* The screening limits are a function of whether the facility is located in noncomplex or complex terrain. A device located where any part of the surrounding terrain within 5 kilometers of the stack equals or exceeds the elevation of the physical stack height (Ha) is considered to be in complex terrain and the screening limits for complex terrain apply. Terrain measurements are to be made from U.S. Geological Survey 7.5-minute topographic maps of the area surrounding the facility.

(5) *Land use.* The screening limits are a function of whether the facility is located in an area where the land use is urban or rural. To determine whether land use in the vicinity of the facility is urban or rural, procedures provided in appendices IX or X of this part shall be used.

(6) *Multiple stacks.* Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls of metals emissions under a RCRA operating permit or interim status controls must comply with the screening limits for all such units assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics. The worst-case

stack is determined from the following equation as applied to each stack:

$$K = HVT$$

Where:

K=a parameter accounting for relative influence of stack height and plume rise;
H=physical stack height (meters);
V=stack gas flow rate (m^3/second); and
T=exhaust temperature (°K).

The stack with the lowest value of K is the worst-case stack.

(7) *Criteria for facilities not eligible for screening limits.* If any criteria below are met, the Tier I and Tier II screening limits do not apply. Owners and operators of such facilities must comply with either the Tier III standards provided by paragraph (d) of this section or with the adjusted Tier I feed rate screening limits provided by paragraph (e) of this section.

(i) The device is located in a narrow valley less than one kilometer wide;

(ii) The device has a stack taller than 20 meters and is located such that the terrain rises to the physical height within one kilometer of the facility;

(iii) The device has a stack taller than 20 meters and is located within five kilometers of a shoreline of a large body of water such as an ocean or large lake;

(iv) The physical stack height of any stack is less than 2.5 times the height of any building within five building heights or five projected building widths of the stack and the distance from the stack to the closest boundary is within five building heights or five projected building widths of the associated building; or

(v) The Director determines that standards based on site-specific dispersion modeling are required.

(8) *Implementation.* The feed rate of metals in each feedstream must be monitored to ensure that the feed rate screening limits are not exceeded.

(c) *Tier II emission rate screening limits.* Emission rate screening limits are specified in appendix I as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in paragraph (b)(7) of this section.

(1) *Noncarcinogenic metals.* The emission rates of antimony, barium, lead, mercury, thallium, and silver shall not exceed the screening limits specified in appendix I of this part.

(2) *Carcinogenic metals.* The emission rates of arsenic, cadmium, beryllium, and chromium shall not exceed values derived from the screening limits specified in appendix I of this part. The emission rate of each of these metals is limited to a level such that the sum of the ratios of the actual emission rate to the emission rate screening limit specified in appendix I shall not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^{n} \frac{AER_{(i)}}{ERSL_{(i)}} \leq 1.0$$

where:

n=number of carcinogenic metals
AER=actual emission rate for metal "i"
ERSL=emission rate screening limit provided by appendix I of this part for metal "i".

(3) *Implementation.* The emission rate limits must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by paragraphs (b)(1)(i) and (ii) and (b)(2)(ii) of this section. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under §§ 266.102 or 266.103 are not exceeded.

(4) *Definitions and limitations.* The definitions and limitations provided by paragraph (b) of this section for the following terms also apply to the Tier II emission rate screening limits provided by paragraph (c) of this section: terrain-adjusted effective stack height, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.

(5) *Multiple stacks.* (i) Owners and operators of facilities with more than one onsite stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA operating permit or interim status controls must comply with the emissions

screening limits for any such stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.

(ii) The worst-case stack is determined by procedures provided in paragraph (b)(6) of this section.

(iii) For each metal, the total emissions of the metal from those stacks shall not exceed the screening limit for the worst-case stack.

(d) *Tier III and Adjusted Tier I site-specific risk assessment.* The requirements of this paragraph apply to facilities complying with either the Tier III or Adjusted Tier I controls, except where specified otherwise.

(1) *General.* Conformance with the Tier III metals controls must be demonstrated by emissions testing to determine the emission rate for each metal. In addition, conformance with either the Tier III or Adjusted Tier I metals controls must be demonstrated by air dispersion modeling to predict the maximum annual average off-site ground level concentration for each dispersion modeling to predict the maximum annual average off-site ground level concentration for each metal, and a demonstration that acceptable ambient levels are not exceeded.

(2) *Acceptable ambient levels.* Appendices IV and V of this part list the acceptable ambient levels for purposes of this rule. Reference air concentrations (RACs) are listed for the noncarcinogenic metals and 10^{-5} risk-specific doses (RSDs) are listed for the carcinogenic metals. The RSD for a metal is the acceptable ambient level for that metal provided that only one of the four carcinogenic metals is emitted. If more than one carcinogenic metal is emitted, the acceptable ambient level for the carcinogenic metals is a fraction of the RSD as described in paragraph (d)(3) of this section.

(3) *Carcinogenic metals.* For the carcinogenic metals, arsenic, cadmium, beryllium, and chromium, the sum of the ratios of the predicted maximum annual average off-site ground level concentrations (except that on-site concentrations must be considered if a person resides on site) to the risk-specific dose (RSD) for all carcinogenic metals emitted shall not exceed 1.0 as determined by the following equation:

$$\sum_{i=1}^{n} \frac{\text{Predicted Ambient Concentration}_{(i)}}{\text{Risk-Specific Dose}_{(i)}} \leq 1.0$$

where: n=number of carcinogenic metals

(4) *Noncarcinogenic metals.* For the noncarcinogenic metals, the predicted maximum annual average off-site ground level concentration for each metal shall not exceed the reference air concentration (RAC).

(5) *Multiple stacks.* Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA operating permit or interim status controls must conduct emissions testing (except that facilities complying with Adjusted Tier I controls need not conduct emissions testing) and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedance of the acceptable ambient levels.

(6) *Implementation.* Under Tier III, the metals controls must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by paragraphs (b)(1) (i) and (ii) and (b)(2)(ii) of this section. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under §§ 266.102 or 266.103 are not exceeded.

(e) *Adjusted Tier I feed rate screening limits.* The owner or operator may adjust the feed rate screening limits provided by appendix I of this part to ac-

count for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit for a metal is determined by back-calculating from the acceptable ambient level provided by appendices IV and V of this part using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit. The feed rate screening limits for carcinogenic metals are implemented as prescribed in paragraph (b)(2) of this section.

(f) *Alternative implementation approaches.* (1) The Director may approve on a case-by-case basis approaches to implement the Tier II or Tier III metals emission limits provided by paragraphs (c) or (d) of this section alternative to monitoring the feed rate of metals in each feedstream.

(2) The emission limits provided by paragraph (d) of this section must be determined as follows:

(i) For each noncarcinogenic metal, by back-calculating from the RAC provided in appendix IV of this part to determine the allowable emission rate for each metal using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with paragraph (h) of this section; and

(ii) For each carcinogenic metal by:

(A) Back-calculating from the RSD provided in appendix V of this part to determine the allowable emission rate for each metal if that metal were the only carcinogenic metal emitted using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with paragraph (h) of this section; and

(B) If more than one carcinogenic metal is emitted, selecting an emission limit for each carcinogenic metal not to exceed the emission rate determined by paragraph (f)(2)(ii)(A) of this section such that the sum for all carcinogenic metals of the ratios of the selected emission limit to the emission rate determined by that paragraph does not exceed 1.0.

(g) *Emission testing*—(1) *General.* Emission testing for metals shall be conducted using the Multiple Metals Train as described in appendix IX of this part.

(2) *Hexavalent chromium.* Emissions of chromium are assumed to be hexavalent chromium unless the owner or operator conducts emissions testing to determine hexavalent chromium emissions using procedures prescribed in appendix IX of this part.

(h) *Dispersion modeling.* Dispersion modeling required under this section shall be conducted according to methods recommended in appendix X of this part, the "Hazardous Waste Combustion Air Quality Screening Procedure" described in appendix IX of this part, or "EPA SCREEN Screening Procedure" as described in Screening Procedures for Estimating Air Quality Impact of Stationary Sources (the latter document is incorporated by reference, see § 260.11) to predict the maximum annual average off-site ground level concentration. However, on-site concentrations must be considered when a person resides on-site.

(i) *Enforcement.* For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under § 266.102) will be regarded as compliance with this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this section may be "information" justifying modification or revocation and re-issuance of a permit under § 270.41 of this chapter.

[56 FR 7208, Feb. 21, 1991; 56 FR 32689, July 17, 1991; 57 FR 38565, Aug. 25, 1992]

§ 266.107 Standards to control hydrogen chloride (HCl) and chlorine gas (Cl_2) emissions.

(a) General. The owner or operator must comply with the hydrogen chloride (HCl) and chlorine (Cl_2) controls provided by paragraph (b), (c), or (e) of this section.

(b) *Screening limits*—(1) *Tier I feed rate screening limits.* Feed rate screening limits are specified for total chlorine in appendix II of this part as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. The feed rate of total chlorine and chloride, both organic and inorganic, in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks shall not exceed the levels specified.

(2) *Tier II emission rate screening limits.* Emission rate screening limits for HCl and Cl_2 are specified in appendix III of this part as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. The stack emission rates of HCl and Cl_2 shall not exceed the levels specified.

(3) *Definitions and limitations.* The definitions and limitations provided by § 266.106(b) for the following terms also apply to the screening limits provided by this paragraph: terrain-adjusted effective stack height, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.

(4) *Multiple stacks.* Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on HCl or Cl_2 emissions under a RCRA operating permit or interim status controls must comply with the Tier I and Tier II screening limits for those stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.

(i) The worst-case stack is determined by procedures provided in § 266.106(b)(6).

(ii) Under Tier I, the total feed rate of chlorine and chloride to all subject devices shall not exceed the screening limit for the worst-case stack.

(iii) Under Tier II, the total emissions of HCl and Cl_2 from all subject stacks shall not exceed the screening limit for the worst-case stack.

(c) *Tier III site-specific risk assessments*—(1) *General.* Conformance with the Tier III controls must be demonstrated by emissions testing to determine the emission rate for HCl and Cl_2, air dispersion modeling to predict the maximum annual average off-site ground level concentration for each compound, and a demonstration that acceptable ambient levels are not exceeded.

(2) *Acceptable ambient levels.* Appendix IV of this part lists the reference air concentrations (RACs) for HCl (7 micrograms per cubic meter) and Cl_2 (0.4 micrograms per cubic meter).

(3) *Multiple stacks.* Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on HCl or Cl_2 emissions under a RCRA operating permit or interim status controls must conduct emissions testing and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedance of the acceptable ambient levels for HCl and Cl_2.

(d) *Averaging periods.* The HCl and Cl_2 controls are implemented by limiting the feed rate of total chlorine and chloride in all feedstreams, including hazardous waste, fuels, and industrial furnace feed stocks. Under Tier I, the feed rate of total chloride and chlorine is limited to the Tier I Screening Limits. Under Tier II and Tier III, the feed rate of total chloride and chlorine is limited to the feed rates during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate limits are based on either:

(1) An hourly rolling average as defined in § 266.102(e)(6); or

(2) An instantaneous basis not to be exceeded at any time.

(e) *Adjusted Tier I feed rate screening limits.* The owner or operator may adjust the feed rate screening limit provided by appendix II of this part to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit is determined by back-calculating from the acceptable ambient level for Cl_2 provided by appendix IV of this part using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit.

(f) *Emissions testing.* Emissions testing for HCl and Cl_2 shall be conducted using the procedures described in appendix IX of this part.

(g) *Dispersion modeling.* Dispersion modeling shall be conducted according to the provisions of § 266.106(h).

(h) *Enforcement.* For the purposes of permit enforcement, compliance with the operating requirements specified in

the permit (under § 266.102) will be regarded as compliance with this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this section may be "information" justifying modification or revocation and re-issuance of a permit under § 270.41 of this chapter.

[56 FR 7208, Feb. 21, 1991; 56 FR 32690, July 17, 1991; 57 FR 38566, Aug. 25, 1992]

§ 266.108 Small quantity on-site burner exemption.

(a) *Exempt quantities.* Owners and operators of facilities that burn hazardous waste in an on-site boiler or industrial furnace are exempt from the requirements of this subpart provided that:

(1) The quantity of hazardous waste burned in a device for a calendar month does not exceed the limits provided in the following table based on the terrain-adjusted effective stack height as defined in § 266.106(b)(3):

EXEMPT QUANTITIES FOR SMALL QUANTITY BURNER EXEMPTION

Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/month)	Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/month)
0 to 3.9	0	40.0 to 44.9	210
4.0 to 5.9	13	45.0 to 49.9	260
6.0 to 7.9	18	50.0 to 54.9	330
8.0 to 9.9	27	55.0 to 59.9	400
10.0 to 11.9	40	60.0 to 64.9	490
12.0 to 13.9	48	65.0 to 69.9	610
14.0 to 15.9	59	70.0 to 74.9	680
16.0 to 17.9	69	75.0 to 79.9	760
18.0 to 19.9	76	80.0 to 84.9	850

EXEMPT QUANTITIES FOR SMALL QUANTITY BURNER EXEMPTION—Continued

Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/month)	Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/month)
20.0 to 21.9	84	85.0 to 89.9	900
22.0 to 23.9	93	90.0 to 94.9	1,100
24.0 to 25.9	100	95.0 to 99.9	1,200
26.0 to 27.9	110	100.0 to 104.9	1,300
28.0 to 29.9	130	105.0 to 109.9	1,500
30.0 to 34.9	140	110.0 to 114.9	1,700
35.0 to 39.9	170	115.0 or greater	1,900

(2) The maximum hazardous waste firing rate does not exceed at any time 1 percent of the total fuel requirements for the device (hazardous waste plus other fuel) on a total heat input or mass input basis, whichever results in the lower mass feed rate of hazardous waste.

(3) The hazardous waste has a minimum heating value of 5,000 Btu/lb, as generated; and

(4) The hazardous waste fuel does not contain (and is not derived from) EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027.

(b) *Mixing with nonhazardous fuels.* If hazardous waste fuel is mixed with a nonhazardous fuel, the quantity of hazardous waste before such mixing is used to comply with paragraph (a).

(c) *Multiple stacks.* If an owner or operator burns hazardous waste in more than one on-site boiler or industrial furnace exempt under this section, the quantity limits provided by paragraph (a)(1) of this section are implemented according to the following equation:

$$\sum_{i=1}^{n} \frac{\text{Actual Quantity Burned}_{(i)}}{\text{Allowable Quantity Burned}_{(i)}} \leq 1.0$$

where:

n means the number of stacks;

Actual Quantity Burned means the waste quantity burned per month in device "i";

Allowable Quantity Burned means the maximum allowable exempt quantity for stack "i" from the table in (a)(1) above.

NOTE: Hazardous wastes that are subject to the special requirements for small quantity generators under § 261.5 of this chapter may be burned in an off-site device under the exemption provided by § 266.108, but must be included in the quantity determination for the exemption.

(d) *Notification requirements.* The owner or operator of facilities qualifying for the small quantity burner exemption under this section must provide a one-time signed, written notice to EPA indicating the following:

(1) The combustion unit is operating as a small quantity burner of hazardous waste;

(2) The owner and operator are in compliance with the requirements of this section; and

(3) The maximum quantity of hazardous waste that the facility may burn per month as provided by § 266.108(a)(1).

(e) *Recordkeeping requirements.* The owner or operator must maintain at the facility for at least three years sufficient records documenting compliance with the hazardous waste quantity, firing rate, and heating value limits of this section. At a minimum, these records must indicate the quantity of hazardous waste and other fuel burned in each unit per calendar month, and the heating value of the hazardous waste.

[56 FR 7208, Feb. 21, 1991; 56 FR 32690, July 17, 1991, as amended at 56 FR 42515, Aug. 27, 1991; 57 FR 38566, Aug. 25, 1992]

§ 266.109 Low risk waste exemption.

(a) *Waiver of DRE standard.* The DRE standard of § 266.104(a) does not apply if the boiler or industrial furnace is operated in conformance with (a)(1) of this section and the owner or operator demonstrates by procedures prescribed in (a)(2) of this section that the burning will not result in unacceptable adverse health effects.

(1) The device shall be operated as follows:

(i) A minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the Director on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

(ii) Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb;

(iii) The hazardous waste is fired directly into the primary fuel flame zone of the combustion chamber; and

(iv) The device operates in conformance with the carbon monoxide controls provided by § 266.104(b)(1). Devices subject to the exemption provided by this section are not eligible for the alternative carbon monoxide controls provided by § 266.104(c).

(2) Procedures to demonstrate that the hazardous waste burning will not pose unacceptable adverse public health effects are as follows:

(i) Identify and quantify those nonmetal compounds listed in appendix VIII, part 261 of this chapter that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained;

(ii) Calculate reasonable, worst case emission rates for each constitutent identified in paragraph (a)(2)(i) of this section by assuming the device achieves 99.9 percent destruction and removal efficiency. That is, assume that 0.1 percent of the mass weight of each constitutent fed to the device is emitted.

(iii) For each constituent identified in paragraph (a)(2)(i) of this section, use emissions dispersion modeling to predict the maximum annual average ground level concentration of the constituent.

(A) Dispersion modeling shall be conducted using methods specified in § 266.106(h).

(B) Owners and operators of facilities with more than one on-site stack from a boiler or industrial furnace that is exempt under this section must conduct dispersion modeling of emissions from all stacks exempt under this section to predict ambient levels prescribed by this paragraph.

(iv) Ground level concentrations of constituents predicted under paragraph (a)(2)(iii) of this section must not exceed the following levels:

(A) For the noncarcinogenic compounds listed in appendix IV of this part, the levels established in appendix IV;

(B) For the carcinogenic compounds listed in appendix V of this part, the sum for all constituents of the ratios of the actual ground level concentration to the level established in appendix V cannot exceed 1.0; and

(C) For constituents not listed in appendix IV or V, 0.1 micrograms per cubic meter.

(b) *Waiver of particular matter standard.* The particulate matter standard of § 266.105 does not apply if:

(1) The DRE standard is waived under paragraph (a) of this section; and

(2) The owner or operator complies with the Tier I or adjusted Tier I metals feed rate screening limits provided by § 266.106 (b) or (c).

[56 FR 7208, Feb. 21, 1991; 56 FR 32690, July 17, 1991, as amended at 56 FR 42515, Aug. 27, 1991]

§ 266.110 Waiver of DRE trial burn for boilers.

Boilers that operate under the special requirements of this section, and that do not burn hazardous waste containing (or derived from) EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027, are considered to be in conformance with the DRE standard of § 266.104(a), and a trial burn to demonstrate DRE is waived. When burning hazardous waste:

(a) A minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the Director on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

(b) Boiler load shall not be less than 40 percent. Boiler load is the ratio at any time of the total heat input to the maximum design heat input;

(c) Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb, and each material fired in a burner where hazardous waste is fired must have a heating value of at least 8,000 Btu/lb, as-fired;

(d) The device shall operate in conformance with the carbon monoxide standard provided by § 266.104(b)(1). Boilers subject to the waiver of the DRE trial burn provided by this section are not eligible for the alternative carbon monoxide standard provided by § 266.104(c);

(e) The boiler must be a watertube type boiler that does not feed fuel using a stoker or stoker type mechanism; and

(f) The hazardous waste shall be fired directly into the primary fuel flame zone of the combustion chamber with an air or steam atomization firing system, mechanical atomization system, or a rotary cup atomization system under the following conditions:

(1) *Viscosity.* The viscosity of the hazardous waste fuel as-fired shall not exceed 300 SSU;

(2) *Particle size.* When a high pressure air or steam atomizer, low pressure atomizer, or mechanical atomizer is used, 70% of the hazardous waste fuel must pass through a 200 mesh (74 micron) screen, and when a rotary cup atomizer is used, 70% of the hazardous waste must pass through a 100 mesh (150 micron) screen;

(3) *Mechanical atomization systems.* Fuel pressure within a mechanical atomization system and fuel flow rate shall be maintained within the design range taking into account the viscosity and volatility of the fuel;

(4) *Rotary cup atomization systems.* Fuel flow rate through a rotary cup atomization system must be maintained within the design range taking into account the viscosity and volatility of the fuel.

[56 FR 7208, Feb. 21, 1991; 56 FR 32690, July 17, 1991, as amended at 56 FR 42515, Aug. 27, 1991]

§ 266.111 Standards for direct transfer.

(a) *Applicability.* The regulations in this section apply to owners and operators of boilers and industrial furnaces subject to §§ 266.102 or 266.103 if hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit.

(b) *Definitions.* (1) When used in this section, the following terms have the meanings given below:

Direct transfer equipment means any device (including but not limited to, such devices as piping, fittings, flanges, valves, and pumps) that is used to distribute, meter, or control the flow of hazardous waste between a container (i.e., transport vehicle) and a boiler or industrial furnace.

Container means any portable device in which hazardous waste is transported, stored, treated, or otherwise handled, and includes transport vehicles that are containers themselves (e.g., tank trucks, tanker-trailers, and rail tank cars), and containers placed on or in a transport vehicle.

(2) This section references several requirements provided in subparts I and J of parts 264 and 265. For purposes of this section, the term "tank systems" in those referenced requirements means direct transfer equipment as defined in paragraph (b)(1) of this section.

(c) *General operating requirements.* (1) No direct transfer of a pumpable hazardous waste shall be conducted from an open-top container to a boiler or industrial furnace.

(2) Direct transfer equipment used for pumpable hazardous waste shall always be closed, except when necessary to add or remove the waste, and shall not be opened, handled, or stored in a manner that may cause any rupture or leak.

(3) The direct transfer of hazardous waste to a boiler or industrial furnace shall be conducted so that it does not:

(i) Generate extreme heat or pressure, fire, explosion, or violent reaction;

(ii) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

(iii) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(iv) Damage the structural integrity of the container or direct transfer equipment containing the waste;

(v) Adversely affect the capability of the boiler or industrial furnace to meet the standards provided by §§ 266.104 through 266.107; or

(vi) Threaten human health or the environment.

(4) Hazardous waste shall not be placed in direct transfer equipment, if it could cause the equipment or its secondary containment system to rupture, leak, corrode, or otherwise fail.

(5) The owner or operator of the facility shall use appropriate controls and practices to prevent spills and overflows from the direct transfer equipment or its secondary containment systems. These include at a minimum:

(i) Spill prevention controls (e.g., check valves, dry discount couplings); and

(ii) Automatic waste feed cutoff to use if a leak or spill occurs from the direct transfer equipment.

(d) *Areas where direct transfer vehicles (containers) are located.* Applying the definition of container under this section, owners and operators must comply with the following requirements:

(1) The containment requirements of § 264.175 of this chapter;

(2) The use and management requirements of subpart I, part 265 of this chapter, except for §§ 265.170 and 265.174 and except that in lieu of the special requirements of § 265.176 for ignitable or reactive waste, the owner or operator may comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjacent property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's (NFPA) "Flammable and Combustible Liquid Code," (1977 or 1981), (incorporated by reference, see § 260.11). The owner or operator must obtain and keep on file at the facility a written certification by the local Fire Marshall that the installation meets the subject NFPA codes; and

(3) The closure requirements of § 264.178 of this chapter.

(e) *Direct transfer equipment.* Direct transfer equipment must meet the following requirements:

(1) *Secondary containment.* Owners and operators shall comply with the secondary containment requirements of § 265.193 of this chapter, except for paragraphs 265.193 (a), (d), (e), and (i) as follows:

(i) For all new direct transfer equipment, prior to their being put into service; and

(ii) For existing direct transfer equipment within 2 years after August 21, 1991.

(2) *Requirements prior to meeting secondary containment requirements.* (i) For existing direct transfer equipment that does not have secondary containment, the owner or operator shall determine whether the equipment is leaking or is unfit for use. The owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by a qualified, registered professional engineer in accordance with §270.11(d) of this chapter that attests to the equipment's integrity by August 21, 1992.

(ii) This assessment shall determine whether the direct transfer equipment is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be transferred to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment shall consider the following:

(A) Design standard(s), if available, according to which the direct transfer equipment was constructed;

(B) Hazardous characteristics of the waste(s) that have been or will be handled;

(C) Existing corrosion protection measures;

(D) Documented age of the equipment, if available, (otherwise, an estimate of the age); and

(E) Results of a leak test or other integrity examination such that the effects of temperature variations, vapor pockets, cracks, leaks, corrosion, and erosion are accounted for.

(iii) If, as a result of the assessment specified above, the direct transfer equipment is found to be leaking or unfit for use, the owner or operator shall comply with the requirements of §§265.196 (a) and (b) of this chapter.

(3) *Inspections and recordkeeping.* (i) The owner or operator must inspect at least once each operating hour when hazardous waste is being transferred from the transport vehicle (container) to the boiler or industrial furnace:

(A) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;

(B) The above ground portions of the direct transfer equipment to detect corrosion, erosion, or releases of waste (e.g., wet spots, dead vegetation); and

(C) Data gathered from monitoring equipment and leak-detection equipment, (e.g., pressure and temperature gauges) to ensure that the direct transfer equipment is being operated according to its design.

(ii) The owner or operator must inspect cathodic protection systems, if used, to ensure that they are functioning properly according to the schedule provided by §265.195(b) of this chapter:

(iii) Records of inspections made under this paragraph shall be maintained in the operating record at the facility, and available for inspection for at least 3 years from the date of the inspection.

(4) *Design and installation of new ancillary equipment.* Owners and operators must comply with the requirements of §265.192 of this chapter.

(5) *Response to leaks or spills.* Owners and operators must comply with the requirements of §265.196 of this chapter.

(6) *Closure.* Owners and operators must comply with the requirements of §265.197 of this chapter, except for §265.197 (c)(2) through (c)(4).

[50 FR 666, Jan. 4, 1985, as amended at 56 FR 42515, Aug. 27, 1991]

§266.112 Regulation of residues.

A residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace is not excluded from the definition of a hazardous waste under §261.4(b) (4), (7), or (8) unless the device and the owner or operator meet the following requirements:

(a) The device meets the following criteria:

(1) *Boilers.* Boilers must burn at least 50% coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal;

(2) *Ore or mineral furnaces.* Industrial furnaces subject to §261.4(b)(7) must process at least 50% by weight normal, nonhazardous raw materials;

(3) *Cement kilns.* Cement kilns must process at least 50% by weight normal cement-production raw materials;

(b) The owner or operator demonstrates that the hazardous waste

does not significantly affect the residue by demonstrating conformance with either of the following criteria:

(1) *Comparison of waste-derived residue with normal residue.* The waste-derived residue must not contain appendix VIII, part 261 constituents (toxic constituents) that could reasonably be attributable to the hazardous waste at concentrations significantly higher than in residue generated without burning or processing of hazardous waste, using the following procedure. Toxic compounds that could reasonably be attributable to burning or processing the hazardous waste (constituents of concern) include toxic constituents in the hazardous waste, and the organic compounds listed in appendix VIII of this part that may be generated as products of incomplete combustion. Sampling and analyses shall be in conformance with procedures prescribed in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, incorporated by reference in §260.11(a) of this chapter.

(i) *Normal residue.* Concentrations of toxic constituents of concern in normal residue shall be determined based on analyses of a minimum of 10 samples representing a minimum of 10 days of operation. Composite samples may be used to develop a sample for analysis provided that the compositing period does not exceed 24 hours. The upper tolerance limit (at 95% confidence with a 95% proportion of the sample distribution) of the concentration in the normal residue shall be considered the statistically-derived concentration in the normal residue. If changes in raw materials or fuels reduce the statistically-derived concentrations of the toxic constituents of concern in the normal residue, the statistically-derived concentrations must be revised or statistically-derived concentrations of toxic constituents in normal residue must be established for a new mode of operation with the new raw material or fuel. To determine the upper tolerance limit in the normal residue, the owner or operator shall use statistical procedures prescribed in "Statistical Methodology for Bevill Residue Determinations" in appendix IX of this part.

(ii) *Waste-derived residue.* Waste-derived residue shall be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the concentrations established for the normal residue under paragraph (b)(1)(i) of this section. If so, hazardous waste burning has significantly affected the residue and the residue shall not be excluded from the definition of a hazardous waste. Concentrations of toxic constituents of concern in the waste-derived residue shall be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite sample for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent shall be the arithmetic mean of the concentrations in the samples. No results may be disregarded; or

(2) *Comparison of waste-derived residue concentrations with health-based limits*—(i) *Nonmetal constituents.* The concentration of each nonmetal toxic constituent of concern (specified in paragraph (b)(1) of this section) in the waste-derived residue must not exceed the health-based level specified in appendix VII of this part, or the level of detection (using analytical procedures prescribed in SW-846), whichever is higher. If a health-based limit for a constituent of concern is not listed in appendix VII of this part, then a limit of 0.002 micrograms per kilogram or the level of detection (using analytical procedures prescribed in SW-846), whichever is higher, shall be used; and

(ii) *Metal constituents.* The concentration of metals in an extract obtained using the Toxicity Characteristic Leaching Procedure of §261.24 of this chapter must not exceed the levels specified in appendix VII of this part; and

(iii) *Sampling and analysis.* Waste-derived residue shall be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the health-based levels.

Concentrations of toxic constituents of concern in the waste-derived residue shall be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite sample for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent shall be the arithmetic mean of the concentrations in the samples. No results may be disregarded; and

(c) Records sufficient to document compliance with the provisions of this section shall be retained until closure of the boiler or industrial furnace unit. At a minimum, the following shall be recorded.

(1) Levels of constituents in appendix VIII, part 261, that are present in waste-derived residues;

(2) If the waste-derived residue is compared with normal residue under paragraph (b)(1) of this section:

(i) The levels of constituents in appendix VIII, part 261, that are present in normal residues; and

(ii) Data and information, including analyses of samples as necessary, obtained to determine if changes in raw materials or fuels would reduce the concentration of toxic constituents of concern in the normal residue.

[50 FR 666, Jan. 4, 1985, as amended at 56 FR 42516, Aug. 27, 1991; 57 FR 38566, Aug. 25, 1992]

APPENDIX I TO PART 266—TIER I AND TIER II FEED RATE AND EMISSIONS SCREENING LIMITS FOR METALS

TABLE I–A—TIER I AND TIER II FEED RATE AND EMISSIONS SCREENING LIMITS FOR NONCARCINOGENIC METALS FOR FACILITIES IN NONCOMPLEX TERRAIN

[Values for urban areas]

Terrain adjusted eff. stack ht. (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	6.0E+01	1.0E+04	1.8E+01	6.0E+01	6.0E+02	6.0E+01
6	6.8E+01	1.1E+04	2.0E+01	6.8E+01	6.8E+02	6.8E+01
8	7.6E+01	1.3E+04	2.3E+01	7.6E+01	7.6E+02	7.6E+01
10	8.6E+01	1.4E+04	2.6E+01	8.6E+01	8.6E+02	8.6E+01
12	9.6E+01	1.7E+04	3.0E+01	9.6E+01	9.6E+02	9.6E+01
14	1.1E+02	1.8E+04	3.4E+01	1.1E+02	1.1E+03	1.1E+02
16	1.3E+02	2.1E+04	3.6E+01	1.3E+02	1.3E+03	1.3E+02
18	1.4E+02	2.4E+04	4.3E+01	1.4E+02	1.4E+03	1.4E+02
20	1.6E+02	2.7E+04	4.6E+01	1.6E+02	1.6E+03	1.6E+02
22	1.8E+02	3.0E+04	5.4E+01	1.8E+02	1.8E+03	1.8E+02
24	2.0E+02	3.4E+04	6.0E+01	2.0E+02	2.0E+03	2.0E+02
26	2.3E+02	3.9E+04	6.8E+01	2.3E+02	2.3E+03	2.3E+02
28	2.6E+02	4.3E+04	7.8E+01	2.6E+02	2.6E+03	2.6E+02
30	3.0E+02	5.0E+04	9.0E+01	3.0E+02	3.0E+03	3.0E+02
35	4.0E+02	6.6E+04	1.1E+02	4.0E+02	4.0E+03	4.0E+02
40	4.6E+02	7.8E+04	1.4E+02	4.6E+02	4.6E+03	4.6E+02
45	6.0E+02	1.0E+05	1.8E+02	6.0E+02	6.0E+03	6.0E+02
50	7.8E+02	1.3E+05	2.3E+02	7.8E+02	7.8E+03	7.8E+02
55	9.6E+02	1.7E+05	3.0E+02	9.6E+02	9.6E+03	9.6E+02
60	1.2E+03	2.0E+05	3.6E+02	1.2E+03	1.2E+04	1.2E+03
65	1.5E+03	2.5E+05	4.3E+02	1.5E+03	1.5E+04	1.5E+03
70	1.7E+03	2.8E+05	5.0E+02	1.7E+03	1.7E+04	1.7E+03
75	1.9E+03	3.2E+05	5.8E+02	1.9E+03	1.9E+04	1.9E+03
80	2.2E+03	3.6E+05	6.4E+02	2.2E+03	2.2E+04	2.2E+03
85	2.5E+03	4.0E+05	7.6E+02	2.5E+03	2.5E+04	2.5E+03
90	2.8E+03	4.6E+05	8.2E+02	2.8E+03	2.8E+04	2.8E+03
95	3.2E+03	5.4E+05	9.6E+02	3.2E+03	3.2E+04	3.2E+03
100	3.6E+03	6.0E+05	1.1E+03	3.6E+03	3.6E+04	3.6E+03
105	4.0E+03	6.8E+05	1.2E+03	4.0E+03	4.0E+04	4.0E+03
110	4.6E+03	7.8E+05	1.4E+03	4.6E+03	4.6E+04	4.6E+03
115	5.4E+03	8.6E+05	1.6E+03	5.4E+03	5.4E+04	5.4E+03
120	6.0E+03	1.0E+06	1.8E+03	6.0E+03	6.0E+04	6.0E+03

TABLE I–B—TIER I AND TIER II FEED RATE AND EMISSIONS SCREENING LIMITS FOR NONCARCINOGENIC METALS FOR FACILITIES IN NONCOMPLEX TERRAIN

[Values for rural areas]

Terrain adjusted eff. stack ht. (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	3.1E+01	5.2E+03	9.4E+00	3.1E+01	3.1E+02	3.1E+01

TABLE I–B—TIER I AND TIER II FEED RATE AND EMISSIONS SCREENING LIMITS FOR NONCARCINOGENIC METALS FOR FACILITIES IN NONCOMPLEX TERRAIN—Continued

[Values for rural areas]

Terrain adjusted eff. stack ht. (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
6	3.6E+01	5.0E+03	1.1E+01	3.6E+01	3.6E+02	3.6E+01
8	4.0E+01	6.8E+03	1.2E+01	4.0E+01	4.0E+02	4.0E+01
10	4.6E+01	7.8E+03	1.4E+01	4.6E+01	4.6E+02	4.6E+01
12	5.8E+01	9.6E+03	1.7E+01	5.8E+01	5.8E+02	5.8E+01
14	6.8E+01	1.1E+04	2.1E+01	6.8E+01	6.8E+02	6.8E+01
16	8.6E+01	1.4E+04	2.6E+01	8.6E+01	8.6E+02	8.6E+01
18	1.1E+02	1.8E+04	3.2E+01	1.1E+02	1.1E+03	1.1E+02
20	1.3E+02	2.2E+04	4.0E+01	1.3E+02	1.3E+03	1.3E+02
22	1.7E+02	2.8E+04	5.0E+01	1.7E+02	1.7E+03	1.7E+02
24	2.2E+02	3.6E+04	6.4E+01	2.2E+02	2.2E+03	2.2E+02
26	2.8E+02	4.6E+04	8.2E+01	2.8E+02	2.8E+03	2.8E+02
28	3.5E+02	5.8E+04	1.0E+02	3.5E+02	3.5E+03	3.5E+02
30	4.3E+02	7.6E+04	1.3E+02	4.3E+02	4.3E+03	4.3E+02
35	7.2E+02	1.2E+05	2.1E+02	7.2E+02	7.2E+03	7.2E+02
40	1.1E+03	1.8E+05	3.2E+02	1.1E+03	1.1E+04	1.1E+03
45	1.5E+03	2.5E+05	4.6E+02	1.5E+03	1.5E+04	1.5E+03
50	2.0E+03	3.3E+05	6.0E+02	2.0E+03	2.0E+04	2.0E+03
55	2.6E+03	4.4E+05	7.8E+02	2.6E+03	2.6E+04	2.6E+03
60	3.4E+03	5.8E+05	1.0E+03	3.4E+03	3.4E+04	3.4E+03
65	4.6E+03	7.6E+05	1.4E+03	4.6E+03	4.6E+04	4.6E+03
70	5.4E+03	9.0E+05	1.6E+03	5.4E+03	5.4E+04	5.4E+03
75	6.4E+03	1.1E+06	1.9E+03	6.4E+03	6.4E+04	6.4E+03
80	7.6E+03	1.3E+06	2.3E+03	7.6E+03	7.6E+04	7.6E+03
85	9.4E+03	1.5E+06	2.8E+03	9.4E+03	9.4E+04	9.4E+03
90	1.1E+04	1.8E+06	3.3E+03	1.1E+04	1.1E+05	1.1E+04
95	1.3E+04	2.2E+06	3.9E+03	1.3E+04	1.3E+05	1.3E+04
100	1.5E+04	2.6E+06	4.6E+03	1.5E+04	1.5E+05	1.5E+04
105	1.8E+04	3.0E+06	5.4E+03	1.8E+04	1.8E+05	1.8E+04
110	2.2E+04	3.6E+06	6.6E+03	2.2E+04	2.2E+05	2.2E+04
115	2.6E+04	4.4E+06	7.8E+03	2.6E+04	2.6E+05	2.6E+04
120	3.1E+04	5.0E+06	9.2E+03	3.1E+04	3.1E+05	3.1E+04

TABLE I–C—TIER I AND TIER II FEED RATE AND EMISSIONS SCREENING LIMITS FOR NONCARCINOGENIC METALS FOR FACILITIES IN COMPLEX TERRAIN

Values for urban and rural areas

Terrain adjusted eff. stack ht. (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	1.4E+01	2.4E+03	4.3E+00	1.4E+01	1.4E+02	1.4E+01
6	2.1E+01	3.5E+03	6.2E+00	2.1E+01	2.1E+02	2.1E+01
8	3.0E+01	5.0E+03	9.2E+00	3.0E+01	3.0E+02	3.0E+01
10	4.3E+01	7.6E+03	1.3E+01	4.3E+01	4.3E+02	4.3E+01
12	5.4E+01	9.0E+03	1.7E+01	5.4E+01	5.4E+02	5.4E+01
14	6.8E+01	1.1E+04	2.0E+01	6.8E+01	6.8E+02	6.8E+01
16	7.8E+01	1.3E+04	2.4E+01	7.8E+01	7.8E+02	7.8E+01
18	8.6E+01	1.4E+04	2.6E+01	8.6E+01	8.6E+02	8.6E+01
20	9.6E+01	1.6E+04	2.9E+01	9.6E+01	9.6E+02	9.6E+01
22	1.0E+02	1.8E+04	3.2E+01	1.0E+02	1.0E+03	1.0E+02
24	1.2E+02	1.9E+04	3.5E+01	1.2E+02	1.2E+03	1.2E+02
26	1.3E+02	2.2E+04	3.6E+01	1.3E+02	1.3E+03	1.3E+02
28	1.4E+02	2.4E+04	4.3E+01	1.4E+02	1.4E+03	1.4E+02
30	1.6E+02	2.7E+04	4.6E+01	1.6E+02	1.6E+03	1.6E+02
35	2.0E+02	3.3E+04	5.8E+01	2.0E+02	2.0E+03	2.0E+02
40	2.4E+02	4.0E+04	7.2E+01	2.4E+02	2.4E+03	2.4E+02
45	3.0E+02	5.0E+04	9.0E+01	3.0E+02	3.0E+03	3.0E+02
50	3.6E+02	6.0E+04	1.1E+02	3.6E+02	3.6E+03	3.6E+02
55	4.6E+02	7.6E+04	1.4E+02	4.6E+02	4.6E+03	4.6E+02
60	5.8E+02	9.4E+04	1.7E+02	5.8E+02	5.8E+03	5.8E+02
65	6.8E+02	1.1E+05	2.1E+02	6.8E+02	6.8E+03	6.8E+02
70	7.8E+02	1.3E+05	2.4E+02	7.8E+02	7.8E+03	7.8E+02
75	8.6E+02	1.4E+05	2.6E+02	8.6E+02	8.6E+03	8.6E+02
80	9.6E+02	1.6E+05	2.9E+02	9.6E+02	9.6E+03	9.6E+02
85	1.1E+03	1.8E+05	3.3E+02	1.1E+03	1.1E+04	1.1E+03
90	1.2E+03	2.0E+05	3.6E+02	1.2E+03	1.2E+04	1.2E+03
95	1.4E+03	2.3E+05	4.0E+02	1.4E+03	1.4E+04	1.4E+03
100	1.5E+03	2.6E+05	4.6E+02	1.5E+03	1.5E+04	1.5E+03
105	1.7E+03	2.8E+05	5.0E+02	1.7E+03	1.7E+04	1.7E+03
110	1.9E+03	3.2E+05	5.8E+02	1.9E+03	1.9E+04	1.9E+03
115	2.1E+03	3.6E+05	6.4E+02	2.1E+03	2.1E+04	2.1E+03
120	2.4E+03	4.0E+05	7.2E+02	2.4E+03	2.4E+04	2.4E+03

TABLE I–D—TIER I AND TIER II FEED RATE AND EMISSIONS SCREENING LIMITS FOR CARCINOGENIC METALS FOR FACILITIES IN NONCOMPLEX TERRAIN

	Values for use in urban areas				Values for use in rural areas			
Terrain adjusted eff. stack ht. (m)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)
4	4.6E−01	1.1E+00	1.7E−01	8.2E−01	2.4E−01	5.8E−01	8.5E−02	4.3E−01
6	5.4E−01	1.3E+00	1.9E−01	9.4E−01	2.8E−01	6.6E−01	1.0E−01	5.0E−01
8	6.0E−01	1.4E+00	2.2E−01	1.1E+00	3.2E−01	7.6E−01	1.1E−01	5.6E−01
10	6.8E−01	1.6E+00	2.4E−01	1.2E+00	3.6E−01	8.6E−01	1.3E−01	6.4E−01
12	7.6E−01	1.8E+00	2.7E−01	1.4E+00	4.3E−01	1.1E+00	1.6E−01	7.8E−01
14	8.6E−01	2.1E+00	3.1E−01	1.5E+00	5.4E−01	1.3E+00	2.0E−01	9.6E−01
16	9.6E−01	2.3E+00	3.5E−01	1.7E+00	6.8E−01	1.6E+00	2.4E−01	1.2E+00
18	1.1E+00	2.6E+00	4.0E−01	2.0E+00	8.2E−01	2.0E+00	3.0E−01	1.5E+00
20	1.2E+00	3.0E+00	4.4E−01	2.2E+00	1.0E+00	2.5E+00	3.7E−01	1.9E+00
22	1.4E+00	3.4E+00	5.0E−01	2.5E+00	1.3E+00	3.2E+00	4.8E−01	2.4E+00
24	1.6E+00	3.9E+00	5.8E−01	2.8E+00	1.7E+00	4.0E+00	6.0E−01	3.0E+00
26	1.8E+00	4.3E+00	6.4E−01	3.2E+00	2.1E+00	5.0E+00	7.6E−01	3.9E+00
28	2.0E+00	4.8E+00	7.2E−01	3.6E+00	2.7E+00	6.4E+00	9.8E−01	5.0E+00
30	2.3E+00	5.4E+00	8.2E−01	4.0E+00	3.5E+00	8.2E+00	1.2E+00	6.2E+00

TABLE I–D—TIER I AND TIER II FEED RATE AND EMISSIONS SCREENING LIMITS FOR CARCINOGENIC METALS FOR FACILITIES IN NONCOMPLEX TERRAIN—Continued

	Values for use in urban areas				Values for use in rural areas			
Terrain adjusted eff. stack ht. (m)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)
35	3.0E+00	6.8E+00	1.0E+00	5.4E+00	5.4E+00	1.3E+01	1.9E+00	9.6E+00
40	3.6E+00	9.0E+00	1.3E+00	6.8E+00	8.2E+00	2.0E+01	3.0E+00	1.5E+01
45	4.6E+00	1.1E+01	1.7E+00	8.6E+00	1.1E+01	2.8E+01	4.2E+00	2.1E+01
50	6.0E+00	1.4E+01	2.2E+00	1.1E+01	1.5E+01	3.7E+01	5.4E+00	2.8E+01
55	7.6E+00	1.8E+01	2.7E+00	1.4E+01	2.0E+01	5.0E+01	7.2E+00	3.6E+01
60	9.4E+00	2.2E+01	3.4E+00	1.7E+01	2.7E+01	6.4E+01	9.6E+00	4.8E+01
65	1.1E+01	2.8E+01	4.2E+00	2.1E+01	3.6E+01	8.6E+01	1.3E+01	6.4E+01
70	1.3E+01	3.1E+01	4.6E+00	2.4E+01	4.3E+01	1.0E+02	1.5E+01	7.6E+01
75	1.5E+01	3.6E+01	5.4E+00	2.7E+01	5.0E+01	1.2E+02	1.8E+01	9.0E+01
80	1.7E+01	4.0E+01	6.0E+00	3.0E+01	6.0E+01	1.4E+02	2.2E+01	1.1E+02
85	1.9E+01	4.6E+01	6.8E+00	3.4E+01	7.2E+01	1.7E+02	2.6E+01	1.3E+02
90	2.2E+01	5.0E+01	7.8E+00	3.9E+01	8.6E+01	2.0E+02	3.0E+01	1.5E+02
95	2.5E+01	5.8E+01	9.0E+00	4.4E+01	1.0E+02	2.4E+02	3.6E+01	1.8E+02
100	2.8E+01	6.8E+01	1.0E+01	5.0E+01	1.2E+02	2.9E+02	4.3E+01	2.2E+02
105	3.2E+01	7.6E+01	1.1E+01	5.6E+01	1.4E+02	3.4E+02	5.0E+01	2.6E+02
110	3.6E+01	8.6E+01	1.3E+01	6.4E+01	1.7E+02	4.0E+02	6.0E+01	3.0E+02
115	4.0E+01	9.6E+01	1.5E+01	7.2E+01	2.0E+02	4.8E+02	7.2E+01	3.6E+02
120	4.6E+01	1.1E+02	1.7E+01	8.2E+01	2.4E+02	5.8E+02	8.6E+01	4.3E+02

TABLE I–E—TIER I AND TIER II FEED RATE AND EMISSIONS SCREENING LIMITS FOR CARCINOGENIC METALS FOR FACILITIES IN COMPLEX TERRAIN

	Values for use in urban and rural areas			
Terrain adjusted eff. stack ht. (m)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)
4	1.1E−01	2.6E−01	4.0E−02	2.0E−01
6	1.6E−01	3.9E−01	5.8E−02	2.9E−01
8	2.4E−01	5.8E−01	8.6E−02	4.3E−01
10	3.5E−01	8.2E−01	1.3E−01	6.2E−01
12	4.3E−01	1.0E+00	1.5E−01	7.6E−01
14	5.0E−01	1.2E+00	1.9E−01	9.4E−01
16	6.0E−01	1.4E+00	2.2E−01	1.1E+00
18	6.8E−01	1.6E+00	2.4E−01	1.2E+00
20	7.6E−01	1.8E+00	2.7E−01	1.3E+00
22	8.2E−01	1.9E+00	3.0E−01	1.5E+00
24	9.0E−01	2.1E+00	3.3E−01	1.6E+00
26	1.0E+00	2.4E+00	3.6E−01	1.8E+00
28	1.1E+00	2.7E+00	4.0E−01	2.0E+00
30	1.2E+00	3.0E+00	4.4E−01	2.2E+00
35	1.5E+00	3.7E+00	5.4E−01	2.7E+00
40	1.9E+00	4.6E+00	6.8E−01	3.4E+00
45	2.4E+00	5.4E+00	8.4E−01	4.2E+00
50	2.9E+00	6.8E+00	1.0E+00	5.0E+00

55	3.5E+00	8.4E+00	1.3E+00	6.4E+00
60	4.3E+00	1.0E+01	1.5E+00	7.8E+00
65	5.4E+00	1.3E+01	1.9E+00	9.6E+00
70	6.0E+00	1.4E+01	2.2E+00	1.1E+01
75	6.8E+00	1.6E+01	2.4E+00	1.2E+01
80	7.6E+00	1.8E+01	2.7E+00	1.3E+01
85	8.2E+00	2.0E+01	3.0E+00	1.5E+01
90	9.4E+00	2.3E+01	3.4E+00	1.7E+01
95	1.0E+01	2.5E+01	4.0E+00	1.9E+01
100	1.2E+01	2.8E+01	4.3E+00	2.1E+01
105	1.3E+01	3.2E+01	4.8E+00	2.4E+01
110	1.5E+01	3.5E+01	5.4E+00	2.7E+01
115	1.7E+01	4.0E+01	6.0E+00	3.0E+01
120	1.9E+01	4.4E+01	6.4E+00	3.3E+01

[56 FR 7228, Feb. 21, 1991; 56 FR 32690, July 17, 1991]

Appendix II to Part 266—Tier I Feed Rate Screening Limits for Total Chlorine

Terrain-adjusted effective stack height (m)	Noncomplex Terrain		Complex Terrain
	Urban (g/hr)	Rural (g/hr)	(g/hr)
4	8.2E+01	4.2E+01	1.9E+01
6	9.1E+01	4.8E+01	2.8E+01
8	1.0E+02	5.3E+01	4.1E+01
10	1.2E+02	6.2E+01	5.8E+01
12	1.3E+02	7.7E+01	7.2E+01
14	1.5E+02	9.1E+01	9.1E+01
16	1.7E+02	1.2E+02	1.1E+02
18	1.9E+02	1.4E+02	1.2E+02
20	2.1E+02	1.8E+02	1.3E+02
22	2.4E+02	2.3E+02	1.4E+02
24	2.7E+02	2.9E+02	1.6E+02
26	3.1E+02	3.7E+02	1.7E+02
28	3.5E+02	4.7E+02	1.9E+02
30	3.9E+02	5.8E+02	2.1E+02
35	5.3E+02	9.6E+02	2.6E+02
40	6.2E+02	1.4E+03	3.3E+02
45	8.2E+02	2.0E+03	4.0E+02
50	1.1E+03	2.6E+03	4.8E+02
55	1.3E+03	3.5E+03	6.2E+02
60	1.6E+03	4.6E+03	7.7E+02
65	2.0E+03	6.2E+03	9.1E+02
70	2.3E+03	7.2E+03	1.1E+03
75	2.5E+03	8.6E+03	1.2E+03
80	2.9E+03	1.0E+04	1.3E+03
85	3.3E+03	1.2E+04	1.4E+03
90	3.7E+03	1.4E+04	1.6E+03
95	4.2E+03	1.7E+04	1.8E+03
100	4.8E+03	2.1E+04	2.0E+03
105	5.3E+03	2.4E+04	2.3E+03
110	6.2E+03	2.9E+04	2.5E+03
115	7.2E+03	3.5E+04	2.8E+03
120	8.2E+03	4.1E+04	3.2E+03

[56 FR 32690, July 17, 1991]

Appendix III to Part 266—Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride

Terrain-adjusted effective stack height (m)	Noncomplex terrain				Complex terrain	
	Values for urban areas		Values for rural areas		Values for use in urban and rural areas	
	Cl_2 (g/hr)	HCl (g/hr)	Cl_2 (g/hr)	HCl (g/hr)	Cl_2 (g/hr)	HCl (g/hr)
4	8.2E+01	1.4E+03	4.2E+01	7.3E+02	1.9E+01	3.3E+02
6	9.1E+01	1.6E+03	4.8E+01	8.3E+02	2.8E+01	4.9E+02
8	1.0E+02	1.8E+03	5.3E+01	9.2E+02	4.1E+01	7.1E+02
10	1.2E+02	2.0E+03	6.2E+01	1.1E+03	5.8E+01	1.0E+03
12	1.3E+02	2.3E+03	7.7E+01	1.3E+03	7.2E+01	1.3E+03
14	1.5E+02	2.6E+03	9.1E+01	1.6E+03	9.1E+01	1.6E+03
16	1.7E+02	2.9E+03	1.2E+02	2.0E+03	1.1E+02	1.8E+03
18	1.9E+02	3.3E+03	1.4E+02	2.5E+03	1.2E+02	2.0E+03
20	2.1E+02	3.7E+03	1.8E+02	3.1E+03	1.3E+02	2.3E+03
22	2.4E+02	4.2E+03	2.3E+02	3.9E+03	1.4E+02	2.4E+03
24	2.7E+02	4.8E+03	2.9E+02	5.0E+03	1.6E+02	2.8E+03
26	3.1E+02	5.4E+03	3.7E+02	6.5E+03	1.7E+02	3.0E+03
28	3.5E+02	6.0E+03	4.7E+02	8.1E+03	1.9E+02	3.4E+03
30	3.9E+02	6.9E+03	5.8E+02	1.0E+04	2.1E+02	3.7E+03
35	5.3E+02	9.2E+03	9.6E+02	1.7E+04	2.6E+02	4.6E+03
40	6.2E+02	1.1E+04	1.4E+03	2.5E+04	3.3E+02	5.7E+03
45	8.2E+02	1.4E+04	2.0E+03	3.5E+04	4.0E+02	7.0E+03
50	1.1E+03	1.8E+04	2.6E+03	4.6E+04	4.8E+02	8.4E+03
55	1.3E+03	2.3E+04	3.5E+03	6.1E+04	6.2E+02	1.1E+04
60	1.6E+03	2.9E+04	4.6E+03	8.1E+04	7.7E+02	1.3E+04
65	2.0E+03	3.4E+04	6.2E+03	1.1E+05	9.1E+02	1.6E+04

Appendix III to Part 266—Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride—Continued

Terrain-adjusted effective stack height (m)	Noncomplex terrain				Complex terrain	
	Values for urban areas		Values for rural areas		Values for use in urban and rural areas	
	Cl_2 (g/hr)	HCl (g/hr)	Cl_2 (g/hr)	HCl (g/hr)	Cl_2 (g/hr)	HCl (g/hr)
70	2.3E+03	3.9E+04	7.2E+03	1.3E+05	1.1E+03	1.8E+04
75	2.5E+03	4.5E+04	8.6E+03	1.5E+05	1.2E+03	2.0E+04
80	2.9E+03	5.0E+04	1.0E+04	1.8E+05	1.3E+03	2.3E+04
85	3.3E+03	5.8E+04	1.2E+04	2.2E+05	1.4E+03	2.5E+04
90	3.7E+03	6.6E+04	1.4E+04	2.5E+05	1.6E+03	2.9E+04
95	4.2E+03	7.4E+04	1.7E+04	3.0E+05	1.8E+03	3.2E+04
100	4.8E+03	8.4E+04	2.1E+04	3.6E+05	2.0E+03	3.5E+04
105	5.3E+03	9.2E+04	2.4E+04	4.3E+05	2.3E+03	3.9E+04
110	6.2E+03	1.1E+05	2.9E+04	5.1E+05	2.5E+03	4.5E+04
115	7.2E+03	1.3E+05	3.5E+04	6.1E+05	2.8E+03	5.0E+04
120	8.2E+03	1.4E+05	4.1E+04	7.2E+05	3.2E+03	5.6E+04

[56 FR 32691, July 17, 1991]

Appendix IV to Part 266—Reference Air Concentrations*

Constituent	CAS No.	RAC (ug/m³)
Acetaldehyde	75-07-0	10
Acetonitrile	75-05-8	10
Acetophenone	98-86-2	100
Acrolein	107-02-8	20
Aldicarb	116-06-3	1
Aluminum Phosphide	20859-73-8	0.3
Allyl Alcohol	107-18-6	5
Antimony	7440-36-0	0.3
Barium	7440-39-3	50
Barium Cyanide	542-62-1	50
Bromomethane	74-83-9	0.6
Calcium Cyanide	592-01-8	30
Carbon Disulfide	75-15-0	200
Chloral	75-87-6	2
Chlorine (free)		0.4
2-Chloro-1,3-butadiene	126-99-8	3
Chromium III	16065-83-1	1000
Copper Cyanide	544-92-3	5
Cresols	1319-77-3	50
Cumene	98-82-8	1
Cyanide (free)	57-12-15	20
Cyanogen	460-19-5	30
Cyanogen Bromide	506-68-3	80
Di-n-butyl Phthalate	84-74-2	100
o-Dichlorobenzene	95-50-1	10
p-Dichlorobenzene	106-46-7	10
Dichlorodifluoromethane	75-71-8	200
2,4-Dichlorophenol	120-83-2	3
Diethyl Phthalate	84-66-2	800
Dimethoate	60-51-5	0.8
2,4-Dinitrophenol	51-28-5	2
Dinoseb	88-85-7	0.9
Diphenylamine	122-39-4	20
Endosulfan	115-29-1	0.05
Endrin	72-20-8	0.3
Fluorine	7782-41-4	50
Formic Acid	64-18-6	2000
Glycidylaldehyde	765-34-4	0.3
Hexachlorocyclopentadiene	77-47-4	5
Hexachlorophene	70-30-4	0.3
Hydrocyanic Acid	74-90-8	20
Hydrogen Chloride	7647-01-1	7
Hydrogen Sulfide	7783-06-4	3
Isobutyl Alcohol	78-83-1	300
Lead	7439-92-1	0.09

Appendix IV to Part 266—Reference Air Concentrations*—Continued

Constituent	CAS No.	RAC (ug/m³)
Maleic Anyhdride	108-31-6	100
Mercury	7439-97-6	0.3
Methacrylonitrile	126-98-7	0.1
Methomyl	16752-77-5	20
Methoxychlor	72-43-5	50
Methyl Chlorocarbonate	79-22-1	1000
Methyl Ethyl Ketone	78-93-3	60
Methyl Parathion	298-00-0	0.3
Nickel Cyanide	557-19-7	20
Nitric Oxide	10102-43-9	100
Nitrobenzene	98-95-3	0.8
Pentachlorobenzene	608-93-5	0.8
Pentachlorophenol	87-86-5	30
Phenol	108-95-2	30
M-Phenylenediamine	108-45-2	5
Phenylmercuric Acetate	62-38-4	0.075
Phosphine	7803-51-2	0.3
Phthalic Anhydride	85-44-9	2000
Potassium Cyanide	151-50-8	50
Potassium Silver Cyanide	506-61-6	200
Pyridine	110-86-1	1
Selenious Acid	7783-00-8	3
Selenourea	630-10-4	5
Silver	7440-22-4	3
Silver Cyanide	506-64-9	100
Sodium Cyanide	143-33-9	30
Strychnine	57-24-9	0.3
1,2,4,5-Tetrachlorobenzene	95-94-3	0.3
2,3,4,6-Tetrachlorophenol	58-90-2	30
Tetraethyl Lead	78-00-2	0.0001
Tetrahydrofuran	109-99-9	10
Thallic Oxide	1314-32-5	0.3
Thallium	7440-28-0	0.5
Thallium (I) Acetate	563-68-8	0.5
Thallium (I) Carbonate	6533-73-9	0.3
Thallium (I) Chloride	7791-12-0	0.3
Thallium (I) Nitrate	10102-45-1	0.5
Thallium Selenite	12039-52-0	0.5
Thallium (I) Sulfate	7446-18-6	0.025
Thiram	137-26-8	5
Toluene	108-88-3	300
1,2,4-Trichlorobenzene	120-82-1	20
Trichloromonofluoromethane	75-69-4	300
2,4,5-Trichlorophenol	95-95-4	100
Vanadium Pentoxide	1314-62-1	20

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APPENDIX IV TO PART 266—REFERENCE AIR CONCENTRATIONS*—Continued

Constituent	CAS No.	RAC (ug/m3)
Warfarin	81-81-2	0.3
Xylenes	1330-20-7	80
Zinc Cyanide	557-21-1	50
Zinc Phosphide	1314-84-7	0.3

*The RAC for other appendix VIII part 261 constituents not listed herein or in appendix V of this part is 0.1 ug/m³.

[56 FR 7232, Feb. 21, 1991; 56 FR 32691, July 17, 1991]

APPENDIX V TO PART 266—RISK SPECIFIC DOSES (10^{-5})

Constituent	CAS No.	Unit risk (m3/ug)	RsD (ug/m3)
Acrylamide	79-06-1	1.3E-03	7.7E-03
Acrylonitrile	107-13-1	6.8E-05	1.5E-01
Aldrin	309-00-2	4.9E-03	2.0E-03
Aniline	62-53-3	7.4E-06	1.4E+00
Arsenic	7440-38-2	4.3E-03	2.3E-03
Benz(a)anthracene	56-55-3	8.9E-04	1.1E-02
Benzene	71-43-2	8.3E-06	1.2E+00
Benzidine	92-87-5	6.7E-02	1.5E-04
Benzo(a)pyrene	50-32-8	3.3E-03	3.0E-03
Beryllium	7440-41-7	2.4E-03	4.2E-03
Bis(2-chloroethyl)ether	111-44-4	3.3E-04	3.0E-02
Bis(chloromethyl)ether	542-88-1	6.2E-02	1.6E-04
Bis(2-ethylhexyl)-phthalate	117-81-7	2.4E-07	4.2E+01
1,3-Butadiene	106-99-0	2.8E-04	3.6E-02
Cadmium	7440-43-9	1.8E-03	5.6E-03
Carbon Tetrachloride	56-23-5	1.5E-05	6.7E-01
Chlordane	57-74-9	3.7E-04	2.7E-02
Chloroform	67-66-3	2.3E-05	4.3E-01
Chloromethane	74-87-3	3.6E-06	2.8E+00
Chromium VI	7440-47-3	1.2E-02	8.3E-04
DDT	50-29-3	9.7E-05	1.0E-01
Dibenz(a,h)anthracene	53-70-3	1.4E-02	7.1E-04
1,2-Dibromo-3-chloropropane	96-12-8	6.3E-03	1.6E-03
1,2-Dibromoethane	106-93-4	2.2E-04	4.5E-02
1,1-Dichloroethane	75-34-3	2.6E-05	3.8E-01
1,2-Dichloroethane	107-06-2	2.6E-05	3.8E-01
1,1-Dichloroethylene	75-35-4	5.0E-05	2.0E-01
1,3-Dichloropropene	542-75-6	3.5E-01	2.9E-05
Dieldrin	60-57-1	4.6E-03	2.2E-03
Diethylstilbestrol	56-53-1	1.4E-01	7.1E-05
Dimethylnitrosamine	62-75-9	1.4E-02	7.1E-04
2,4-Dinitrotoluene	121-14-2	8.8E-05	1.1E-01
1,2-Diphenylhydrazine	122-66-7	2.2E-04	4.5E-02
1,4-Dioxane	123-91-1	1.4E-06	7.1E+00
Epichlorohydrin	106-89-8	1.2E-06	8.3E+00
Ethylene Oxide	75-21-8	1.0E-04	1.0E-01
Ethylene Dibromide	106-93-4	2.2E-04	4.5E-02
Formaldehyde	50-00-0	1.3E-05	7.7E-01
Heptachlor	76-44-8	1.3E-03	7.7E-03
Heptachlor Epoxide	1024-57-3	2.6E-03	3.8E-03
Hexachlorobenzene	118-74-1	4.9E-04	2.0E-02
Hexachlorobutadiene	87-68-3	2.0E-05	5.0E-01
Alpha-hexachloro-cyclohexane	319-84-6	1.8E-03	5.6E-03
Beta-hexachloro-cyclohexane	319-85-7	5.3E-04	1.9E-02
Gamma-hexachloro-cyclohexane	58-89-9	3.8E-04	2.6E-02
Hexachlorocyclo-hexane, Technical	.....	5.1E-04	2.0E-02
Hexachlorodibenxo-p-dioxin(1,2 Mixture)	.....	1.3E+0	7.7E-06
Hexachloroethane	67-72-1	4.0E-06	2.5E+00
Hydrazine	302-01-2	2.9E-03	3.4E-03
Hydrazine Sulfate	302-01-2	2.9E-03	3.4E-03
3-Methylcholanthrene	56-49-5	2.7E-03	3.7E-03
Methyl Hydrazine	60-34-4	3.1E-04	3.2E-02
Methylene Chloride	75-09-2	4.1E-06	2.4E+00
4,4'-Methylene-bis-2-chloroaniline	101-14-4	4.7E-05	2.1E-01
Nickel	7440-02-0	2.4E-04	4.2E-02
Nickel Refinery Dust	7440-02-0	2.4E-04	4.2E-02
Nickel Subsulfide	12035-72-2	4.8E-04	2.1E-02
2-Nitropropane	79-46-9	2.7E-02	3.7E-04

APPENDIX V TO PART 266—RISK SPECIFIC DOSES (10^{-5})—Continued

Constituent	CAS No.	Unit risk (m3/ug)	RsD (ug/m3)
N-Nitroso-n-butylamine	924-16-3	1.6E-03	6.3E-03
N-Nitroso-n-methylurea	684-93-5	8.6E-02	1.2E-04
N-Nitrosodiethylamine	55-18-5	4.3E-02	2.3E-04
N-Nitrosopyrrolidine	930-55-2	6.1E-04	1.6E-02
Pentachloronitrobenzene	82-68-8	7.3E-05	1.4E-01
PCBs	1336-36-3	1.2E-03	8.3E-03
Pronamide	23950-58-5	4.6E-06	2.2E+00
Reserpine	50-55-5	3.0E-03	3.3E-03
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	1746-01-6	4.5E+01	2.2E-07
1,1,2,2-Tetrachloroethane	79-34-5	5.8E-05	1.7E-01
Tetrachloroethylene	127-18-4	4.8E-07	2.1E+01
Thiourea	62-56-6	5.5E-04	1.8E-02
1,1,2-Trichloroethane	79-00-5	1.6E-05	6.3E-01
Trichloroethylene	79-01-6	1.3E-06	7.7E+00
2,4,6-Trichlorophenol	88-06-2	5.7E-06	1.8E+00
Toxaphene	8001-35-2	3.2E-04	3.1E-02
Vinyl Chloride	75-01-4	7.1E-06	1.4E+00

[56 FR 7232, Feb. 21, 1991]

APPENDIX VI TO PART 266—STACK PLUME RISE

(Estimated Plume Rise (in Meters) Based on Stack Exit Flow Rate and Gas Temperature)

Flow rate (m3/s)	Exhaust Temperature (K°)										
	<325	325-349	350-399	400-449	450-499	500-599	600-699	700-799	800-999	1000-1499	>1499
<0.5	0	0	0	0	0	0	0	0	0	0	0
0.5-0.9	0	0	0	0	0	0	0	0	1	1	1
1.0-1.9	0	0	0	0	1	1	2	3	3	3	4
2.0-2.9	0	0	1	3	4	4	6	6	7	8	9
3.0-3.9	0	1	2	5	6	7	9	10	11	12	13
4.0-4.9	1	2	4	6	8	10	12	13	14	15	17
5.0-7.4	2	3	5	8	10	12	14	16	17	19	21
7.5-9.9	3	5	8	12	15	17	20	22	22	23	24
10.0-12.4	4	6	10	15	19	21	23	24	25	26	27
12.5-14.9	4	7	12	18	22	23	25	26	27	28	29
15.0-19.9	5	8	13	20	23	24	26	27	28	29	31
20.0-24.9	6	10	17	23	25	27	29	30	31	32	34
25.0-29.9	7	12	20	25	27	29	31	32	33	35	36
30.0-34.9	8	14	22	26	29	31	33	35	36	37	39
35.0-39.9	9	16	23	28	30	32	35	36	37	39	41
40.0-49.9	10	17	24	29	32	34	36	38	39	41	42
50.0-59.9	12	21	26	31	34	36	39	41	42	44	46
60.0-69.9	14	22	27	33	36	39	42	43	45	47	49
70.0-79.9	16	23	29	35	38	41	44	46	47	49	51
80.0-89.9	17	25	30	36	40	42	46	48	49	51	54
90.0-99.9	19	26	31	38	42	44	48	50	51	53	56
100.0-119.9	21	26	32	39	43	46	49	52	53	55	58
120.0-139.9	22	28	35	42	46	49	52	55	56	59	61
140.0-159.9	23	30	36	44	48	51	55	58	59	62	65
160.0-179.9	25	31	38	46	50	54	58	60	62	65	67
180.0-199.9	26	32	40	48	52	56	60	63	65	67	70
>199.9	26	33	41	49	54	58	62	65	67	69	73

[56 FR 7233, Feb. 21, 1991]

APPENDIX VII TO PART 266—HEALTH-BASED LIMITS FOR EXCLUSION OF WASTE-DERIVED RESIDUES*

METALS—TCLP EXTRACT CONCENTRATION LIMITS

Constituent	CAS No.	Concentration limits (mg/L)
Antimony	7440-36-0	1xE+00
Arsenic	7440-38-2	5xE+00
Barium	7440-39-3	1xE+02
Beryllium	7440-41-7	7xE-03
Cadmium	7440-43-9	1xE+00
Chromium	7440-47-3	5xE+00
Lead	7439-92-1	5xE+00
Mercury	7439-97-6	2xE-01
Nickel	7440-02-0	7xE+01
Selenium	7782-49-2	1xE+00
Silver	7440-22-4	5xE+00
Thallium	7440-28-0	7xE+00

NONMETALS—RESIDUE CONCENTRATION LIMITS

Constituent	CAS No.	Concentration limits for residues (mg/kg)
Acalonitrile	75-05-8	2xE-01
Acetophenone	98-86-2	4xE+00
Acrolein	107-02-8	5xE-01
Acrylamide	79-06-1	2xE-04
Acrylonitrile	107-13-1	7xE-04
Aldrin	309-00-2	2xE-05
Allyl alcohol	107-18-6	2xE-01
Aluminum phosphide	20859-73-8	1xE-02
Aniline	62-53-3	6xE-02
Barium cyanide	542-62-1	1xE+00
Benz(a)anthracene	56-55-3	1xE-04
Benzene	71-43-2	5xE-03
Benzidine	92-87-5	1xE-06
Bis(2-chloroethyl) ether	111-44-4	3xE-04
Bis(chloromethyl) ether	542-88-1	2xE-06
Bis(2-ethylhexyl) phthalate	117-81-7	3xE+01
Bromoform	75-25-2	7xE-01
Calcium cyanide	592-01-8	1xE-06
Carbon disulfide	75-15-0	4xE+00
Carbon tetrachloride	56-23-5	6xE-03
Chlordane	57-74-9	3xE-04
Chlorobenzene	108-90-7	1xE+00
Chloroform	67-66-3	6xE-02
Copper cyanide	544-92-3	2xE-01
Cresols (Cresylic acid)	1319-77-3	2xE+00
Cyanogen	460-19-5	1xE+00
DDT	50-29-3	1xE-03
Dibenz(a, h)-anthracene	53-70-3	7xE-06
1,2-Dibromo-3-chloropropane	96-12-8	2xE-05
p-Dichlorobenzene	106-46-7	7.5xE-02
Dichlorodifluoromethane	75-71-8	7xE+00
1,1-Dichloroethylene	75-35-4	5xE-03
2,4-Dichlorophenol	120-83-2	1xE-01
1,3-Dichloropropene	542-75-6	1xE-03
Dieldrin	60-57-1	2xE-05
Diethyl phthalate	84-66-2	3xE+01
Diethylstilbesterol	56-53-1	7xE-07
Dimethoate	60-51-5	3xE-02
2,4-Dinitrotoluene	121-14-2	5xE-04
Diphenylamine	122-39-4	9xE-01
1,2-Diphenylhydrazine	122-66-7	5xE-04
Endosulfan	115-29-7	2xE-03
Endrin	72-20-8	2xE-04
Epichlorohydrin	106-89-8	4xE-02
Ethylene dibromide	106-93-4	4xE-07
Ethylene oxide	75-21-8	3xE-04

NONMETALS—RESIDUE CONCENTRATION LIMITS—Continued

Constituent	CAS No.	Concentration limits for residues (mg/kg)
Fluorine	7782-41-4	4xE+00
Formic acid	64-18-6	7xE+01
Heptachlor	76-44-8	8xE-05
Heptachlor epoxide	1024-57-3	4xE-05
Hexachlorobenzene	118-74-1	2xE-04
Hexachlorobutadiene	87-68-3	5xE-03
Hexachlorocyclopentadiene	77-47-4	2xE-01
Hexachlorodibenzo-p-dioxins	19408-74-3	6xE-08
Hexachloroethane	67-72-1	3xE-02
Hydrazine	302-01-1	1xE-04
Hydrogen cyanide	74-90-8	7xE-05
Hydrogen sulfide	7783-06-4	1xE-06
Isobutyl alcohol	78-83-1	1xE+01
Methomyl	16752-77-5	1xE+00
Methoxychlor	72-43-5	1xE-01
3-Methylcholanthrene	56-49-5	4xE-05
4,4'-Methylenebis (2-chloroaniline).	101-14-4	2xE-03
Methylene chloride	75-09-2	5xE-02
Methyl ethyl ketone (MEK)	78-93-3	2xE+00
Methyl hydrazine	60-34-4	3xE-04
Methyl parathion	298-00-0	2xE-02
Naphthalene	91-20-3	1xE+01
Nickel cyanide	557-19-7	7xE-01
Nitric oxide	10102-43-9	4xE+00
Nitrobenzene	98-95-3	2xE-02
N-Nitrosodi-n-butylamine	924-16-3	6xE-05
N-Nitrosodiethylamine	55-18-5	2xE-06
N-Nitroso-N-methylurea	684-93-5	1xE-07
N-Nitrosopyrrolidine	930-55-2	2xE-04
Pentachlorobenzene	608-93-5	3xE-02
Pentachloronitrobenzene (PCNB).	82-68-8	1xE-01
Pentachlorophenol	87-86-5	1xE+00
Phenol	108-95-2	1xE+00
Phenylmercury acetate	62-38-4	3xE-03
Phosphine	7803-51-2	1xE-02
Polychlorinated biphenyls, N.O.S.	1336-36-3	5xE-05
Potassium cyanide	151-50-8	2xE+00
Potassium silver cyanide	506-61-6	7xE+00
Pronamide	23950-58-5	3xE+00
Pyridine	110-86-1	4xE-02
Reserpine	50-55-5	3xE-05
Selenourea	630-10-4	2xE-01
Silver cyanide	506-64-9	4xE+00
Sodium cyanide	143-33-9	1xE+00
Strychnine	57-24-9	1xE-02
1,2,4,5-Tetrachlorobenzene	95-94-3	1xE-02
1,1,2,2-tetrachloroethane	79-34-5	2xE-03
Tetrachloroethylene	127-18-4	7xE-01
2,3,4,6-Tetrachlorophenol	58-90-2	1xE-02
Tetraethyl lead	78-00-2	4xE-06
Thiourea	62-56-6	2xE-04
Toluene	108-88-3	1xE+01
Toxaphene	8001-35-2	5xE-03
1,1,2-Trichloroethane	79-00-5	6xE-03
Trichloroethylene	79-01-6	5xE-03
Trichloromonofluoromethane	75-69-4	1xE+01
2,4,5-Trichlorophenol	95-95-4	4xE+00
2,4,6-Trichlorophenol	88-06-2	4xE+00
Vanadium pentoxide	1314-62-1	7xE-01
Vinyl chloride	75-01-4	2xE-03

*NOTE: The health-based concentration limits for appendix VIII part 261 constituents for which a health-based concentration is not provided below is 2xE-06 mg/kg.

[56 FR 7234, Feb. 21, 1991; 56 FR 32691, July 17, 1991]

APPENDIX VIII TO PART 266—POTENTIAL PICS FOR DETERMINATION OF EXCLUSION OF WASTE-DERIVED RESIDUES

PICS FOUND IN STACK EFFLUENTS

Volatiles	Semivolatiles
Benzene	Bis(2-ethylhexyl)phthalate
Toluene	Naphthalene
Carbon tetrachloride	Phenol
Chloroform	Diethyl phthalate
Methylene chloride	Butyl benzyl phthalate
Trichloroethylene	2,4-Dimethylphenol
Tetrachloroethylene	o-Dichlorobenzene
1,1,1-Trichloroethane	m-Dichlorobenzene
Chlorobenzene	p-Dichlorobenzene
cis-1,4-Dichloro-2-butene	Hexachlorobenzene
Bromochloromethane	2,4,6-Trichlorophenol
Bromodichloromethane	Fluoranthene
Bromoform	o-Nitrophenol
Bromomethane	1,2,4-Trichlorobenzene
Methylene bromide	o-Chlorophenol
Methyl ethyl ketone	Pentachlorophenol
	Pyrene
	Dimethyl phthalate
	Mononitrobenzene
	2,6-Toluene diisocyanate

[56 FR 7235, Feb. 21, 1991; 56 FR 32691, July 17, 1991]

APPENDIX IX TO PART 266—METHODS MANUAL FOR COMPLIANCE WITH THE BIF REGULATIONS

Burning Hazardous Waste in Boilers and Industrial Furnaces

TABLE OF CONTENTS

SECTION 1.0 INTRODUCTION

This document presents required methods for demonstrating compliance with U.S. Environmental Protection Agency regulations for boilers and industrial furnaces (BIFs) burning hazardous waste (see 40 CFR part 266, subpart H). Included in this document are:

1. Performance Specifications for Continuous Emission Monitoring (CEM) of Carbon Monoxide, Oxygen, and Hydrocarbons in Stack Gases.

2. Sampling and Analytical (S&A) Methods for Multiple Metals, Hexavalent Chromium, HCl and Chlorine, Polychlorinated Dibenzo-

(a) A list of the hazardous wastes placed or to be placed in each landfill or landfill cell;

(b) Detailed plans and an engineering report describing how the landfill is designed and is or will be constructed, operated, and maintained to meet the requirements of §§ 264.19, 264.301, 264.302, and 264.303 of this chapter, addressing the following items:

(1)(i) The liner system (except for an existing portion of a landfill), if the landfill must meet the requirements of § 264.301(a) of this chapter. If an exemption from the requirement for a liner is sought as provided by § 264.301(b) of this chapter, submit detailed plans, and engineering and hydrogeological reports, as appropriate, describing alternate designs and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;

(ii) The double liner and leak (leachate) detection, collection, and removal system, if the landfill must meet the requirements of § 264.301(c) of this chapter. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by § 264.301(d), (e), or (f) of this chapter, submit appropriate information;

(iii) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(iv) The construction quality assurance (CQA) plan if required under § 264.19 of this chapter;

(v) Proposed action leakage rate, with rationale, if required under § 264.302 of this chapter, and response action plan, if required under § 264.303 of this chapter;

(2) Control of run-on;

(3) Control of run-off;

(4) Management of collection and holding facilities associated with run-on and run-off control systems; and

(5) Control of wind dispersal of particulate matter, where applicable;

(c) A description of how each landfill, including the double liner system, leachate collection and removal system, leak detection system, cover system, and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of § 264.303(a), (b), and (c) of this chapter. This information must be included in the inspection plan submitted under § 270.14(b)(5);

(d) A description of how each landfill, including the liner and cover systems, will be inspected in order to meet the requirements of § 264.303 (a) and (b). This information should be included in the inspection plan submitted under § 270.14(b)(5).

(e) Detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with § 264.310(a), and a description of how each landfill will be maintained and monitored after closure in accordance with § 264.310(b). This information should be included in the closure and post-closure plans submitted under § 270.14(b)(13).

(f) If ignitable or reactive wastes will be landfilled, an explanation of how the standards of § 264.312 will be complied with;

(g) If incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how § 264.313 will be complied with;

(h) If bulk or non-containerized liquid waste or wastes containing free liquids is to be landfilled prior to May 8, 1985, an explanation of how the requirements of § 264.314(a) will be complied with;

(i) If containers of hazardous waste are to be landfilled, an explanation of how the requirements of § 264.315 or § 264.316, as applicable, will be complied with.

(j) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a landfill is or will be designed, constructed, operated, and maintained to meet the requirements of § 264.317. This submission must address the following items as specified in § 264.317:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983, as amended at 50 FR 2006, Jan. 14, 1985; 50 FR 28752, July 15, 1985; 57 FR 8496, Jan. 29, 1992]

§ 270.22 Specific part B information requirements for boilers and industrial furnaces burning hazardous waste.

(a) *Trial burns*—(1) *General.* Except as provided below, owners and operators that are subject to the standards to control organic emissions provided by § 266.104 of this chapter, standards to control particulate matter provided by § 266.105 of this chapter, standards to control metals emissions provided by § 266.106 of this chapter, or standards to control hydrogen chloride or chlorine gas emissions provided by § 266.107 of this chapter must conduct a trial burn to demonstrate conformance with those standards and must submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with § 270.66.

(i) A trial burn to demonstrate conformance with a particular emission standard may be waived under provisions of §§ 266.104 through 266.107 of this chapter and paragraphs (a)(2) through (a)(5) of this section; and

(ii) The owner or operator may submit data in lieu of a trial burn, as prescribed in paragraph (a)(6) of this section.

(2) *Waiver of trial burn for DRE*—(i) *Boilers operated under special operating requirements.* When seeking to be permitted under §§ 266.104(a)(4) and 266.110 of this chapter that automatically waive the DRE trial burn, the owner or operator of a boiler must submit documentation that the boiler operates under the special operating requirements provided by § 266.110 of this chapter.

(ii) *Boilers and industrial furnaces burning low risk waste.* When seeking to be permitted under the provisions for low risk waste provided by §§ 266.104(a)(5) and 266.109(a) of this chapter that waive the DRE trial burn, the owner or operator must submit:

(A) Documentation that the device is operated in conformance with the requirements of § 266.109(a)(1) of this chapter.

(B) Results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in appendix VIII of part 261 of this chapter, except for those constituents that would reasonably not be expected to be in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained. The analysis must rely on analytical techniques specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (incorporated by reference, see § 260.11).

(C) Documentation of hazardous waste firing rates and calculations of reasonable, worst-case emission rates of each constituent identified in paragraph (a)(2)(ii)(B) of this section using procedures provided by § 266.109(a)(2)(ii) of this chapter.

(D) Results of emissions dispersion modeling for emissions identified in paragraphs (a)(2)(ii)(C) of this section using modeling procedures prescribed by § 266.106(h) of this chapter. The Director will review the emission modeling conducted by the applicant to determine conformance with these procedures. The Director will either approve the modeling or determine that alternate or supplementary modeling is appropriate.

(E) Documentation that the maximum annual average ground level concentration of each constituent identified in paragraph (a)(2)(ii)(B) of this section quantified in conformance with paragraph (a)(2)(ii)(D) of this section does not exceed the allowable ambient level established in appendices IV or V of part 266. The acceptable ambient concentration for emitted constituents for which a specific Reference Air Concentration has not been established in appendix IV or Risk-Specific Dose has not been established in appendix V is 0.1' micrograms per cubic meter, as noted in the footnote to appendix IV.

(3) *Waiver of trial burn for metals.* When seeking to be permitted under

the Tier I (or adjusted Tier I) metals feed rate screening limits provided by § 266.106 (b) and (e) of this chapter that control metals emissions without requiring a trial burn, the owner or operator must submit:

(i) Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;

(ii) Documentation of the concentration of each metal controlled by § 266.106 (b) or (e) of this chapter in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of each metal;

(iii) Documentation of how the applicant will ensure that the Tier I feed rate screening limits provided by § 266.106 (b) or (e) of this chapter will not be exceeded during the averaging period provided by that paragraph;

(iv) Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by § 266.106 (b)(3) through (b)(5) of this chapter;

(v) Documentation of compliance with the provisions of § 266.106(b)(6), if applicable, for facilities with multiple stacks;

(vi) Documentation that the facility does not fail the criteria provided by § 266.106(b)(7) for eligibility to comply with the screening limits; and

(vii) Proposed sampling and metals analysis plan for the hazardous waste, other fuels, and industrial furnace feed stocks.

(4) *Waiver of trial burn for particulate matter.* When seeking to be permitted under the low risk waste provisions of § 266.109(b) which waives the particulate standard (and trial burn to demonstrate conformance with the particulate standard), applicants must submit documentation supporting conformance with paragraphs (a)(2)(ii) and (a)(3) of this section.

(5) *Waiver of trial burn for HCl and Cl_2.* When seeking to be permitted under the Tier I (or adjusted Tier I) feed rate screening limits for total chloride and chlorine provided by § 266.107 (b)(1) and (c) of this chapter that control emissions of hydrogen chloride (HCl) and chlorine gas (Cl_2) without requiring a trial burn, the owner or operator must submit:

(i) Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;

(ii) Documentation of the levels of total chloride and chlorine in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of total chloride and chlorine;

(iii) Documentation of how the applicant will ensure that the Tier I (or adjusted Tier I) feed rate screening limits provided by § 266.107 (b)(1) or (e) of this chapter will not be exceeded during the averaging period provided by that paragraph;

(iv) Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by § 266.107(b)(3) of this chapter;

(v) Documentation of compliance with the provisions of § 266.107(b)(4), if applicable, for facilities with multiple stacks;

(vi) Documentation that the facility does not fail the criteria provided by § 266.107(b)(3) for eligibility to comply with the screening limits; and

(vii) Proposed sampling and analysis plan for total chloride and chlorine for the hazardous waste, other fuels, and industrial furnace feedstocks.

(6) *Data in lieu of trial burn.* The owner or operator may seek an exemption from the trial burn requirements to demonstrate conformance with §§ 266.104 through 266.107 of this chapter and § 270.66 by providing the information required by § 270.66 from previous compliance testing of the device in conformance with § 266.103 of this chapter, or from compliance testing or trial or operational burns of similar boilers or industrial furnaces burning similar hazardous wastes under similar conditions. If data from a similar device is used to support a trial burn waiver, the design and operating information required by § 270.66 must be provided for both the similar device and the device to which the data is to be applied, and a comparison of the design and operating information must be provided. The Director shall approve a permit application without a trial burn if he finds

that the hazardous wastes are sufficiently similar, the devices are sufficiently similar, the operating conditions are sufficiently similar, and the data from other compliance tests, trial burns, or operational burns are adequate to specify (under § 266.102 of this chapter) operating conditions that will ensure conformance with § 266.102(c) of this chapter. In addition, the following information shall be submitted:

(i) For a waiver from any trial burn:

(A) A description and analysis of the hazardous waste to be burned compared with the hazardous waste for which data from compliance testing, or operational or trial burns are provided to support the contention that a trial burn is not needed;

(B) The design and operating conditions of the boiler or industrial furnace to be used, compared with that for which comparative burn data are available; and

(C) Such supplemental information as the Director finds necessary to achieve the purposes of this paragraph.

(ii) For a waiver of the DRE trial burn, the basis for selection of POHCs used in the other trial or operational burns which demonstrate compliance with the DRE performance standard in § 266.104(a) of this chapter. This analysis should specify the constituents in appendix VIII, part 261 of this chapter, that the applicant has identified in the hazardous waste for which a permit is sought, and any differences from the POHCs in the hazardous waste for which burn data are provided.

(b) *Alternative HC limit for industrial furnaces with organic matter in raw materials.* Owners and operators of industrial furnaces requesting an alternative HC limit under § 266.104(f) of this chapter shall submit the following information at a minimum:

(1) Documentation that the furnace is designed and operated to minimize HC emissions from fuels and raw materials;

(2) Documentation of the proposed baseline flue gas HC (and CO) concentration, including data on HC (and CO) levels during tests when the facility produced normal products under normal operating conditions from normal raw materials while burning normal fuels and when not burning hazardous waste;

(3) Test burn protocol to confirm the baseline HC (and CO) level including information on the type and flow rate of all feedstreams, point of introduction of all feedstreams, total organic carbon content (or other appropriate measure of organic content) of all nonfuel feedstreams, and operating conditions that affect combustion of fuel(s) and destruction of hydrocarbon emissions from nonfuel sources;

(4) Trial burn plan to:

(i) Demonstrate that flue gas HC (and CO) concentrations when burning hazardous waste do not exceed the baseline HC (and CO) level; and

(ii) Identify the types and concentrations of organic compounds listed in appendix VIII, part 261 of this chapter, that are emitted when burning hazardous waste in conformance with procedures prescribed by the Director;

(5) Implementation plan to monitor over time changes in the operation of the facility that could reduce the baseline HC level and procedures to periodically confirm the baseline HC level; and

(6) Such other information as the Director finds necessary to achieve the purposes of this paragraph.

(c) *Alternative metals implementation approach.* When seeking to be permitted under an alternative metals implementation approach under § 266.106(f) of this chapter, the owner or operator must submit documentation specifying how the approach ensures compliance with the metals emissions standards of § 266.106(c) or (d) and how the approach can be effectively implemented and monitored. Further, the owner or operator shall provide such other information that the Director finds necessary to achieve the purposes of this paragraph.

(d) *Automatic waste feed cutoff system.* Owners and operators shall submit information describing the automatic waste feed cutoff system, including any pre-alarm systems that may be used.

(e) *Direct transfer.* Owners and operators that use direct transfer operations to feed hazardous waste from transport vehicles (containers, as defined in § 266.111 of this chapter) directly to the boiler or industrial furnace shall sub-

requirements of §§ 264.19, 264.251, 264.252, and 264.253 of this chapter, addressing the following items:

(i)(1) The liner system (except for an existing portion of a waste pile), if the waste pile must meet the requirements of § 264.251(a) of this chapter. If an exemption from the requirement for a liner is sought as provided by § 264.251(b) of this chapter, submit detailed plans, and engineering and hydrogeological reports, as appropriate, describing alternate designs and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;

(ii) The double liner and leak (leachate) detection, collection, and removal system, if the waste pile must meet the requirements of § 264.251(c) of this chapter. If an exemption from the requirements for double liners and a leak detection, collection and removal system or alternative design is sought as provided by § 264.251(d), (e), or (f) of this chapter, submit appropriate information;

(iii) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(iv) The construction quality assurance (CQA) plan if required under § 264.19 of this chapter;

(v) Proposed action leakage rate, with rationale, if required under § 264.252 of this chapter, and response action plan, if required under § 264.253 of this chapter;

(2) Control of run-on;

(3) Control of run-off;

(4) Management of collection and holding units associated with run-on and run-off control systems; and

(5) Control of wind dispersal of particulate matter, where applicable;

(d) A description of how each waste pile, including the double liner system, leachate collection and removal system, leak detection system, cover system, and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of § 264.254(a), (b), and (c) of this chapter. This information must be included in the inspection plan submitted under § 270.14(b)(5);

(e) If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;

(f) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how the requirements of § 264.256 will be complied with;

(g) If incompatible wastes, or incompatible wastes and materials will be place in a waste pile, an explanation of how § 264.257 will be complied with;

(h) A description of how hazardous waste residues and contaminated materials will be removed from the waste pile at closure, as required under § 264.258(a). For any waste not to be removed from the waste pile upon closure, the owner or operator must submit detailed plans and an engineering report describing how § 264.310 (a) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under § 270.14(b)(13).

(i) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a waste pile that is not enclosed (as defined in § 264.250(c)) is or will be designed, constructed, operated, and maintained to meet the requirements of § 264.259. This submission must address the following items as specified in § 264.259:

(1) The volume, physical, and chemical characteristics of the wastes to be disposed in the waste pile, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

[48 FR 14228, Apr. 1, 1983, as amended at 50 FR 2006, Jan. 14, 1985; 50 FR 28752, July 15, 1985; 57 FR 3496, Jan. 29, 1992]

§ 270.19 Specific part B information requirements for incinerators.

Except as § 264.340 of this chapter provides otherwise, owners and operators of facilities that incinerate hazardous waste must fulfill the requirements of (a), (b), or (c) of this section.

(a) When seeking an exemption under § 264.340 (b) or (c) of this chapter (Ignitable, corrosive, or reactive wastes only):

(1) Documentation that the waste is listed as a hazardous waste in part 261, subpart D of this chapter, solely because it is ignitable (Hazard Code I) or corrosive (Hazard Code C) or both; or

(2) Documentation that the waste is listed as a hazardous waste in part 261, subpart D of this chapter, solely because it is reactive (Hazard Code R) for characteristics other than those listed in § 261.23(a) (4) and (5) of this chapter, and will not be burned when other hazardous wastes are present in the combustion zone; or

(3) Documentation that the waste is a hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous waste under part 261, subpart C of this chapter; or

(4) Documentation that the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in § 261.23(a) (1), (2), (3), (6), (7), or (8) of this chapter, and that it will not be burned when other hazardous wastes are present in the combustion zone; or

(b) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with § 270.62; or

(c) In lieu of a trial burn, the applicant may submit the following information:

(1) An analysis of each waste or mixture of wastes to be burned including:

(i) Heat value of the waste in the form and composition in which it will be burned.

(ii) Viscosity (if applicable), or description of physical form of the waste.

(iii) An identification of any hazardous organic constituents listed in part 261, appendix VIII, of this chapter, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in part 261, appendix VIII, of this chapter which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in "Test methods for the evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 270.6 and referenced in 40 CFR part 261, appendix III), or their equivalent.

(iv) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 270.6).

(v) A quantification of those hazardous constituents in the waste which may be designated as POHC's based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in § 264.343 of this chapter.

(2) A detailed engineering description of the incinerator, including:

(i) Manufacturer's name and model number of incinerator.

(ii) Type of incinerator.

(iii) Linear dimension of incinerator unit including cross sectional area of combustion chamber.

(iv) Description of auxiliary fuel system (type/feed).

(v) Capacity of prime mover.

(vi) Description of automatic waste feed cutoff system(s).

(vii) Stack gas monitoring and pollution control monitoring system.

(viii) Nozzle and burner design.

(ix) Construction materials.

(x) Location and description of temperature, pressure, and flow indicating devices and control devices.

(3) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in paragraph (c)(1) of this section. This analysis should specify the POHC's which the applicant has identified in the waste for which a permit is sought, and any differences from

the POHC's in the waste for which burn data are provided.

(4) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available.

(5) A description of the results submitted from any previously conducted trial burn(s) including:

(i) Sampling and analysis techniques used to calculate performance standards in § 264.343 of this chapter,

(ii) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement),

(6) The expected incinerator operation information to demonstrate compliance with §§ 264.343 and 264.345 of this chapter including:

(i) Expected carbon monoxide (CO) level in the stack exhaust gas.

(ii) Waste feed rate.

(iii) Combustion zone temperature.

(iv) Indication of combustion gas velocity.

(v) Expected stack gas volume, flow rate, and temperature.

(vi) Computed residence time for waste in the combustion zone.

(vii) Expected hydrochloric acid removal efficiency.

(viii) Expected fugitive emissions and their control procedures.

(ix) Proposed waste feed cut-off limits based on the identified significant operating parameters.

(7) Such supplemental information as the Director finds necessary to achieve the purposes of this paragraph.

(8) Waste analysis data, including that submitted in paragraph (c)(1) of this section, sufficient to allow the Director to specify as permit Principal Organic Hazardous Constituents (permit POHC's) those constituents for which destruction and removal efficiencies will be required.

(d) The Director shall approve a permit application without a trial burn if he finds that:

(1) The wastes are sufficiently similar; and

(2) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under § 264.345 of this chapter) operating conditions that will ensure that the performance standards in § 264.343 of this chapter will be met by the incinerator.

§ 270.20 Specific part B information requirements for land treatment facilities.

Except as otherwise provided in § 264.1, owners and operators of facilities that use land treatment to dispose of hazardous waste must provide the following additional information:

(a) A description of plans to conduct a treatment demonstration as required under § 264.272. The description must include the following information:

(1) The wastes for which the demonstration will be made and the potential hazardous constituents in the waste;

(2) The data sources to be used to make the demonstration (*e.g.*, literature, laboratory data, field data, or operating data);

(3) Any specific laboratory or field test that will be conducted, including:

(i) The type of test (*e.g.*, column leaching, degradation);

(ii) Materials and methods, including analytical procedures;

(iii) Expected time for completion;

(iv) Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices.

(b) A description of a land treatment program, as required under § 264.271. This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items:

(1) The wastes to be land treated;

(2) Design measures and operating practices necessary to maximize treatment in accordance with § 264.273(a) including:

(i) Waste application method and rate;

(ii) Measures to control soil pH;

(iii) Enhancement of microbial or chemical reactions;

(iv) Control of moisture content;

(3) Provisions for unsaturated zone monitoring, including:

(i) Sampling equipment, procedures, and frequency;

(ii) Procedures for selecting sampling locations;

(iii) Analytical procedures;

(iv) Chain of custody control;

(v) Procedures for establishing background values;

(vi) Statistical methods for interpreting results;

(vii) The justification for any hazardous constituents recommended for selection as principal hazardous constituents, in accordance with the criteria for such selection in § 264.278(a);

(4) A list of hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to § 264.13;

(5) The proposed dimensions of the treatment zone;

(c) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of § 264.273. This submission must address the following items:

(1) Control of run-on;

(2) Collection and control of run-off;

(3) Minimization of run-off of hazardous constituents from the treatment zone;

(4) Management of collection and holding facilities associated with run-on and run-off control systems;

(5) Periodic inspection of the unit. This information should be included in the inspection plan submitted under § 270.14(b)(5);

(6) Control of wind dispersal of particulate matter, if applicable;

(d) If food-chain crops are to be grown in or on the treatment zone of the land treatment unit, a description of how the demonstration required under § 264.276(a) will be conducted including:

(1) Characteristics of the food-chain crop for which the demonstration will be made.

(2) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;

(3) Procedures for crop growth, sample collection, sample analysis, and data evaluation;

(4) Characteristics of the comparison crop including the location and conditions under which it was or will be grown;

(e) If food-chain crops are to be grown, and cadmium is present in the land-treated waste, a description of how the requirements of § 264.276(b) will be complied with;

(f) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required under §§ 264.280(a)(8) and 264.280(c)(2). This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under § 270.14(b)(13);

(g) If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of § 264.281 will be complied with;

(h) If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how § 264.282 will be complied with.

(i) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of § 264.283. This submission must address the following items as specified in § 264.283:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983, as amended at 50 FR 2006, Jan. 14, 1985]

§ 270.21 Specific part B information requirements for landfills.

Except as otherwise provided in § 264.1, owners and operators of facilities that dispose of hazardous waste in landfills must provide the following additional information:

mit information supporting conformance with the standards for direct transfer provided by §266.111 of this chapter.

(f) *Residues.* Owners and operators that claim that their residues are excluded from regulation under the provisions of §266.112 of this chapter must submit information adequate to demonstrate conformance with those provisions.

[56 FR 7235, Feb. 21, 1991; 56 FR 32691, July 17, 1991]

§ 270.23 Specific part B information requirements for miscellaneous units.

Except as otherwise provided in §264.600, owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units must provide the following additional information:

(a) A detailed description of the unit being used or proposed for use, including the following:

(1) Physical characteristics, materials of construction, and dimensions of the unit;

(2) Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of §§264.601 and 264.602; and

(3) For disposal units, a detailed description of the plans to comply with the post-closure requirements of §264.603.

(b) Detailed hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards of §264.601. If the applicant can demonstrate that he does not violate the environmental performance standards of §264.601 and the Director agrees with such demonstration, preliminary hydrologic, geologic, and meteorologic assessments will suffice.

(c) Information on the potential pathways of exposure of humans or environmental receptors to hazardous waste or hazardous constituents and on the potential magnitude and nature of such exposures.

(d) For any treatment unit, a report on a demonstration of the effectiveness of the treatment based on laboratory or field data.

(e) Any additional information determined by the Director to be necessary for evaluation of compliance of the unit with the environmental performance standards of §264.601.

§ 270.24 Specific part B information requirements for process vents.

Except as otherwise provided in §264.1, owners and operators of facilities that have process vents to which subpart AA of part 264 applies must provide the following additional information:

(a) For facilities that cannot install a closed-vent system and control device to comply with the provisions of 40 CFR 264 subpart AA on the effective date that the facility becomes subject to the provisions of 40 CFR 264 or 265 subpart AA, an implementation schedule as specified in §264.1033(a)(2).

(b) Documentation of compliance with the process vent standards in §264.1032, including:

(1) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan).

(2) Information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, estimates of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or concentrations) that represent the conditions that exist when the waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(3) Information and data used to determine whether or not a process vent is subject to the requirements of §264.1032.

(c) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with the requirements of §264.1032, and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in §264.1035(b)(3).

(d) Documentation of compliance with §264.1033, including:

(1) A list of all information references and sources used in preparing the documentation.

(2) Records, including the dates, of each compliance test required by §264.1033(k).

(3) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" (incorporated by reference as specified in §260.11) or other engineering texts acceptable to the Regional Administrator that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in §264.1035(b)(4)(iii).

(4) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(5) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater unless the total organic emission limits of §264.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.

[55 FR 25518, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§ 270.25 Specific part B information requirements for equipment.

Except as otherwise provided in §264.1, owners and operators of facilities that have equipment to which subpart BB of part 264 applies must provide the following additional information:

(a) For each piece of equipment to which subpart BB of part 264 applies:

(1) Equipment identification number and hazardous waste management unit identification.

(2) Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan).

(3) Type of equipment (e.g., a pump or pipeline valve).

(4) Percent by weight total organics in the hazardous waste stream at the equipment.

(5) Hazardous waste state at the equipment (e.g., gas/vapor or liquid).

(6) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").

(b) For facilities that cannot install a closed-vent system and control device to comply with the provisions of 40 CFR 264 subpart BB on the effective date that the facility becomes subject to the provisions of 40 CFR 264 or 265 subpart BB, an implementation schedule as specified in §264.1033(a)(2).

(c) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in §264.1035(b)(3).

(d) Documentation that demonstrates compliance with the equipment standards in §§264.1052 to 264.1059. This documentation shall contain the records required under §264.1064. The Regional Administrator may request further documentation before deciding if compliance has been demonstrated.

(e) Documentation to demonstrate compliance with §264.1060 shall include the following information:

(1) A list of all information references and sources used in preparing the documentation.

(2) Records, including the datos, of each compliance test required by § 264.1033(j).

(3) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "ATPI Course 415: Control of Gaseous Emissions" (incorporated by reference as specified in § 260.11) or other engineering texts acceptable to the Regional Administrator that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in § 264.1035(b)(4)(iii).

(4) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(5) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater.

[55 FR 25518, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§ 270.26 Special part B information requirements for drip pads.

Except as otherwise provided by § 264.1 of this chapter, owners and operators of hazardous waste treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads must provide the following additional information:

(a) A list of hazardous wastes placed or to be placed on each drip pad.

(b) If an exemption is sought to subpart F of part 264 of this chapter, as provided by § 264.90 of this chapter, detailed plans and an engineering report describing how the requirements of § 264.90(b)(2) of this chapter will be met.

(c) Detailed plans and an engineering report describing how the drip pad is or will be designed, constructed, operated and maintained to meet the requirements of § 264.573 of this chapter, including the as-built drawings and specifications. This submission must address the following items as specified in § 264.571 of this chapter:

(1) The design characteristics of the drip pad;

(2) The liner system;

(3) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time;

(4) Practices designed to maintain drip pads;

(5) The associated collection system;

(6) Control of run-on to the drip pad;

(7) Control of run-off from the drip pad;

(8) The interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad;

(9) Procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or other materials, including but not limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning and provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned.

(10) Operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized;

(11) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and non-pressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices;

(12) Provisions for ensuring that collection and holding units associated with the run-on and run-off control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system;

(13) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals.

(14) A description of how each drip pad, including appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of § 264.573 of this chapter. This information should be included in the inspection plan submitted under § 270.14(b)(5) of this part.

(15) A certification signed by an independent qualified, registered professional engineer, stating that the drip pad design meets the requirements of paragraphs (a) through (f) of § 264.573 of this chapter.

(16) A description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under § 264.575(a) of this chapter. For any waste not to be removed from the drip pad upon closure, the owner or operator must submit detailed plans and an engineering report describing how § 264.310 (a) and (b) of this chapter will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under § 270.14(b)(13).

[55 FR 50469, Dec. 6, 1990. Redesignated and amended at 56 FR 30193, July 1, 1991]

§§ 270.27—270.28 [Reserved]

§ 270.29 Permit denial.

The Director may, pursuant to the procedures in part 124, deny the permit application either in its entirety or as to the active life of a hazardous waste management facility or unit only.

[64 FR 9607, Mar. 7, 1989]

Subpart C—Permit Conditions

§ 270.30 Conditions applicable to all permits.

The following conditions apply to all RCRA permits, and shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit.

(a) *Duty to comply.* The permittee must comply with all conditions of this permit, except that the permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit. (See § 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of the appropriate Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(b) *Duty to reapply.* If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

(c) *Need to halt or reduce activity not a defense.* It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

(e) *Proper operation and maintenance.* The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

(f) *Permit actions.* This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

based on information submitted in part B of the application, substantial, although incomplete or inconclusive, information already exists upon which to base the issuance of a facility permit.

(2) If the Director finds that not enough information exists upon which he can establish permit conditions to attempt to provide for compliance with all of the requirements of subpart M, he must issue a treatment demonstration permit covering only the field test or laboratory analyses.

(b) If the Director finds that a phased permit may be issued, he will establish, as requirements in the first phase of the facility permit, conditions for conducting the field tests or laboratory analyses. These permit conditions will include design and operating parameters (including the duration of the tests or analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone), monitoring procedures, post-demonstration clean-up activities, and any other conditions which the Director finds may be necessary under §264.272(c). The Director will include conditions in the second phase of the facility permit to attempt to meet all subpart M requirements pertaining to unit design, construction, operation, and maintenance. The Director will establish these conditions in the second phase of the permit based upon the substantial but incomplete or inconclusive information contained in the part B application.

(1) The first phase of the permit will be effective as provided in §124.15(b) of this chapter.

(2) The second phase of the permit will be effective as provided in paragraph (d) of this section.

(c) When the owner or operator who has been issued a two-phase permit has completed the treatment demonstration, he must submit to the Director a certification, signed by a person authorized to sign a permit application or report under §270.11, that the field tests or laboratory analyses have been carried out in accordance with the conditions specified in phase one of the permit for conducting such tests or analyses. The owner or operator must also submit all data collected during the field tests or laboratory analyses within 90 days of completion of those tests or analyses unless the Director approves a later date.

(d) If the Director determines that the results of the field tests or laboratory analyses meet the requirements of §264.272 of this chapter, he will modify the second phase of the permit to incorporate any requirements necessary for operation of the facility in compliance with part 264, subpart M, of this chapter, based upon the results of the field tests or laboratory analyses.

(1) This permit modification may proceed under §270.42, or otherwise will proceed as a modification under §270.41(a)(2). If such modifications are necessary, the second phase of the permit will become effective only after those modifications have been made.

(2) If no modifications of the second phase of the permit are necessary, the Director will give notice of his final decision to the permit applicant and to each person who submitted written comments on the phased permit or who requested notice of the final decision on the second phase of the permit. The second phase of the permit then will become effective as specified in §124.15(b).

[48 FR 14228, Apr. 1, 1983, as amended at 53 FR 37939, Sept. 28, 1988]

§ 270.64 Interim permits for UIC wells.

The Director may issue a permit under this part to any Class I UIC well (see §144.6) injecting hazardous wastes within a State in which no UIC program has been approved or promulgated. Any such permit shall apply and insure compliance with all applicable requirements of 40 CFR part 264, subpart R (RCRA standards for wells), and shall be for a term not to exceed two years. No such permit shall be issued after approval or promulgation of a UIC program in the State. Any permit under this section shall contain a condition providing that it will terminate upon final action by the Director under a UIC program to issue or deny a UIC permit for the facility.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983]

§ 270.65 Research, development, and demonstration permits.

(a) The Administrator may issue a research, development, and demonstration permit for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which permit standards for such experimental activity have not been promulgated under part 264 or 266. Any such permit shall include such terms and conditions as will assure protection of human health and the environment. Such permits:

(1) Shall provide for the construction of such facilities as necessary, and for operation of the facility for not longer than one year unless renewed as provided in paragraph (d) of this section, and

(2) Shall provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the Administrator deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment, and

(3) Shall include such requirements as the Administrator deems necessary to protect human health and the environment (including, but not limited to, requirements regarding monitoring, operation, financial responsibility, closure, and remedial action), and such requirements as the Administrator deems necessary regarding testing and providing of information to the Administrator with respect to the operation of the facility.

(b) For the purpose of expediting review and issuance of permits under this section, the Administrator may, consistent with the protection of human health and the environment, modify or waive permit application and permit issuance requirements in parts 124 and 270 except that there may be no modification or waiver of regulations regarding financial responsibility (including insurance) or of procedures regarding public participation.

(c) The Administrator may order an immediate termination of all operations at the facility at any time he determines that termination is necessary to protect human health and the environment.

(d) Any permit issued under this section may be renewed not more than three times. Each such renewal shall be for a period of not more than 1 year.

[50 FR 28752, July 15, 1985]

§ 270.66 Permits for boilers and industrial furnaces burning hazardous waste.

(a) *General.* Owners and operators of new boilers and industrial furnaces (those not operating under the interim status standards of §266.103 of this chapter) are subject to paragraphs (b) through (f) of this section. Boilers and industrial furnaces operating under the interim status standards of §266.103 of this chapter are subject to paragraph (g) of this section.

(b) *Permit operating periods for new boilers and industrial furnaces.* A permit for a new boiler or industrial furnace shall specify appropriate conditions for the following operating periods:

(1) *Pretrial burn period.* For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the boiler or industrial furnace to a point of operational readiness to conduct a trial burn, not to exceed 720 hours operating time when burning hazardous waste, the Director must establish in the Pretrial Burn Period of the permit conditions, including but not limited to, allowable hazardous waste feed rates and operating conditions. The Director may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension according to §270.42.

(i) Applicants must submit a statement, with part B of the permit application, that suggests the conditions necessary to operate in compliance with the standards of §§266.104 through 266.107 of this chapter during this period. This statement should include, at a minimum, restrictions on the applicable operating requirements identified in §266.102(e) of this chapter.

(ii) The Director will review this statement and any other relevant information submitted with part B of the

permit application and specify requirements for this period sufficient to meet the performance standards of §§266.104 through 266.107 of this chapter based on his/her engineering judgment.

(2) *Trial burn period.* For the duration of the trial burn, the Director must establish conditions in the permit for the purposes of determining feasibility of compliance with the performance standards of §§266.104 through 266.107 of this chapter and determining adequate operating conditions under §266.102(e) of this chapter. Applicants must propose a trial burn plan, prepared under paragraph (c) of this section, to be submitted with part B of the permit application.

(3) *Post-trial burn period.* (i) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Director to reflect the trial burn results, the Director will establish the operating requirements most likely to ensure compliance with the performance standards of §§266.104 through 266.107 of this chapter based on his engineering judgment.

(ii) Applicants must submit a statement, with part B of the application, that identifies the conditions necessary to operate during this period in compliance with the performance standards of §§266.104 through 266.107 of this chapter. This statement should include, at a minimum, restrictions on the operating requirements provided by §266.102(e) of this chapter.

(iii) The Director will review this statement and any other relevant information submitted with part B of the permit application and specify requirements for this period sufficient to meet the performance standards of §§266.104 through 266.107 of this chapter based on his/her engineering judgment.

(4) *Final permit period.* For the final period of operation, the Director will develop operating requirements in conformance with §266.102(e) of this chapter that reflect conditions in the trial burn plan and are likely to ensure compliance with the performance standards of §§266.104 through 266.107 of this chapter. Based on the trial burn results, the Director shall make any necessary modifications to the operating requirements to ensure compliance with the performance standards. The permit modification shall proceed according to §270.42.

(c) *Requirements for trial burn plans.* The trial burn plan must include the following information. The Director, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this paragraph:

(1) An analysis of each feed stream, including hazardous waste, other fuels, and industrial furnace feed stocks, as fired, that includes:

(i) Heating value, levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, total chlorine/chloride, and ash;

(ii) Viscosity or description of the physical form of the feed stream;

(2) An analysis of each hazardous waste, as fired, including:

(i) An identification of any hazardous organic constituents listed in appendix VIII, part 261, of this chapter that are present in the feed stream, except that the applicant need not analyze for constituents listed in appendix VIII that would reasonably not be expected to be found in the hazardous waste. The constituents excluded from analysis must be identified and the basis for this exclusion explained. The analysis must be conducted in accordance with analytical techniques specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (incorporated by reference, see §270.6), or their equivalent.

(ii) An approximate quantification of the hazardous constituents identified in the hazardous waste, within the precision produced by the analytical methods specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (incorporated by reference, see §270.6), or other equivalent.

(iii) A description of blending procedures, if applicable, prior to firing the hazardous waste, including a detailed analysis of the hazardous waste prior to blending, an analysis of the material with which the hazardous waste is blended, and blending ratios.

(3) A detailed engineering description of the boiler or industrial furnace, including:

(i) Manufacturer's name and model number of the boiler or industrial furnace;

(ii) Type of boiler or industrial furnace;

(iii) Maximum design capacity in appropriate units;

(iv) Description of the feed system for the hazardous waste, and, as appropriate, other fuels and industrial furnace feedstocks;

(v) Capacity of hazardous waste feed system;

(vi) Description of automatic hazardous waste feed cutoff system(s);

(vii) Description of any air pollution control system; and

(viii) Description of stack gas monitoring and any pollution control monitoring systems.

(4) 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.

(5) A detailed test schedule for each hazardous waste for which the trial burn is planned, including date(s), duration, quantity of hazardous waste to be burned, and other factors relevant to the Director's decision under paragraph (b)(2) of this section.

(6) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feed rate, and, as appropriate, the feed rates of other fuels and industrial furnace feedstocks, and any other relevant parameters that may affect the ability of the boiler or industrial furnace to meet the performance standards in §§266.104 through 266.107 of this chapter.

(7) A description of, and planned operating conditions for, any emission control equipment that will be used.

(8) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction.

(9) Such other information as the Director reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this paragraph and the criteria in paragraph (b)(2) of this section.

(d) *Trial burn procedures.* (1) A trial burn must be conducted to demonstrate conformance with the standards of §§266.104 through 266.107 of this chapter under an approved trial burn plan.

(2) The Director shall approve a trial burn plan if he/she finds that:

(i) The trial burn is likely to determine whether the boiler or industrial furnace can meet the performance standards of §§266.104 through 266.107 of this chapter;

(ii) The trial burn itself will not present an imminent hazard to human health and the environment;

(iii) The trial burn will help the Director to determine operating requirements to be specified under §266.102(e) of this chapter; and

(iv) The information sought in the trial burn cannot reasonably be developed through other means.

(3) The applicant must submit to the Director a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and must submit the results of all the determinations required in paragraph (c) of this section. This submission shall be made within 90 days of completion of the trial burn, or later if approved by the Director.

(4) All data collected during any trial burn must be submitted to the Director following completion of the trial burn.

(5) All submissions required by this paragraph must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under §270.11.

(e) *Special procedures for DRE trial burns.* When a DRE trial burn is required under §266.104(a) of this chapter, the Director will specify (based on the hazardous waste analysis data and other information in the trial burn plan) as trial Principal Organic Hazardous Constituents (POHCs) those compounds for which destruction and removal efficiencies must be calculated during the trial burn. These trial POHCs will be specified by the Director based on information including his/her estimate of the difficulty of destroying the constituents identified in the haz-

ardous waste analysis, their concentrations or mass in the hazardous waste feed, and, for hazardous waste containing or derived from wastes listed in part 261, subpart D of this chapter, the hazardous waste organic constituent(s) identified in Appendix VII of that part as the basis for listing.

(f) *Determinations based on trial burn.* During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:

(1) A quantitative analysis of the levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, thallium, silver, and chlorine/chloride, in the feed streams (hazardous waste, other fuels, and industrial furnace feedstocks);

(2) When a DRE trial burn is required under §266.104(a) of this chapter:

(i) A quantitative analysis of the trial POHCs in the hazardous waste feed;

(ii) A quantitative analysis of the stack gas for the concentration and mass emissions of the trial POHCs; and

(iii) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in §266.104(a) of this chapter;

(3) When a trial burn for chlorinated dioxins and furans is required under §266.104(e) of this chapter, a quantitative analysis of the stack gas for the concentration and mass emission rate of the 2,3,7,8-chlorinated tetra-octa congeners of chlorinated dibenzo-p-dioxins and furans, and a computation showing conformance with the emission standard;

(4) When a trial burn for particulate matter, metals, or HCl/Cl_2 is required under §§266.105, 266.106 (c) or (d), or 266.107 (b)(2) or (c) of this chapter, a quantitative analysis of the stack gas for the concentrations and mass emissions of particulate matter, metals, or hydrogen chloride (HCl) and chlorine (Cl_2), and computations showing conformance with the applicable emission performance standards;

(5) When a trial burn for DRE, metals, or HCl/Cl_2 is required under §§266.104(a), 266.106 (c) or (d), or 266.107 (b)(2) or (c) of this chapter, a quantitative analysis of the scrubber water (if any), ash residues, other residues, and products for the purpose of estimating the fate of the trial POHCs, metals, and chlorine/chloride;

(6) An identification of sources of fugitive emissions and their means of control;

(7) A continuous measurement of carbon monoxide (CO), oxygen, and where required, hydrocarbons (HC), in the stack gas; and

(8) Such other information as the Director may specify as necessary to ensure that the trial burn will determine compliance with the performance standards in §§266.104 through 266.107 of this chapter and to establish the operating conditions required by §266.102(e) of this chapter as necessary to meet those performance standards.

(g) *Interim status boilers and industrial furnaces.* For the purpose of determining feasibility of compliance with the performance standards of §§266.104 through 266.107 of this chapter and of determining adequate operating conditions under §266.103 of this chapter, applicants owning or operating existing boilers or industrial furnaces operated under the interim status standards of §266.103 must either prepare and submit a trial burn plan and perform a trial burn in accordance with the requirements of this section or submit other information as specified in §270.22(a)(6). Applicants who submit a trial burn plan and receive approval before submission of the part B permit application must complete the trial burn and submit the results specified in paragraph (f) of this section with the part B permit application. If completion of this process conflicts with the date set for submission of the part B application, the applicant must contact the Director to establish a later date for submission of the part B application or the trial burn results. If the applicant submits a trial burn plan with part B of the permit application, the trial burn must be conducted and the results submitted within a time period prior to permit issuance to be specified by the Director.

[56 FR 7239, Feb. 21, 1991; 56 FR 32692, July 17, 1991]

Subpart G—Interim Status

§270.70 Qualifying for interim status.

(a) Any person who owns or operates an "existing HWM facility" or a facility in existence on the effective date of statutory or regulatory amendments under the Act that render the facility subject to the requirement to have an RCRA permit shall have interim status and shall be treated as having been issued a permit to the extent he or she has:

(1) Complied with the requirements of section 3010(a) of RCRA pertaining to notification of hazardous waste activity.

[*Comment*: Some existing facilities may not be required to file a notification under section 3010(a) of RCRA. These facilities may qualify for interim status by meeting paragraph (a)(2) of this section.]

(2) Complied with the requirements of §270.10 governing submission of part A applications;

(b) Failure to qualify for interim status. If EPA has reason to believe upon examination of a part A application that it fails to meet the requirements of §270.13, it shall notify the owner or operator in writing of the apparent deficiency. Such notice shall specify the grounds for EPA's belief that the application is deficient. The owner or operator shall have 30 days from receipt to respond to such a notification and to explain or cure the alleged deficiency in his part A application. If, after such notification and opportunity for response, EPA determines that the application is deficient it may take appropriate enforcement action.

(c) Paragraph (a) of this section shall not apply to any facility which has been previously denied a RCRA permit or if authority to operate the facility under RCRA has been previously terminated.

[48 FR 14228, Apr. 1, 1983, as amended at 49 FR 17718, Apr. 24, 1984; 50 FR 28763, July 15, 1985]

§270.71 Operation during interim status.

(a) During the interim status period the facility shall not:

(1) Treat, store, or dispose of hazardous waste not specified in part A of the permit application;

(2) Employ processes not specified in part A of the permit application; or

(3) Exceed the design capacities specified in part A of the permit application.

(b) Interim status standards. During interim status, owners or operators shall comply with the interim status standards at 40 CFR part 265.

§270.72 Changes during interim status.

(a) Except as provided in paragraph (b), the owner or operator of an interim status facility may make the following changes at the facility:

(1) Treatment, storage, or disposal of new hazardous wastes not previously identified in part A of the permit application (and, in the case of newly listed or identified wastes, addition of the units being used to treat, store, or dispose of the hazardous wastes on the effective date of the listing or identification) if the owner or operator submits a revised part A permit application prior to such treatment, storage, or disposal;

(2) Increases in the design capacity of processes used at the facility if the owner or operator submits a revised part A permit application prior to such a change (along with a justification explaining the need for the change) and the Director approves the changes because:

(i) There is a lack of available treatment, storage, or disposal capacity at other hazardous waste management facilities, or

(ii) The change is necessary to comply with a Federal, State, or local requirement.

(3) Changes in the processes for the treatment, storage, or disposal of hazardous waste or addition of processes if the owner or operator submits a revised part A permit application prior to such change (along with a justification explaining the need for the change) and the Director approves the change because:

(i) The change is necessary to prevent a threat to human health and the environment because of an emergency situation, or

(ii) The change is necessary to comply with a Federal, State, or local requirement.

(4) Changes in the ownership or operational control of a facility if the new owner or operator submits a revised part A permit application no later than 90 days prior to the scheduled change. When a transfer of operational control of a facility occurs, the old owner or operator shall comply with the requirements of 40 CFR part 265, subpart H (Financial Requirements), until the new owner or operator has demonstrated to the Director that he is complying with the requirements of that subpart. The new owner or operator must demonstrate compliance with subpart H requirements within six months of the date of the change in ownership or operational control of the facility. Upon demonstration to the Director by the new owner or operator of compliance with subpart H, the Director shall notify the old owner or operator in writing that he no longer needs to comply with subpart H as of the date of demonstration. All other interim status duties are transferred effective immediately upon the date of the change in ownership or operational control of the facility.

(5) Changes made in accordance with an interim status corrective action order issued by EPA under section 3008(h) or other Federal authority, by an authorized State under comparable State authority, or by a court in a judicial action brought by EPA or by an authorized State. Changes under this paragraph are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(6) Addition of newly regulated units for the treatment, storage, or disposal of hazardous waste if the owner or operator submits a revised part A permit application on or before the date on which the unit becomes subject to the new requirements.

(b) Except as specifically allowed under this paragraph, changes listed under paragraph (a) of this section may not be made if they amount to reconstruction of the hazardous waste management facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds 50 percent of the capital cost of a comparable entirely new hazardous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

(1) Changes made solely for the purposes of complying with the requirements of 40 CFR 265.193 for tanks and ancillary equipment.

(2) If necessary to comply with Federal, State, or local requirements, changes to an existing unit, changes solely involving tanks or containers, or addition of replacement surface impoundments that satisfy the standards of section 3004(o).

(3) Changes that are necessary to allow owners or operators to continue handling newly listed or identified hazardous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of the rule establishing the new listing or identification.

(4) Changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan.

(5) Changes necessary to comply with an interim status corrective action order issued by EPA under section 3008(h) or other Federal authority, by an authorized State under comparable State authority, or by a court in a judicial proceeding brought by EPA or an authorized State, provided that such changes are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(6) Changes to treat or store, in tanks, containers, or containment buildings, hazardous wastes subject to land disposal restrictions imposed by part 268 of this chapter or RCRA section 3004, provided that such changes are made solely for the purpose of complying with part 268 of this chapter or RCRA section 3004.

(7) Addition of newly regulated units under paragraph (a)(6) of this section.

[54 FR 9608, Mar. 7, 1989, as amended at 56 FR 7239, Feb. 21, 1991; 57 FR 37282, Aug. 18, 1992]

§ 270.73 Termination of interim status.

Interim status terminates when:

(a) Final administrative disposition of a permit application is made; or

(b) Interim status is terminated as provided in § 270.10(e)(5).

(c) For owners or operators of each land disposal facility which has been granted interim status prior to November 8, 1984, on November 8, 1985, unless:

(1) The owner or operator submits a part B application for a permit for such facility prior to that date; and

(2) The owner or operator certifies that such facility is in compliance with all applicable ground-water monitoring and financial responsibility requirements.

(d) For owners or operators of each land disposal facility which is in existence on the effective date of statutory or regulatory amendments under the Act that render the facility subject to the requirement to have a RCRA permit and which is granted interim status, twelve months after the date on which the facility first becomes subject to such permit requirement unless the owner or operator of such facility:

(1) Submits a part B application for a RCRA permit for such facility before the date 12 months after the date on which the facility first becomes subject to such permit requirement; and

(2) Certifies that such facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(e) For owners or operators of any land disposal unit that is granted authority to operate under § 270.72(a) (1), (2) or (3), on the date 12 months after the effective date of such requirement, unless the owner or operator certifies that such unit is in compliance with all applicable ground-water monitoring and financial responsibility requirements.

(f) For owners and operators of each incinerator facility which has achieved interim status prior to November 8, 1984, interim status terminates on November 8, 1989, unless the owner or operator of the facility submits a part B application for a RCRA permit for an incinerator facility by November 8, 1986.

(g) For owners or operators of any facility (other than a land disposal or an incinerator facility) which has achieved interim status prior to November 8, 1984, interim status terminates on November 8, 1992, unless the owner or operator of the facility submits a part B application for a RCRA permit for the facility by November 8, 1988.

[48 FR 14228, Apr. 1, 1983, as amended at 50 FR 28753, July 15, 1985; 54 FR 9609, Mar. 7, 1989; 56 FR 7239, Feb. 21, 1991; 56 FR 32692, July 17, 1991]

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

Subpart A—Requirements for Final Authorization

Subpart B—Requirements for Interim Authorization

used oil managed by generators. Under the rebuttable presumption for used oil of §279.10(b)(1)(ii), used oil containing greater than 1,000 ppm total halogens is presumed to be a hazardous waste and thus must be managed as hazardous waste and not as used oil unless the presumption is rebutted. However, the rebuttable presumption does not apply to certain metalworking oils/fluids and certain used oils removed from refrigeration units.

[57 FR 41612, Sept. 10, 1992, as amended at 58 FR 26425, May 3, 1993]

§ 279.22 Used oil storage.

Used oil generators are subject to all applicable Spill Prevention, Control and Countermeasures (40 CFR part 112) in addition to the requirements of this Subpart. Used oil generators are also subject to the Underground Storage Tank (40 CFR part 280) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this subpart.

(a) *Storage units.* Used oil generators shall not store used oil in units other than tanks, containers, or units subject to regulation under parts 264 or 265 of this chapter.

(b) *Condition of units.* Containers and aboveground tanks used to store used oil at generator facilities must be:

(1) In good condition (no severe rusting, apparent structural defects or deterioration); and

(2) Not leaking (no visible leaks).

(c) *Labels.* (1) Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

(2) Fill pipes used to transfer used oil into underground storage tanks at generator facilities must be labeled or marked clearly with the words "Used Oil."

(d) *Response to releases.* Upon detection of a release of used oil to the environment not subject to the requirements of part 280, subpart F of this chapter which has occurred after the effective date of the authorized used oil program for the State in which the release is located, a generator must perform the following cleanup steps:

(1) Stop the release;

(2) Contain the released used oil;

(3) Clean up and manage properly the released used oil and other materials; and

(4) If necessary to prevent future releases, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

[57 FR 41612, Sept. 10, 1992, as amended at 58 FR 26425, May 3, 1993]

§ 279.23 On-site burning in space heaters.

Generators may burn used oil in used oil-fired space heaters provided that:

(a) The heater burns only used oil that the owner or operator generates or used oil received from household do-it-yourself used oil generators;

(b) The heater is designed to have a maximum capacity of not more than 0.5 million Btu per hour; and

(c) The combustion gases from the heater are vented to the ambient air.

[57 FR 41612, Sept. 10, 1992, as amended at 58 FR 26425, May 3, 1993]

§ 279.24 Off-site shipments.

Except as provided in paragraphs (a) through (c) of this section, generators must ensure that their used oil is transported only by transporters who have obtained EPA identification numbers.

(a) *Self-transportation of small amounts to approved collection centers.* Generators may transport, without an EPA identification number, used oil that is generated at the generator's site and used oil collected from household do-it-yourselfers to a used oil collection center provided that:

(1) The generator transports the used oil in a vehicle owned by the generator or owned by an employee of the generator;

(2) The generator transports no more than 55 gallons of used oil at any time; and

(3) The generator transports the used oil to a used oil collection center that is registered, licensed, permitted, or recognized by a state/county/municipal government to manage used oil.

(b) *Self-transportation of small amounts to aggregation points owned by the generator.* Generators may transport, without an EPA identification number, used oil that is generated at the generator's site to an aggregation point provided that:

(1) The generator transports the used oil in a vehicle owned by the generator or owned by an employee of the generator;

(2) The generator transports no more than 55 gallons of used oil at any time; and

(3) The generator transports the used oil to an aggregation point that is owned and/or operated by the same generator.

(c) *Tolling arrangements.* Used oil generators may arrange for used oil to be transported by a transporter without an EPA identification number if the used oil is reclaimed under a contractual agreement pursuant to which reclaimed oil is returned by the processor/re-refiner to the generator for use as a lubricant, cutting oil, or coolant. The contract (known as a "tolling arrangement") must indicate:

(1) The type of used oil and the frequency of shipments;

(2) That the vehicle used to transport the used oil to the processing/re-refining facility and to deliver recycled used oil back to the generator is owned and operated by the used oil processor/re-refiner; and

(3) That reclaimed oil will be returned to the generator.

Subpart D—Standards for Used Oil Collection Centers and Aggregation Points

§ 279.30 Do-it-yourselfer used oil collection centers.

(a) *Applicability.* This section applies to owners or operators of all do-it-yourselfer (DIY) used oil collection centers. A DIY used oil collection center is any site or facility that accepts/aggregates and stores used oil collected only from household do-it-yourselfers.

(b) *DIY used oil collection center requirements.* Owners or operators of all DIY used oil collection centers must comply with the generator standards in subpart C of this part.

§ 279.31 Used oil collection centers.

(a) *Applicability.* This section applies to owners or operators of used oil collection centers. A used oil collection center is any site or facility that accepts/aggregates and stores used oil collected from used oil generators regulated under subpart C of this part who bring used oil to the collection center in shipments of no more than 55 gallons under the provisions of §279.24(a). Used oil collection centers may also accept used oil from household do-it-yourselfers.

(b) *Used oil collection center requirements.* Owners or operators of all used oil collection centers must:

(1) Comply with the generator standards in subpart C of this part; and

(2) Be registered/licensed/permitted/recognized by a state/county/municipal government to manage used oil.

§ 279.32 Used oil aggregation points owned by the generator.

(a) *Applicability.* This section applies to owners or operators of all used oil aggregation points. A used oil aggregation point is any site or facility that accepts, aggregates, and/or stores used oil collected only from other used oil generation sites owned or operated by the owner or operator of the aggregation point, from which used oil is transported to the aggregation point in shipments of no more than 55 gallons under the provisions of §279.24(b). Used oil aggregation points may also accept used oil from household do-it-yourselfers.

(b) *Used oil aggregation point requirements.* Owners or operators of all used oil aggregation points must comply with the generator standards in subpart C of this part.

Subpart E—Standards for Used Oil Transporter and Transfer Facilities

§ 279.40 Applicability.

(a) *General.* Except as provided in paragraphs (a)(1) through (a)(4) of this section, this subpart applies to all used oil transporters. Used oil transporters are persons who transport used oil, persons who collect used oil from more than one generator and transport the collected oil, and owners and operators of used oil transfer facilities.

(1) This subpart does not apply to on-site transportation.

(2) This subpart does not apply to generators who transport shipments of

also comply with subpart H of this part; and

(5) Burners who dispose of used oil, including the use of used oil as a dust suppressant, must comply with subpart I of this part.

(c) *Specification fuel.* This subpart does not apply to persons burning used oil that meets the used oil fuel specification of § 279.11, provided that the burner complies with the requirements of subpart H of this part.

[57 FR 41612, Sept. 10, 1992, as amended at 58 FR 26126, May 3, 1993]

§ 279.61 Restrictions on burning.

(a) Off-specification used oil fuel may be burned for energy recovery in only the following devices:

(1) Industrial furnaces identified in § 260.10 of this chapter;

(2) Boilers, as defined in § 260.10 of this chapter, that are identified as follows:

(i) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes;

(ii) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale; or

(iii) Used oil-fired space heaters provided that the burner meets the provisions of § 279.23; or

(3) Hazardous waste incinerators subject to regulation under subpart O of parts 264 or 265 of this chapter.

(b)(1) With the following exception, used oil burners may not process used oil unless they also comply with the requirements of subpart F of this part.

(2) Used oil burners may aggregate off-specification used oil with virgin oil or on-specification used oil for purposes of burning, but may not aggregate for purposes of producing on-specification used oil.

§ 279.62 Notification

(a) *Identification numbers.* Used oil burners which have not previously complied with the notification requirements of RCRA section 3010 must comply with these requirements and obtain an EPA identification number.

(b) *Mechanics of notification.* A used oil burner who has not received an EPA identification number may obtain one by notifying the Regional Administrator of their used oil activity by submitting either:

(1) A completed EPA Form 8700-12 (To obtain EPA Form 8700-12 call RCRA/Superfund Hotline at 1-800-424-9346 or 703-920-9810); or

(2) A letter requesting an EPA identification number. Call the RCRA/Superfund Hotline to determine where to send a letter requesting an EPA identification number. The letter should include the following information:

(i) Burner company name;

(ii) Owner of the burner company;

(iii) Mailing address for the burner;

(iv) Name and telephone number for the burner point of contact;

(v) Type of used oil activity; and

(vi) Location of the burner facility.

[57 FR 41612, Sept. 10, 1992, as amended at 58 FR 33342, June 17, 1993]

§ 279.63 Rebuttable presumption for used oil.

(a) To ensure that used oil managed at a used oil burner facility is not hazardous waste under the rebuttable presumption of § 279.10(b)(1)(ii), a used oil burner must determine whether the total halogen content of used oil managed at the facility is above or below 1,000 ppm.

(b) The used oil burner must determine if the used oil contains above or below 1,000 ppm total halogens by:

(1) Testing the used oil;

(2) Applying knowledge of the halogen content of the used oil in light of the materials or processes used; or

(3) If the used oil has been received from a processor/refiner subject to regulation under subpart F of this part, using information provided by the processor/re-refiner.

(c) If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste/because it has been mixed with halogenated hazardous waste listed in subpart D of part 261 of this chapter. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter). EPA Publication SW-846, Third Edition, is available for the cost of $110.00 from the Government Printing Office, Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 202-783-3238 (document number 955-001-00000-1).

(1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in § 279.24(c), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(d) *Record retention.* Records of analyses conducted or information used to comply with paragraphs (a), (b), and (c) of this section must be maintained by the burner for at least 3 years.

§ 279.64 Used oil storage.

Used oil burners are subject to all applicable Spill Prevention, Control and Countermeasures (40 CFR part 112) in addition to the requirements of this subpart. Used oil burners are also subject to the Underground Storage Tank (40 CFR part 280) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this subpart.

(a) *Storage units.* Used oil burners may not store used oil in units other than tanks, containers, or units subject to regulation under parts 264 or 265 of this chapter.

(b) *Condition of units.* Containers and aboveground tanks used to store oil at burner facilities must be:

(1) In good condition (no severe rusting, apparent structural defects or deterioration); and

(2) Not leaking (no visible leaks).

(c) *Secondary containment for containers.* Containers used to store used oil at burner facilities must be equipped with a secondary containment system.

(1) The secondary containment system must consist of, at a minimum:

(i) Dikes, berms or retaining walls; and

(ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall.

(2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

(d) *Secondary containment for existing aboveground tanks.* Existing aboveground tanks used to store used oil at burner facilities must be equipped with a secondary containment system.

(1) The secondary containment system must consist of, at a minimum:

(i) Dikes, berms or retaining walls; and

(ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or

(iii) An equivalent secondary containment system.

(2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

(e) *Secondary containment for existing aboveground tanks.* New aboveground tanks used to store used oil at burner facilities must be equipped with a secondary containment system.

(1) The secondary containment system must consist of, at a minimum:

(i) Dikes, berms or retaining walls; and

(ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

(iii) An equivalent secondary containment system.

(ii) The owner or operator must remove or decontaminate used oil residues, contaminated containment system components, contaminated soils, and structures and equipment contaminated with used oil, and manage them as hazardous waste, unless the materials are not hazardous waste under part 261 of this chapter.

[57 FR 41612, Sept. 10, 1992, as amended at 58 FR 26426, May 3, 1993]

§ 279.55 Analysis plan.

Owners or operators of used oil processing and re-refining facilities must develop and follow a written analysis plan describing the procedures that will be used to comply with the analysis requirements of § 279.53 and, if applicable, § 279.72. The owner or operator must keep the plan at the facility.

(a) *Rebuttable presumption for used oil in § 279.53.* At a minimum, the plan must specify the following:

(1) Whether sample analyses or knowledge of the halogen content of the used oil will be used to make this determination.

(2) If sample analyses are used to make this determination:

(i) The sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either:

(A) One of the sampling methods in appendix I of part 261 of this chapter; or

(B) A method shown to be equivalent under §§ 260.20 and 260.21 of this chapter;

(ii) Whether sample analyses or knowledge will be used to determine the halogen content of the used oil, and

(iii) The methods used to analyze used oil for the parameters specified in § 279.53; and

(3) The type of information that will be used to determine the halogen content of the used oil.

(b) *On-specification used oil fuel in § 279.72.* At a minimum, the plan must specify the following if § 279.72 is applicable:

(1) Whether sample analyses or other information will be used to make this determination;

(2) If sample analyses are used to make this determination:

(i) The sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either:

(A) One of the sampling methods in appendix I of part 261 of this chapter; or

(B) A method shown to be equivalent under § 260.20 and 260.21 of this chapter;

(ii) Whether used oil will be sampled and analyzed prior to or after any processing/re-refining;

(iii) The frequency of sampling to be performed, and whether the analysis will be performed on-site or off-site; and

(iv) The methods used to analyze used oil for the parameters specified in § 279.72; and

(3) The type of information that will be used to make the on-specification used oil fuel determination.

§ 279.56 Tracking.

(a) *Acceptance.* Used oil processors/re-refiners must keep a record of each used oil shipment accepted for processing/re-refining. These records may take the form of a log, invoice, manifest, bill of lading or other shipping documents. Records for each shipment must include the following information:

(1) The name and address of the transporter who delivered the used oil to the processor/re-refiner;

(2) The name and address of the generator or processor/re-refining from whom the used oil was sent for processing/re-refining;

(3) The EPA identification number of the transporter who delivered the used oil to the processor/re-refiner;

(4) The EPA identification number (if applicable) of the generator or processor/re-refiner from whom the used oil was sent for processing/re-refining;

(5) The quantity of used oil accepted; and

(6) The date of acceptance.

(b) *Delivery.* Used oil processor/re-refiners must keep a record of each shipment of used oil that is shipped to a used oil burner, processor/ re-refiner, or disposal facility. These records may take the form of a log, invoice, manifest, bill of lading or other shipping documents. Records for each shipment must include the following information:

(1) The name and address of the transporter who delivers the used oil to the burner, processor/re-refiner or disposal facility;

(2) The name and address of the burner, processor/re-refiner or disposal facility who will receive the used oil;

(3) The EPA identification number of the transporter who delivers the used oil to the burner, processor/re-refiner or disposal facility;

(4) The EPA identification number of the burner, processor/re-refiner, or disposal facility who will receive the used oil;

(5) The quantity of used oil shipped; and

(6) The date of shipment.

(c) *Record retention.* The records described in paragraphs (a) and (b) of this section must be maintained for at least three years.

§ 279.57 Operating record and reporting.

(a) *Operating record.* (1) The owner or operator must keep a written operating record at the facility.

(2) The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility;

(i) Records and results of used oil analyses performed as described in the analysis plan required under § 279.55; and

(ii) Summary reports and details of all incidents that require implementation of the contingency plan as specified in § 279.52(b).

(b) *Reporting.* A used oil processor/re-refiner must report to the Regional Administrator, in the form of a letter, on a biennial basis (by March 1 of each even numbered year), the following information concerning used oil activities during the previous calendar year;

(1) The EPA identification number, name, and address of the processor/re-refiner;

(2) The calendar year covered by the report; and

(3) The quantities of used oil accepted for processing/re-refining and the manner in which the used oil is processed/re-refined, including the specific processes employed.

§ 279.58 Off-site shipments of used oil.

Used oil processors/re-refiners who initiate shipments of used oil off-site must ship the used oil using a used oil transporter who has obtained an EPA identification number.

§ 279.59 Management of residues.

Owners and operators who generate residues from the storage, processing, or re-fining of used oil must manage the residues as specified in § 279.10(e).

Subpart G—Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery

§ 279.60 Applicability.

(a) *General.* The requirements of this subpart apply to used oil burners except as specified in paragraphs (a)(1) and (a)(2) of this section. A used oil burner is a facility where used oil not meeting the specification requirements in § 279.11 is burned for energy recovery in devices identified in § 279.61(a). Facilities burning used oil for energy recovery under the following conditions are not subject to this Subpart:

(1) The used oil is burned by the generator in an on-site space heater under the provisions of § 279.23; or

(2) The used oil is burned by a processor/re-refiner for purposes of processing used oil, which is considered burning incidentally to used oil processing.

(b) *Other applicable provisions.* Used oil burners who conduct the following activities are also subject to the requirements of other applicable provisions of this part as indicated below.

(1) Burners who generate used oil must also comply with subpart C of this part;

(2) Burners who transport used oil must also comply with subpart E of this part;

(3) Except as provided in § 279.61(b), burners who process or re-refine used oil must also comply with subpart F of this part;

(4) Burners who direct shipments of off-specification used oil from their facility to a used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in § 279.11 must

also comply with subpart H of this part; and

(5) Burners who dispose of used oil, including the use of used oil as a dust suppressant, must comply with subpart I of this part.

(c) *Specification fuel.* This subpart does not apply to persons burning used oil that meets the used oil fuel specification of § 279.11, provided that the burner complies with the requirements of subpart H of this part.

[57 FR 41612, Sept. 10, 1992, as amended at 58 FR 26426, May 3, 1993]

§ 279.61 Restrictions on burning.

(a) Off-specification used oil fuel may be burned for energy recovery in only the following devices:

(1) Industrial furnaces identified in § 260.10 of this chapter;

(2) Boilers, as defined in § 260.10 of this chapter, that are identified as follows:

(i) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes;

(ii) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale; or

(iii) Used oil-fired space heaters provided that the burner meets the provisions of § 279.23; or

(3) Hazardous waste incinerators subject to regulation under subpart O of parts 264 or 265 of this chapter.

(b)(1) With the following exception, used oil burners may not process used oil unless they also comply with the requirements of subpart F of this part.

(2) Used oil burners may aggregate off-specification used oil with virgin oil or on-specification used oil for purposes of burning, but may not aggregate for purposes of producing on-specification used oil.

§ 279.62 Notification

(a) *Identification numbers.* Used oil burners which have not previously complied with the notification requirements of RCRA section 3010 must comply with these requirements and obtain an EPA identification number.

(b) *Mechanics of notification.* A used oil burner who has not received an EPA identification number may obtain one by notifying the Regional Administrator of their used oil activity by submitting either:

(1) A completed EPA Form 8700-12 (To obtain EPA Form 8700-12 call RCRA/Superfund Hotline at 1-800-424-9346 or 703-920-9810); or

(2) A letter requesting an EPA identification number. Call the RCRA/Superfund Hotline to determine where to send a letter requesting an EPA identification number. The letter should include the following information:

(i) Burner company name;

(ii) Owner of the burner company;

(iii) Mailing address for the burner;

(iv) Name and telephone number for the burner point of contact;

(v) Type of used oil activity; and

(vi) Location of the burner facility.

[57 FR 41612, Sept. 10, 1992, as amended at 58 FR 33342, June 17, 1993]

§ 279.63 Rebuttable presumption for used oil.

(a) To ensure that used oil managed at a used oil burner facility is not hazardous waste under the rebuttable presumption of § 279.10(b)(1)(ii), a used oil burner must determine whether the total halogen content of used oil managed at the facility is above or below 1,000 ppm.

(b) The used oil burner must determine if the used oil contains above or below 1,000 ppm total halogens by:

(1) Testing the used oil;

(2) Applying knowledge of the halogen content of the used oil in light of the materials or processes used; or

(3) If the used oil has been received from a processor/refiner subject to regulation under subpart F of this part, using information provided by the processor/re-refiner.

(c) If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste/because it has been mixed with halogenated hazardous waste listed in subpart D of part 261 of this chapter. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter). EPA Publication SW-846, Third Edition, is available for the cost of $110.00 from the Government Printing Office, Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, 202-783-3238 (document number 955-001-00000-1).

(1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in § 279.24(c), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(d) *Record retention.* Records of analyses conducted or information used to comply with paragraphs (a), (b), and (c) of this section must be maintained by the burner for at least 3 years.

§ 279.64 Used oil storage.

Used oil burners are subject to all applicable Spill Prevention, Control and Countermeasures (40 CFR part 112) in addition to the requirements of this subpart. Used oil burners are also subject to the Underground Storage Tank (40 CFR part 280) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this subpart.

(a) *Storage units.* Used oil burners may not store used oil in units other than tanks, containers, or units subject to regulation under parts 264 or 265 of this chapter.

(b) *Condition of units.* Containers and aboveground tanks used to store oil at burner facilities must be:

(1) In good condition (no severe rusting, apparent structural defects or deterioration); and

(2) Not leaking (no visible leaks).

(c) *Secondary containment for containers.* Containers used to store used oil at burner facilities must be equipped with a secondary containment system.

(1) The secondary containment system must consist of, at a minimum:

(i) Dikes, berms or retaining walls; and

(ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall.

(2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

(d) *Secondary containment for existing aboveground tanks.* Existing aboveground tanks used to store used oil at burner facilities must be equipped with a secondary containment system.

(1) The secondary containment system must consist of, at a minimum:

(i) Dikes, berms or retaining walls; and

(ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or

(iii) An equivalent secondary containment system.

(2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

(e) *Secondary containment for existing aboveground tanks.* New aboveground tanks used to store used oil at burner facilities must be equipped with a secondary containment system.

(1) The secondary containment system must consist of, at a minimum:

(i) Dikes, berms or retaining walls; and

(ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

(iii) An equivalent secondary containment system.

Reg 25

WEST VIRGINIA REGISTER

Published by Ken Hechler, Secretary of State

Volume XI

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A Weekly Publication

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CONTENTS

LEGISLATIVE

SECRETARY OF STATE

KEN HECHLER

ADMINISTRATIVE LAW DIVISION

FILED

Jul 6 4 33 PM '94

OFFICE OF WEST VIRGINIA SECRETARY OF STATE

NOTICE OF PUBLIC HEARING ON A PROPOSED RULE

AGENCY: West Virginia Division of Environmental Protection Office of Air Quality TITLE NUMBER: 45CSR6

RULE TYPE: Legislative ; CITE AUTHORITY W. Va. Code §§22-5-1 et seq.

AMENDMENT TO AN EXISTING RULE: YES X NO

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 45CSR6

TITLE OF RULE BEING AMENDED: "To Prevent and Control Air Pollution From Combustion of Refuse"

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED:

TITLE OF RULE BEING PROPOSED:

DATE OF PUBLIC HEARING: August 9, 1994 TIME: 9:00 a.m.

LOCATION OF PUBLIC HEARING: Office of Air Quality
1558 Washington Street, East
Charleston, WV 25311

COMMENTS LIMITED TO: ORAL ___, WRITTEN ___, BOTH X

COMMENTS MAY ALSO BE MAILED TO THE FOLLOWING ADDRESS: Same as Above.

The Department requests that persons wishing to make comments at the hearing make an effort to submit written comments in order to facilitate the review of these comments.

The issues to be heard shall be limited to the proposed rule.

ATTACH A BRIEF SUMMARY OF YOUR PROPOSAL.

SECRETARY OF STATE

KEN HECHLER

ADMINISTRATIVE LAW DIVISION

Form #1

FILED

Jul 6 4 34 PM '94

OFFICE OF WEST VIRGINIA SECRETARY OF STATE

NOTICE OF PUBLIC HEARING ON A PROPOSED RULE

AGENCY: West Virginia Division of Environmental Protection Office of Air Quality TITLE NUMBER: 45CSR25

RULE TYPE: Legislative ; CITE AUTHORITY W. Va. Code §§22-5-1 et seq.

AMENDMENT TO AN EXISTING RULE: YES X NO

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 45CSR25

TITLE OF RULE BEING AMENDED: "To Prevent and Control Air Pollution From Hazardous Waste Treatment, Storage, or Disposal Facilities"

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED:

TITLE OF RULE BEING PROPOSED:

DATE OF PUBLIC HEARING: August 9, 1994 TIME: 9:00 a.m.

LOCATION OF PUBLIC HEARING: Office of Air Quality
1558 Washington Street, East
Charleston, WV 25311

COMMENTS LIMITED TO: ORAL ___, WRITTEN ___, BOTH X

COMMENTS MAY ALSO BE MAILED TO THE FOLLOWING ADDRESS: Same as Above.

The Department requests that persons wishing to make comments at the hearing make an effort to submit written comments in order to facilitate the review of these comments.

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CHRONOLOGICAL INDEX VOLUME XI ISSUE 27

Proposed Rules Filed for Public Hearing

AGENCY	RULE/TYPE	AUTHORITY	HEARING/COMMENT PERIOD/LOCATION
DEP-Air Quality (45-25)	To Prevent & Control Air Pollution From Hazardous Waste Treatment, Storage, or Disposal Facilities Legislative	§22-5-1	August 9, 1994, 9:00 a.m. Office of Air Quality 1558 Washington Street, E Charleston, WV 25311 Written Comments Same Address
DEP-Air Quality (45-36)	Requirements for Determining Conformity of Transportation Plans, Programs & Projects Developed, Funded or Approved Under Title 23 U.S>C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans Legislative	§22-5-1	August 9, 1994, 9:00 a.m. Hearing & Written Comments Same as Above
DEP-Air Quality (45-37)	Provisions to Control Sulfur Dioxide Emissions & Ambient Air Quality Levels of Sulfur Dioxide in Hancock County Legislative	§22-5-1	August 9, 1994, 9:00 a.m. Hearing & Written Comments Same as Above
DEP-Air Quality (45-38)	Provisions for Determination of Compliance with Air Quality Management Rules Legislative	§22-5-1	August 9, 1994, 9:00 a.m. Hearing & Written Comments Same as Above
Health (64-14)	Personal Care Home Licensure Legislative	§16-5C-5	July 27, 1994, 10:00 a.m. Days Inn Conference Center Flatwoods, WV Written Comments Through August 1, 1994 Kay Howard Regulatory Development Dept of Health & Human Resources Bldg. 3, Rm. 265, Capitol Complex Charleston, WV 25305
Health (64-14)	Residential Board & Care Homes Legislative	§16-5H-2	July 27, 1994, 1:30 p.m. Hearing & Written Comments Same as Above

OTHER

FILED

JUL 6 4 28 PM '94

OFFICE OF WEST VIRGINIA SECRETARY OF STATE

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5	-	To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
45CSR6	-	To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)
45CSR25	-	To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
45CSR30	-	Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
45CSR37	-	Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)
45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U. S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Library of the Office of Air Quality located at the address below on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

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45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

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G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director

Eli McCoy
Deputy Director

July 1, 1994

The Wheeling News-Register and
Intelligencer
Legal Ad Department
1500 Main Street
Wheeling, WV 26003

Dear Legal Ad Department:

Please publish the enclosed "Notice of Public Hearing" as soon as possible as a Class I legal advertisement. The publication must occur no later than Friday, July 8, 1994 and must not be published on Sunday as a matter of law. If you have any questions regarding this matter, please contact Tammy Mowrer at 558-2275.

You may submit your invoice and a tear sheet to the attention of Ms. Nadine Sitton, 1558 Washington Street, East, Charleston, West Virginia 25311.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosure

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Mr. Tim Carroll
Office of Air Quality
Northern Panhandle Regional Office
1911 Warwood Avenue
Wheeling, West Virginia 26003

Dear Mr. Carroll:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosures

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Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Office of Air Quality, Northern Panhandle Regional Office, 1911 Warwood Avenue, Wheeling, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director

Eli McCoy
Deputy Director

July 1, 1994

The Parkersburg News
Legal Ad Department
519 Juliana Street
Parkersburg, WV 26102

Dear Legal Ad Department:

Please publish the enclosed "Notice of Public Hearing" as soon as possible as a Class I legal advertisement. The publication must occur no later than Friday, July 8, 1994 and must not be published on Sunday as a matter of law. If you have any questions regarding this matter, please contact Tammy Mowrer at 558-2275.

You may submit your invoice and a tear sheet to the attention of Ms. Nadine Sitton, 1558 Washington Street, East, Charleston, West Virginia 25311.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosure

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Ms. Dorothy Chittum
Librarian
Parkersburg/Wood County Public Library
3100 Emerson Avenue
Parkersburg, West Virginia 26104

Dear Ms. Chittum:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

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Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Parkersburg/Wood County Public Library, 3100 Emerson Avenue, Parkersburg, West Virginia on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director

Eli McCoy
Deputy Director

July 1, 1994

The Herald-Dispatch
Legal Ad Department
P. O. Box 2017
Huntington, WV 25720

Dear Legal Ad Department:

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Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

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DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Mr. Matt Onion
Cabell County Public Library
455 9th Street Plaza
Huntington, West Virginia 25701

Dear Mr. Onion:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

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Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

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45CSR6	-	To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)
45CSR25	-	To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
45CSR36	-	Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
45CSR37	-	Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)
45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U. S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Cabell County Public Library, 455 9th Street Plaza, Huntington, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director
Eli McCoy
Deputy Director

July 1, 1994

Charleston Daily Mail
Legal Ad Department
1001 Virginia Street, East
Charleston, WV 25301

Dear Legal Ad Department:

Please publish the enclosed "Notice of Public Hearing" as soon as possible as a Class I legal advertisement. The publication must occur no later than Friday, July 8, 1994 and must not be published on Sunday as a matter of law. If you have any questions regarding this matter, please contact Tammy Mowrer at 558-2275.

You may submit your invoice and a tear sheet to the attention of Ms. Nadine Sitton, 1558 Washington Street, East, Charleston, West Virginia 25311.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosure

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Ms. Jeanne Chandler
Librarian
Office of Air Quality
1558 Washington Street, East
Charleston, WV 25311

Dear Ms. Chandler:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosures

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5	-	To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
45CSR6	-	To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)
45CSR25	-	To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
45CSR36	-	Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
45CSR37	-	Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)
45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U. S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Library of the Office of Air Quality located at the address below on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director

Eli McCoy
Deputy Director

July 1, 1994

Beckley Register/Herald
Legal Ad Department
P. O. Drawer P
Beckley, WV 25801

Dear Legal Ad Department:

Please publish the enclosed "Notice of Public Hearing" as soon as possible as a Class I legal advertisement. The publication must occur no later than Friday, July 8, 1994 and must not be published on Sunday as a matter of law. If you have any questions regarding this matter, please contact Tammy Mowrer at 558-2275.

You may submit your invoice and a tear sheet to the attention of Ms. Nadine Sitton, 1558 Washington Street, East, Charleston, West Virginia 25311.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosure

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Ms. Susan Vidovich
Librarian
Raleigh County Public Library
P. O. Box 1876
Beckley, West Virginia 25802

Dear Ms. Vidovich:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosures

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5	-	To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
45CSR6	-	To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)
45CSR25	-	To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
45CSR36	-	Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
45CSR37	-	Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)
45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U. S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Raleigh County Public Library, P. O. Box 1876, Beckley, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director

Eli McCoy
Deputy Director

July 1, 1994

The Clarksburg Exponent
Legal Ad Department
P. O. Box 2000
Clarksburg, WV 26301

Dear Legal Ad Department:

Please publish the enclosed "Notice of Public Hearing" as soon as possible as a Class I legal advertisement. The publication must occur no later than Friday, July 8, 1994 and must not be published on Sunday as a matter of law. If you have any questions regarding this matter, please contact Tammy Mowrer at 558-2275.

You may submit your invoice and a tear sheet to the attention of Ms. Nadine Sitton, 1558 Washington Street, East, Charleston, West Virginia 25311.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosure

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Ms. Donna Riggs
Secretary
WV Air Pollution Control Commission
North Central Regional Office
109 Adams Street, Room M-2
Fairmont, West Virginia 26554-2800

Dear Ms. Riggs:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosures

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5	-	To Prevent and Control Air Poliution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
45CSR6	-	To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)
45CSR25	-	To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
45CSR36	-	Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
45CSR37	-	Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)
45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U. S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Office of Air Quality, North Central Regional Office, 517 1/2 East Park Avenue, Fairmont, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director

Eli McCoy
Deputy Director

July 1, 1994

Mineral Daily News Tribune
Legal Ad Department
P. O. Box 879
Keyser, West Virginia 26726

Dear Legal Ad Department:

Please publish the enclosed "Notice of Public Hearing" as soon as possible as a Class I legal advertisement. The publication must occur no later than Friday, July 8, 1994 and must not be published on Sunday as a matter of law. If you have any questions regarding this matter, please contact Tammy Mowrer at 558-2275.

You may submit your invoice and a tear sheet to the attention of Ms. Nadine Sitton, 1558 Washington Street, East, Charleston, West Virginia 25311.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosure

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor
John M. Ranson
Cabinet Secretary

David C. Callaghan
Director
Ann A. Spaner
Deputy Director

July 7, 1994

Ms. Karen Hiser
Librarian
Keyser-Mineral County Public Library
105 North Main Street
Keyser, West Virginia 26726

Dear Ms. Hiser:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosures

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5	-	To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
45CSR6	-	To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)
45CSR25	-	To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
45CSR36	-	Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
45CSR37	-	Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)
45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U. S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Keyser-Mineral County Public Library, 105 North Main Street, Keyser, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director

Eli McCoy
Deputy Director

July 1, 1994

The Record Delta
Legal Ad Department
P. O. Box 550
Buckhannon, WV 26201

Dear Legal Ad Department:

Please publish the enclosed "Notice of Public Hearing" as soon as possible as a Class I legal advertisement. The publication must occur no later than Friday, July 8, 1994 and must not be published on Sunday as a matter of law. If you have any questions regarding this matter, please contact Tammy Mowrer at 558-2275.

You may submit your invoice and a tear sheet to the attention of Ms. Nadine Sitton, 1558 Washington Street, East, Charleston, West Virginia 25311.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosure

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Ms. Ruth B. Six
Librarian
Gassaway Public Library
100 Birch Street
Gassaway, West Virginia 26624

Dear Ms. Six:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosures

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5	-	To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
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45CSR36	-	Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
45CSR37	-	Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)
45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U. S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Gassaway Public Library, 100 Birch Street, Gassaway, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director

Eli McCoy
Deputy Director

July 1, 1994

Elkins Inter-Mountain
Legal Ad Department
P. O. Box 1339
Elkins, WV 26241

Dear Legal Ad Department:

Please publish the enclosed "Notice of Public Hearing" as soon as possible as a Class I legal advertisement. The publication must occur no later than Friday, July 8, 1994 and must not be published on Sunday as a matter of law. If you have any questions regarding this matter, please contact Tammy Mowrer at 558-2275.

You may submit your invoice and a tear sheet to the attention of Ms. Nadine Sitton, 1558 Washington Street, East, Charleston, West Virginia 25311.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosure

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Elkins-Randolph County Public Library
c/o Librarian
416 Davis Avenue
Elkins, West Virginia 26241

Dear Librarian:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosures

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5	-	To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
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45CSR25	-	To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
45CSR36	-	Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
45CSR37	-	Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)
45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U. S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Elkins-Randolph County Public Library, 416 Davis Avenue, Elkins, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

David C. Callaghan
Director

Eli McCoy
Deputy Director

July 1, 1994

The Evening/Weekend Journal
Legal Ad Department
207 West King Street
Martinsburg, WV 25401

Dear Legal Ad Department:

Please publish the enclosed "Notice of Public Hearing" as soon as possible as a Class I legal advertisement. The publication must occur no later than Friday, July 8, 1994 and must not be published on Sunday as a matter of law. If you have any questions regarding this matter, please contact Tammy Mowrer at 558-2275.

You may submit your invoice and a tear sheet to the attention of Ms. Nadine Sitton, 1558 Washington Street, East, Charleston, West Virginia 25311.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosure

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Ms. Peggy Y. Batten
Librarian
Martinsburg-Berkeley County Public Library
101 West King Street
Martinsburg, West Virginia 25401

Dear Ms. Batten:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosures

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

July 7, 1994

Mr. Richard Poling
Office of Air Quality
Eastern Panhandle Regional Office
P. O. Box 99
Burlington, West Virginia 26710

Dear Mr. Poling:

On Tuesday, August 9, 1994 the West Virginia Air Pollution Control Commission will hold a public hearing on the following proposed legislative rules: 45CSR5, 45CSR6, 45CSR25, 45CSR36, 45CSR37, and 45CSR38. Please retain the enclosed documents for public review until after the August 9th hearing. Also, please have any interested party sign the enclosed register and return the register and any correspondence you may have regarding the proposed legislative rules.

Thank you very much for your cooperation and assistance in this matter. If you have any questions, please direct them to Tammy Mowrer at (304) 558-2275.

Sincerely yours,

Dale Farley
Chief, Office of Air Quality

DF/tlm

Enclosures

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5	-	To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
45CSR6	-	To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)
45CSR25	-	To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
45CSR36	-	Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
45CSR37	-	Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)
45CSR38	-	Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U. S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following locations: Martinsburg-Berkeley County Public Library, 101 King Street, Martinsburg, WV and the Office of Air Quality's Burlington Office, P. O. Box 99, Burlington, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

I, as an officer of the News-Tribune, a daily newspaper published at Keyser, Mineral County, West Virginia, hereby certify that the Division of Environmental Protection in the case of Notice of Public Hearing: New Legislative Rules

vs.

a copy whereof is hereto annexed has been published for 1 consecutive day in said NEWS-TRIBUNE, the first publication being on the 7th day of, July 19 94.

Given under my hand at Keyser this 7th day of July 19 94.

Publisher

Publisher's Fee

$31.50

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginnning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5 - To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments).

45CRS6 - To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments).

45CRS25 - To Prevent and Control Air Pollution from Harzardous Waste Treatment, Storage, or Disposal Facilities (Amendments).

45CRS36 - Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule).

45CRS37 - Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule).

45CRS38 - Provisions for Detemination of Compliance with Air Quality Management Rules (New Rule).

Upon authorization and promulgation, the above rules, with the exception of 45CRS25, will be submitted to the U.S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CRS25 will be submitted to U.S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

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Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Keyser-Mineral County Public Library, 105 North Main Street, Keyser, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office: G. Dale Farley, Office of Air Quality, Division of Environmental Protection, 1558 Washington Street, East, Charleston, WV 25311-2599.

7: 7

State of West Virginia, County of Randolph, ss.

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5—To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)

45CSR6—To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)

45CSR25—To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)

45CSR36—Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)

45CSR37—Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)

45CSR38—Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U.S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U.S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

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The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Elkins-Randolph County Public Library, 416 Davis Avenue, Elkins, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2508

7-7

I, James Hoffman, Publisher of THE INTER-MOUNTAIN, a newspaper published at Elkins, in said county, do hereby certify that the annexed advertisement was published on the following dates:

July 07 ---------- ---------- ----------

19 94 as required by law.

Given under my hand this 07 day of July 19 94

James Hoffman
Publisher

Printer's Fee: $ 41 69

re me this 07 day of July 19 94.

Shirley A. Reneau
Notary Public

15 day of April ~~19~~ 2002

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5 - To Prevent and Control Air Pollution from the Operation of Coal Preperation Plants and Coal Handling Operations (Amendments)

45CSR6 - To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)

45CSR25 - To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)

45CSR36 - Requirements for Determining conformity of Transportation Plans, Programs and Projects Developed, Funded or Approved Under title 23 U.S.C. or the Federal Transit Act, to Applicable Air Quality Implementation Plans (New Rule)

45CSR37 - Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)

45CSR38 - Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U.S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the Federal Clean Air Act, as amended. 45CSR25 Will be submitted to U.S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U.S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Office of Air Quality, Northern Panhandle Regional Office, 1911 Warwood Avenue, Wheeling, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality

STATE OF WEST VIRGINIA,
COUNTY OF OHIO.

I, Bonnie Mattern for the publisher of the WHEELING NEWS-REGISTER ~~WHEELING INTELLIGENCER~~ newspapers published in the CITY OF WHEELING, STATE OF WEST VIRGINIA, hereby certify that the annexed publication was inserted in said newspaper on the following dates:

July 8, 1994

commencing on the 8 day of July, 19 94

Given under my hand this 13 day of July, 19 94

Bonnie Mattern

Sworn to and subscribed before me this 15th day of July 19 94 at WHEELING, OHIO COUNTY, WEST VIRGINIA

Marjorie A. Strauss
Notary Public

of, in and for OHIO COUNTY, WEST VIRGINIA.

My Commission expires Sept. 26, 2000

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
MARJORIE A. STRAUSS
1500 Main Street
Wheeling, West Virginia 26003
My Commission Expires Sept. 26, 2000

NOTICE

On Tuesday, August 9, 994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5
To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)

45CSR6
To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)

45CSR25
To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)

45CSR36
Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)

45CSR37
Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)

45CSR38
Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U.S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U. S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 (Redesignation Request, dated November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street, East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Cabell County Public Library, 455 9th Street Plaza, Huntington, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599
LH-931 7-7,94

AFFIDAVIT OF PUBLICATION

'T VIRGINIA,
COUNTY OF CABELL, TO-WIT:

I, Connie Rappold being first duly sworn, depose and say that I am Legal Clerk for The Herald-Dispatch, a corporation, who publishes at Huntington, Cabell County, West Virginia, the newspaper: The Herald-Dispatch, a independent newspaper, in the morning seven days each week, Monday through Sunday including New Year's Day, Memorial Day, the Fourth of July, Labor Day, Thanksgiving and Christmas; that I have been duly authorized by the Board of Directors of such corporation to execute this affidavit of publication for an on behalf of such corporation and the newspaper mentioned herein; that the legal advertisement attached in the left margin of this affidavit and made a part hereof and bearing number LH-931 was duly published in

The Herald-Dispatch

one time, ~~once a week for successive weeks~~, commencing with its issue of the 7th day of July, 19 94, and ending with the issue of the 7th day of July, 19 94, and was posted at the East door of the Cabell County Courthouse on the 7th day of July, 19 94: that said legal advertisement was published on the following dates: July 7, 1994

; that the cost of publishing said annexed advertisement as aforesaid was ; that such newspaper in which such legal advertisement was published has been and is now published regularly, at least as frequently as once a week for at least fifty weeks during the calendar year as prescribed by its mailing permit, and has been so published in the municipality of Huntington, Cabell County, West Virginia, for at least one year immediately preceding the date on which the legal advertisement set forth herein was delivered to such newspaper for publication; that such newspaper is a newspaper of "general circulation" as defined in Article 3, Chapter 59, of the West Virginia Code, within the publication area or areas of the municipality of Huntington, Cabell and Wayne Counties, West Virginia, and

that such newspaper is circulated to the general public at a definite price or consideration; that such newspaper on each date published consists of not less than four pages without a cover; and that it is a newspaper to which the general public resorts for passing events of a political, religious, commercial and social nature, and for current happenings, announcements, miscellaneous reading matters, advertisements and other notices.

Connie Rappold

Taken, subscribed and sworn to before me in my said county this 7th day of June, 19 94

My commission expires October 24, 2000

Notary Public
Cabell County,
West Virginia

10M Form A-135 (867H)

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5 - To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)

45CSR6 - To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)

45CSR25 - To Prevent Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)

45CSR36 - Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)

45CSR37 - Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)

45CSR38 - Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U.S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U.S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U. S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Parkersburg/Wood County Public Library, 3100 Emerson Avenue, Parkersburg, West Virginia on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

Jul 8

HEATHER BYERS being first duly sworn, says that the

NOTICE OF PUBLIC HEARING

hereto attached was printed in the Parkersburg News a DAILY newspaper published in the City of Parkersburg, Wood County, West Virginia, and posted at the front door of the Court House for ONE successive weeks, the first publication and posting thereon being on the 8th day of July 19 94, and subsequent publication on the ____ day of ____ 19____, the ____ day of ____ 19____, the ____ day of ____ 19____, and the ____ day of ____ 19____.

Printer's Fee $ 40.24

6 2/8 " x 103= 643.75 words @ .0625

Heather Byers

Subscribed and sworn to before me this 8th day of July 19 94.

Melanie Ayers
Notary Public for Wood County, West Virginia

My commission expires 3-23-04

Parkersburg Printing Co. - 8/71

CHARLESTON NEWSPAPERS
P.O. Box 2993
Charleston, West Virginia 25330
Billing 348-4898
Classified 348-4848
1-800-WVA-NEWS
FEIN 55-0676079

INVOICE DATE	
ACCOUNT NBR	037143002
SALES REP ID	0016
INVOICE NBR	371430020711005

Legal pricing is based upon 67 words per column inch at a rate of $.0725 per word
Each successive insertion is discounted by 25% of the first insertion rate ($.054375 per word

ISSUE DATE	AD TYPE	PUB	DESCRIPTION / REFERENCE NBR / PURCHASE ORDER #	AD NUMBER	AD SIZE / TOTAL RUN	RATE	GROSS AMOUNT	NET AMOUNT
07/08	LEGF	DM	PUBLIC HEARING 125107001	L213110	3X0550 16.50	4.85	80.03	80.03
			TOTAL INVOICE AMOUNT					80.03

State of West Virginia, **AFFIDAVIT OF PUBLICATION**

I, Sandra Biggs of

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
SARAH J. WITHROW
1001-T LINCOLN DRIVE
SO. CHARLESTON, WV 25309
My Commission Expires April 28, 2003

THE DAILY MAIL, A DAILY REPUBLICAN NEWSPAPER, published in the city of Charleston, Kanawha County, West Virginia, do solemnly swear that the annexed notice of:

PUBLIC HEARING

was duly published in said paper(s) during the dates listed below, and was posted at the front door of the court house of said Kanawha County West Virginia, on the 9TH day of JULY 1994. Published during the following dates: 07/08/94-07/08/94

Subscribed and sworn to before me this 12 day of July

Printers fee $ 80.03

Sarah J. Withrow
Notary Public of Kanawha County, West Virginia

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

- 45CSR5 - To prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
- 45CSR6 - To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)
- 45CSR25 - To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
- 45CSR36 - Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S. C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)
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- 45CSR38 - Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U.S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U.S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U.S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be held in the Office of Air Quality's Conference Room at 1558 Washington Street East, Charleston, West Virginia. The hearing is open to the public. Written comments by all interested parties will be accepted from the date of this notice until the close of the hearing and made part of the record. Oral comments will be accepted at the public hearing and will be limited to five minutes per person per rule. The period for public comment will end at the close of the hearing.

Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Library of the Office of Air Quality located at the address below on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

(213110)

The items listed hereon conform to specification, were received and are approved for payment.
Date: 07.21.94 Signed: N. Sutton

Appn. Yr.	Acct #:	Line Item:
95	7897.17	035
Off. Code: 5	Fed. Code: 504 / P.C.: 509	
Purchase Auth. SA No. 4	Vendor FEIN # 550.676.079 SS # ___-___-____	Off Ap Date

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8708	1995	0313	096	____	

AFFIDAVIT OF PUBLICATION

BECKLEY NEWSPAPERS INC.

BECKLEY, WEST VIRGINIA 25801

July 8, , 1994

STATE OF WEST VIRGINIA
COUNTY OF RALEIGH, to wit:

I, Robert E. Zutaut being first duly sworn upon my oath, do depose and say that I am Advertising Manager of Beckley Newspapers Inc., a corporation, publisher of the newspaper entitled The Register-Herald, an Independent newspaper; that I have been duly authorized by the board of directors of such corporation to execute this affidavit of publication; that such newspaper has been published for more than one year prior to publication of the annexed notice described below; that such newspaper is regularly published daily, for at least fifty weeks during the calendar year, in the municipality of Beckley, Raleigh County, West Virginia; that such newspaper is a newspaper of "general circulation," as that term is defined in article three, chapter fifty-nine of the Code of West Virginia, 1931, as amended, within the publication area or areas of the aforesaid municipality and county; that such newspaper averages in length four or more pages, exclusive of any cover, per issue; that such newspaper is circulated to the general public at a definite price of consideration; that such newspaper is a newspaper to which the general public resorts for passing events of a political, religious, commercial and social nature, and for current happenings, announcements, miscellaneous reading matters, advertisements and other notices; that the annexed notice

of Public Hearing
(Description of notice)

was duly published in said newspaper once a week for one successive week (Class I), commencing with the issue of the 8th day of July, 1994, and ending with the issue of the 8th day of July, 1994, (and was posted at the

on the day of); that said annexed notice was published on the following dates:

July 8, 1994 and that the cost of publishing said annexed notice as aforesaid was $ 44.30

Signed R. E. Zutaut
Robert E. Zutaut, Advertising Manager
Beckley Newspapers

Taken, subscribed and sworn to before me in my said county this 8th day of July, 1994

My commission expires March 27, 2001

Notary Public of Raleigh County, Virginia

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
DIANA L. CLOSE
BECKLEY NEWSPAPER
P. O. DRAWER P OR R
BECKLEY, WV 25801
My Commission Expires March 27, 2001

COPY OF PUBLICATION

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5 - To Prevent and Control Air Pollution from the Operation of Coal Preparatation Plants and Coal Handling Operations (Amendments)

45CSR6 - To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)

45CSR25 - To Prevent And Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)

45CSR36 - Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)

45CSR37 - Provisions to Control Sulfur Dioxide Emissions and Ambient Air Quality Levels of Sulfur Dioxide in Hancock County (New Rule)

45CSR38 - Provisions for Determination of Compliance with Air Quality Management Rules (New Rule)

Upon Authorization and promulgation, the above rules, with the exception of 45CSR25, will be submitted to the U.S. Environmental Protection Agency for EPA approval and incorporation into the West Virginia State Implementation Plan under the federal Clean Air Act, as amended. 45CSR25 will be submitted to U.S. EPA as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the federal Resource Conservation and Recovery Act.

After conclusion of the hearing on the proposed rules above, the Division of Environmental Protection will hold a hearing on proposed minor revisions to the maintenance plans associated with West Virginia's three redesignation requests currently pending before U.S. EPA for the Charleston, Parkersburg, and Huntington/Ashland ozone nonattainment areas. These revisions contain language which clarifies West Virginia's commitments for contingency measures that had been incorporated in the original November 13, 1992 Redesignation Request, the Update to the November 13, 1992 Redesignation Request, dated February 28, 1994 for the Charleston/Parkersburg areas and the Amendment to the November 12, 1992 Redesignation Request, dated November 12, 1993 for the Huntington/Ashland area.

The public hearing will be in the Office of Air Qua Conference Room at Washington Street Charleston, West Virginia. hearing is open to the p Written comments by interested parties will accepted from the date of notice until the close of hearing and made part of the ord. Oral comments will accepted at the public he and will be limited to five nutes per person per rule. period for public comment end at the close of the hearin

Copies of the prop legislative rules may be obta from the Office of Secreta State or may be reviewed d normal business hours at following location: Ra County Public Library, P.O. 1876, Beckley, WV on and July 8, 1994.

Please provide any w comments or questions to following contact and office: G. Dale Farley, Office of Quality, Division Environmental Protection, Washington Street, Charleston, WV 25311-2599.

7-8-Fri-1-RH

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia Division of Environmental Protection will hold public hearings on the following proposed new legislative rules or rule amendments:

45CSR5 - To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)

45CSR6 - To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)

45CSR25 - To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)

45CSR36 - Requirements for Determining Conformity of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U. S. C. or the Federal Transit Act, To Applicable Air Quality Implementation Plans (New Rule)

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Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Office of Air Quality, North Central Regional Office, 517 1/2 East Park Avenue, Fairmont, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

PUBLISHER'S CERTIFICATE

OFFICE OF AIR QUALITY
'94 AUG 11 P 12:15

STATE OF WEST VIRGINIA,

COUNTY OF HARRISON

I, Deborah S. Veltri

Classified Office Manager of THE CLARKSBURG EXPONENT, a newspaper of general circulation published in the City of Clarksburg, County and State aforesaid, do hereby certify that the annexed

Notice of Public Hearing

was published in said THE CLARKSBURG EXPONENT one time, on the

7 day of July 19 94

The publisher's fee for said publication is $ 25.25

Deborah S. Veltri
Classified Office Mgr. of The Clarksburg Exponent

SEAL

Subscribed and sworn to before me this 7 day of July 19 94

Debra Kay Swiger
Notary Public in and for Harrison County, WV.

My commission expires on the 25th day of August 2003

Form CA-14 E

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Debra Kay Swiger
Route 1, Box 26A
Wallace, WV 26448
My Commission Expires August 25, 2003

NOTICE OF PUBLIC HEARING

On Tuesday, August 9, 1994, beginning at 9:00 a.m., the West Virginia division of Environmental Protection will hold public hearings on the following proposed new legislative rules and rule amendments:

45CSR5 - To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations (Amendments)
45CSR6 - To Prevent and Control Air Pollution from the Combustion of Refuse (Amendments)
45CSR25 - To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities (Amendments)
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Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following location: Gassaway Public Library, 100 Birch Street, Gassaway, WV on or after July 8, 1994.

Please provide any written comments or questions to the following contact and office:
G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599
7-8

State of West Virginia, County of Upshur, ss:

I, Mark Davis, Advertising Manager Record Delta, a newspaper published at Buckhannon in the said county, do hereby certify that the annexed NOTICE OF PUBLIC HEARING

was published once a week for ONE (1) successive weeks in said Record Delta newspaper published as aforesaid, commencing on the 8th day of July days of 19 94

Given under my hand this 8th day of July day of 19 94

Mark Davis
...Advertising Manager

Printers fee $ 34.50

WEST VIRGINIA, UPSHUR COUNTY, TO-WIT:

Subscribed and sworn to before me this 8th day of July day of 19 94

Phyllis J. Neuhart
Notary Public.

My Commission expires May 26, 2003

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
PHYLLIS J. NEUHARTH
RT. 2, BOX 95
FRENCH CREEK, WV 26218
My Commission Expires May 26, 2003

NOTICE OF PUBLIC HEARING

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Copies of the proposed legislative rules may be obtained from the Office of Secretary of State or may be reviewed during normal business hours at the following locations: Martinsburg-Berkeley County Public Library, 101 King Street, Martinsburg, WV and the Office of Air Quality's Burlington Office, P.O. Box 99, Burlington, WV on and after July 8, 1994.

Please provide any written comments or questions to the following contact and office:

G. Dale Farley
Office of Air Quality
Division of Environmental Protection
1558 Washington Street, East
Charleston, WV 25311-2599

7/8(1t)

Certificate of Publication

This is to certify the annexed advertisement

WV DEPT.COMM.,LABOR, ENV. RES.
DIV. ENV. PROTECTION
OFFICE OF AIR QUALITY

NOTICE OF PUBLIC HEARING

appeared for 1 consecutive days/weeks in The Journal Publishing Company a newspaper published in the City of Martinsburg, W. Va., in its issue beginning

7/8

and ending

"OFFICIAL SEAL"
NOTARY PUBLIC
STATE OF WEST VIRGINIA
CHERYL D. GEORGE
Box 505½ Jefferson Street
Martinsburg, W Va. 25401
My Commission Expires September 14, 1998

The Journal

Fee $ 43.61

OAQ MAILING LIST FOR PUBLIC HEARINGS/MEETINGS

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Greensburg, Pennsylvania 15601

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Washington, D.C. 20037

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Charleston, WV 25313

Ms. Becky Fleming
Charleston Daily Mail
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Charleston, WV 25301

Mr. Norm Steenstra
Environmental Coordinator
West Virginia Citizen Action Group
1324 Virginia Street, East
Charleston, West Virginia 25301

Mr. Eric Niiler
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Charleston, WV 25301

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Scott Depot, WV 25560

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National Institute for Chemical Studies
Nitro/St. Albans Committee
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Nitro, West Virginia 25143

Mr. Ray de Bolt
Fire Chief
Charleston Fire Department
808 Virginia Street, West
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The Honorable William Croye
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National Institute for Chemical Studies
Upper Kanawha Valley Committee
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Dr. Paul Hill, President
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WV Office of Air Quality
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Office of Air Quality
1615 Washington Street, East
Charleston, WV 25311

W VA OFFICE OF AIR QUALITY

AUGUST 9, 1994

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Doug Ricci	WVDOT	"
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W VA OFFICE OF AIR QUALITY

AUGUST 9, 1994

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Karen Watson	"	"
Jeanne Chandler	WVDEP - PIO	Charleston

PUBLIC HEARING

WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION

OFFICE OF AIR QUALITY

* *

The following is a transcript of a public hearing held at the West Virginia Division of Environmental Protection, Office of Air Quality, 1558 Washington Street, Charleston, Kanawha County, West Virginia, on August 9, 1994, at 9:00 a.m., and taken by Christy L. Morris, Certified Court Reporter and Notary Public, pursuant to notice.

* *

S U P E R I O R C O U R T R E P O R T I N G
Christy L. Morris, CCR
3719 Virginia Avenue, S.E.
Charleston, West Virginia 25304
(304) 925-2244 Mobile 542-4606

ORIGINAL

PROCEEDINGS

45CSR25

TO PREVENT AND CONTROL AIR POLLUTION FROM
HAZARDOUS WASTE TREATMENT, STORAGE,
OR DISPOSAL FACILITIES

MS. CHANDLER: The purpose of this public hearing is to hear discussions on proposed Rule 45CSR25.

To Prevent And Control Air Pollution From Hazardous Waste Treatment, Storage, Or Disposal Facilities.

The purpose of this rule is to establish a program of regulation over the treatment, storage, and disposal of hazardous wastes in order to achieve and maintain such levels of air quality as will protect the public health and safety and the environment from the effects of improper, inadequate, or unsound treatment, storage, or disposal of hazardous wastes.

The proposed rule changes will update references to the counterpart Federal regulations, incorporate references to the new Division of Environmental Protection legislation and also resolve

inconsistencies between 45CSR6 and 45CSR25 which will allow Hercules Aerospace Corporation to burn spent propellent in accordance with the provisions of 40 CFR 265.382, a rule which applies, in part, to the open burning of military explosives.

45CSR25 will be submitted to the U. S. Environmental Protection Agency as a component part of the State's rules for program authorization relative to the hazardous waste management provisions under the Federal Resource Conservation and Recovery Act.

The floor is now open for public comment. Oral comments will be limited to five minutes.

MR. HULBURT: This is the last one. David Hulburt, again, Hercules Aerospace Company. With regard to the proposed change to Rule 25, by way of background, I must state first that the EPA under 40 CFR 265.382 specifically exempted from its prohibition on open burning of hazardous waste, the open burning of waste explosives recognizing that this was the only treatment technology available.

Subsequently, in the preamble to 40 CFR

264, the EPA stated that the provision of 265.382 would be applied in issuance of permits under 264, particularly subpart P as it related to thermal treatment.

The requirements contained in 265.382 include the distance to property line provisions as well as human health and environmental requirements. Subsequent to its issuing of the preamble to 40 CFR 264, the EPA recognized the inapplicability of the distance requirements as printed in 265.382 in certain situations. And they issued a final rule correction which was published in 54FR26198, which stated in effect that the distance provisions originally contained in 265.382 were based on military, that is cased explosives, which presented a fragment hazard and that those distances did not necessarily apply to the open burning of commercial explosives or that is explosives which were not cased. And, therefore, and that a permit could be issued with it with shorter distance provisions than those contained in 265.382. West Virginia has now adopted by reference both 40 CFR 265 and 264.

Hercules had petitioned therefore, for a rule change to add paragraph 3.2.d. to 45CSR25, which contains specific language which would recognize the recognition of the inapplicability of the distance provisions as published by the EPA in 5426198.

TO WIT: That read: the distance provisions of 40 CFR 265.382 apply only to the open burning or open detonation of military explosives in a manner that presents an uncontrolled fragment release hazard. The distance provisions of the American Table of Distances or commercial explosives apply otherwise.

Subsequent to this petitioning and the discussions of Office Air Quality, it became apparent that they preferred to have a distance to property line provision in the regulation and the American Table of Distances does not have a specific requirement for distance in property line.

We, therefore, are in support of changing the language to include specific reference to the DOD Contractors' Safety Manual for Ammunition and Explosives, DOD 4145.6-M which, in fact, is the regulation under which Hercules must operate the

facility under its lease with the government, and, thus, contains specific distance property line provisions.

The need for this rule change we feel is because of the regulatory trail left by the EPA in its original publication of the regulation under part 265 it subsequent preamble language leaves it open to interpretation as to what their intent was, including this specific language well-insured consistent application to the rule which West Virginia has adopted by reference.

The rationale then is that this proposed change will codify the intent of the EPA under 40 CFR and eliminate possible ambiguous interpretations in requirements which were originally put in there on explosive safety considerations rather than health, environmental or air pollution. The considerations are consistent with those of the Department of Defense which is the government agency where their expertise is in explosive safety. Further, the regulation of air pollution is not affected by this change in that it relates only to the distances which are considerations

for explosive safety and the human health and environmental requirements of the regulation are unaffected.

There are a number of available studies which we belief support the conclusion that open burning, as we practice it, is done in an environmentally safe manner and is fully in compliance with the safety requirements of the Department of Defense, which are referenced in the proposed change and we will be submitting a documentation package to that effect.

MS. CHANDLER: Thank you, Mr. Hulburt. Any other comments on proposed Rule 45CSR25? Being nothing further, the public hearing for 45CSR25 is concluded.

REPORTER'S CERTIFICATE

STATE OF WEST VIRGINIA,

COUNTY OF KANAWHA, to wit:

I, Christy L. Morris, Certified Court Reporter and Notary Public duly certify and commissioned, do hereby certify that the foregoing is a true and accurate transcript of the proceedings had in the public hearing on the 9th day of August, 1994.

Given under my hand and notarial seal this 11th day of August, 1994.

C. L. Morris CCR

Certified Court Reporter
Notary Public

MY COMMISSION EXPIRES: 12/11/95

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August 9, 1994

VIA HAND DELIVERY

G. Dale Farley, Chief
Office of Air Quality
1558 Washington Street, East
Charleston, West Virginia 25311

Dear Mr. Farley:

Enclosed for filing are the written comments of the West Virginia Manufacturers Association for the Division of Environmental Protection, Office of Air Quality proposed legislative rule, 45 CSR 25, "To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities."

If you have any questions regarding the comments, please feel free to call me.

Very truly yours,

Michael P. McThomas

MPM:cdl
Enclosure

COMMENTS OF THE
WEST VIRGINIA MANUFACTURERS ASSOCIATION
ON PROPOSED REGULATION 25
TO PREVENT AND CONTROL AIR POLLUTION FROM HAZARDOUS WASTE
TREATMENT, STORAGE, OR DISPOSAL FACILITIES
45 CSR 25

August 9, 1994

COMMENTS OF THE
WEST VIRGINIA MANUFACTURERS ASSOCIATION
ON PROPOSED REGULATION 25
TO PREVENT AND CONTROL AIR POLLUTION FROM HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES

August 9, 1994

I. INTRODUCTION

On July 6, 1994, the West Virginia Division of Environmental Protection, Office of Air Quality ("DEP" or "OAQ") filed with the Secretary of State proposed Regulation 25, "To Prevent and Control Air Pollution From Hazardous Waste Treatment, Storage, Or Disposal Facilities," of Title 45 of the West Virginia Regulations. Accompanying the proposed rule was a notice inviting written comment for a public hearing to be held August 9, 1994. Pursuant to this notice, the West Virginia Manufacturers Association ("WVMA") files these comments.

The WVMA represents a broad cross-section of large and small industrial concerns throughout West Virginia. Because WVMA members are subject to, and significantly affected by, changes in the state hazardous waste management program, the WVMA has actively participated in the development of the state program since its inception. This participation has historically included filing comments on periodic revisions to Regulation 25, as well as commenting on proposed hazardous waste regulations of other agencies. These comments represent a continuation of the active

and supportive role the WVMA has played in the development of a reasonable and protective hazardous waste management program for West Virginia.

The comments that follow address general concerns with respect to the scope of Regulation 25 as well as specific concerns on proposed changes to individual sections of the rule. Unless otherwise noted, all references to federal regulations are to Title 40 of the Code of Federal Regulations ("C.F.R."), while all references to state regulations are to Title 45 of the Code of State Regulations ("C.S.R.").

II. GENERAL COMMENTS

A. Regulation Under Both Chapter 22, Article 5 (Air) and Chapter 22, Article 18 (Hazardous Waste)

The proposed Regulation 25 is broader in scope than authorized by the state Air Pollution Control Act. In recognition of this problem, the proposed rule cites as co-authority the state Air Pollution Control Act and the state Hazardous Waste Management Act. The OAQ has not, however, made a determination that Regulation 25 is necessary to carry out some purpose under the state Air Pollution Control Act. The Air Pollution Control Commission[1] has indicated in the past that its purpose for adopting Regulation 25 was to receive delegation of the federal hazardous waste program pursuant to the state Hazardous Waste Management Act.

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[1] The Air Pollution Control Commission is the predecessor rule-making governmental unit for air pollution, prevent and control rules. Pursuant to H.B. 4065 (Reg. Sess. 1994), the "Division of Environmental Protection Reorganization Bill," effective June 10, 1994, the rule-making authority for air rules was transferred to the Division of Environmental Protection. The former Director of the Air Pollution Control Commission is currently the Director of the Office of Air Quality. Similarly, employees of the Air Pollution Control Commission were transferred to the Office of Air Quality. Thus, while historical reference is made to the Air Pollution Control Commission, the policies and personnel have retained a continuity with the environmental executive agency reorganization.

To the extent that the DEP does rely on the Air Pollution Control Act as authority for this regulation, the regulation exceeds the authority granted under that statute in several ways. For example, because Regulation 25 is broader in scope than the federal Resource Conservation and Recovery Act ("RCRA") program concerning emissions from hazardous wastes, the proposed regulation is violative of W. Va. Code § 22-5-4(a)(4) as more stringent than the federal program as to emissions of hazardous wastes. The Air Pollution Control Act has no provision that would authorize the DEP to use the Air Pollution Control Act to control pollutants for which no national ambient air standards have been set or for which an amendment to the State Implementation Plan would be required.

Recognizing that W. Va. Code § 22-1-3a provides that notwithstanding the provisions of W. Va. Code § 22-5-4 the Director may promulgate a rule more or less stringent than the federal counterpart program, the Director has not complied with the requirements of W. Va. Code § 22-1-3a. This code section requires that legislative rules promulgated by the Director after July 1, 1994 may be more or less stringent than a counterpart federal rule or program to the extent that the Director provides specific written reasons which demonstrate that such provisions are reasonably necessary to protect, preserve or enhance the quality of West Virginia's environment or human health or safety, taking into consideration the scientific evidence, specific environmental characteristics of West Virginia or an area thereof. In the case of specific rules which have a technical basis, the Director must provide the specific technical basis upon which the Director relied. Here, the Director has

made a blanket statement that the rule is no more stringent when in fact the rule goes beyond that required by RCRA. RCRA has pervaded the entire field of regulation of hazardous waste and is clearly a federal counterpart regulation. Thus, incorporation by reference is appropriate. While the agency has incorporated some parts by reference, the rule is more stringent in various provisions; i.e. regulation of tanks and wastewater treatment plants, and by requiring controls not required by the federal regulations. At the very least, the reasons for the deviation from wholesale adoption of the emission standards of the federal regulations should be provided by the Director in accordance with the statutory mandate. This should address the rule in whole, not just those sections being amended. Moreover, the statement of reasons and the determinations of the Director as to the stringency of the regulations should be set forth in a separate document that is contemporaneously filed with the rule, but is not part of the body of the rule.

B. The Need to Coordinate Regulation 25 with Existing DEP Hazardous Waste Regulations

Notwithstanding the monumental progress in the coordination of the state hazardous waste management program with the passage of the Division of Environmental Protection Reorganization Act (H.B. 4065, effective June 10, 1994), coordination between offices and divisions within the DEP must be realized. In particular, the WVMA applauds the change in Section 3.1.a revising the arbiter of conflicts between the OAQ and the Office of Waste Management ("OWM") to be vested in the Director of DEP. Still, the WVMA maintains that the provisions of

Regulation 25 should be incorporated by reference into 47 CSR 35, the Hazardous Waste Management Rules rather than vice versa.

The WVMA supports efforts by the agency to comply with the mandate of the state Hazardous Waste Management Act to avoid duplication to the maximum extent practical, and to coordinate the various rulemaking and permitting activities under the Act with one another. While the DEP has the primary authority to implement the statutory provisions, the Director's authority under the Air Pollution Control Act for hazardous waste is limited to three areas:

> (1) To promulgate rules establishing air pollution performance standards and permit requirements and procedures;
>
> (2) To adopt rules for the monitoring and control of air emissions at hazardous waste treatment, storage, and disposal facilities;
>
> (3) To promulgate rules establishing standards applicable to the owners and operators of facilities which burn, for purposes of energy recovery, any fuel produced from hazardous waste.

With this as background, we believe Regulation 25 should be limited to the emission standards of treatment, storage or disposal facilities and not invade those areas of hazardous waste management that are already covered by the pervasive federal program as adopted by reference by the Hazardous Waste Management Rules, 47 CSR 35.

The WVMA further reiterates its objection to obtaining two separate permits for the same activity from two different offices of the DEP. The WVMA

praises the efforts made by the DEP so far and offers its support in developing a single permitting, single enforcement system to run the program. Particularly now that the DEP has been established as a consolidated agency, a concentrated effort should be made to establish an efficient, comprehensive and practical scheme for implementing the Act in a manner that complies with the directives of the Legislature. The WVMA recommends the DEP issue a consolidated permit with separate sections addressing the various regulatory aspects of hazardous waste activity that are within the jurisdiction of a particular office within the DEP. The WVMA pledges its support to such an effort.

C. Incorporation by Reference of Federal Regulations

We also support the incorporation by reference of the various provisions of the federal hazardous waste regulations. Whether done as a part of Regulation 25 or as part of the DEP Hazardous Waste Management Rules[2], this approach eliminates the squandering of limited resources through restating the federal regulations. This approach simplifies the rules from the standpoint of the regulated community and should streamline the process of updating the rules as necessary to keep up with the regular revisions to the federal program.

However, the WVMA recommends that proposed Section 1.5 be revised so as to ensure that subsequent revisions to the federal regulations which occur after the effective date of the final rule will not lead to confusion regarding applicable

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[2] The hazardous waste management rules incorporate by reference the federal hazardous waste management program in effect on July 1, 1994 as promulgated pursuant to RCRA.

requirements. Such revision is also necessary to comply with the State's rulemaking procedure, which prohibits incorporating future changes in federal regulations without amendment or formal rulemaking. To avoid these potential problems, the following sentence should be added to the end of the Section 1.5:

> Unless otherwise indicated, where reference to a federal regulation or standard appears in this rule, such regulation or standard will, for purposes of this rule, be construed as that version which was in effect as of July 1, 1994.

The final rule must specify a date certain to determine the appropriate federal regulations which apply. Accordingly, it is logical to use the date of the most recent revision of the Code of Federal Regulations, July 1, 1994.

D. Incorporation By Reference of Existing Hazardous Waste Management Rules

Consistent with our comments above, we applaud the approach of proposed Regulation 25 in its incorporation by reference of certain sections of the DEP hazardous waste regulations. However, we think by far the better approach would be for the DEP hazardous waste rules to incorporate by reference Regulation 25. It is perfectly logical that the DEP regulations should be the foundation for the state hazardous waste program, with regulations of other agencies incorporated as appropriate. Likewise, it would also be appropriate to eliminate Regulation 25 altogether and adopt the federal hazardous waste management program in its entirety to be utilized by both the OAQ and the OWM. There remains the administrative issue of dealing with coordinating implementation between the OAQ and OWM, but the agency structure is in place to do so. Wholesale adoption of the requirements of the

Hazardous Waste Management Rules creates dual regulatory obligations on the part of the regulated community and creates the potential for dual enforcement by the OAQ and the OWM for the same regulatory requirement. The solution to these problems lies in coordination of OAQ and OWM activities within the DEP as required in the Act.

E. Determination of Stringency.

The WVMA asserts that it is inappropriate to include a determination of stringency within the body of the rule. Instead, the analysis and conclusions of the agency should be part of the findings preliminary to the rule and set forth with the other preliminary documents that are required to be filed with the rule pursuant to W. Va. Code § 29A-3-1 et seq., such as the fiscal note and the narrative explanation of the purpose of the rule. Clearly, the legislature did not contemplate that the Director's statement regarding stringency of specific provisions in a proposed rule would be incorporated into the rule and adopted as law. This proposed section should, therefore, be deleted from the final rule, and, after examining the proposed rule, the Director should publish an appropriate statement that would accompany the rule.

Furthermore, pursuant to W. Va. Code § 22-1-3a, where rules promulgated by the Director will be more stringent or less stringent than their federal counterpart, the Director is required to provide a written statement, setting out specific reasons which demonstrate that each particular, substantive provision that varies from the federal counterpart regulation is (in the case of a more stringent rule) or is not (in the case of a less stringent rule) "reasonably necessary to protect,

preserve or enhance the quality of West Virginia's environment or human health or safety." The statement required of the Director must take into consideration the scientific evidence, specific environmental characteristics of West Virginia or an area thereof, or stated legislative findings, policies or purposes relied upon by the Director in making the preceding determination. Accordingly, to comply with the legislative mandate, the Director's statement must be detailed and address specific provisions.

As noted above, the Director has not complied with the statutory mandate to make a determination of stringency with respect to this rule. In addition to the WVMA's objection to including a blanket statement within the body of the rule, there are several provisions of this rule that are more stringent than the federal requirements including emissions from tanks, regulation of generators, and emissions from wastewater treatment plants. See e.g. Sections 4.1, 4.4, 4.7 & 4.11. The Director has failed to provide a statement of reasons for deviating from the federal exemptions or exclusions of certain hazardous waste activities as required by statute. The fact that this rule is being amended rather than promulgated for the first time does not relieve the Director of this obligation to review and justify the rule in whole at this time.

F. Constitutional Takings Determination.

The WVMA similarly asserts that it is inappropriate to incorporate this section into the proposed rule and objects to a blanket statement of acquiescence with the statute. Accordingly, the WVMA recommends that this proposed section be

deleted from the final rule and that the Director's "takings" rationale be included in the documents filed in support of the rule with the Secretary of State.

G. Applicability to Generators

As the WVMA has commented in the past, it does not believe that the DEP has authority to regulate emissions from generators of hazardous waste under the Act, but only the treatment, storage, or disposal of waste that creates statutory air pollution. Consequently, the statement made in Section 4.1 that proposed Regulation 25 will apply to "[g]enerators accumulating hazardous waste on-site for periods of less than ninety days" is not valid without some nexus between the regulation and the authority granted to the DEP in the Act. Moreover, the provisions are more stringent than the federal regulation and therefore are contrary to W. Va. Code § 22-1-3a. Specifically, this section states that "[i]n the absence of a federal rule, the adoption of a state rule shall not be construed to be more stringent than a federal rule, unless the absence of a federal rule is the result of a specific federal exemption." Id. This means that the exemption for 90-day tanks is to be recognized by the state's hazardous waste management program and it is violative of this provision to regulate tanks that are otherwise exempt under the federal program. The code provision further addresses those areas where there simply is no federal regulation. Here, RCRA is pervasive and covers the gamut of hazardous waste -- from cradle to grave.

III. SPECIFIC COMMENTS

Section 1.1(a) This section should be clarified to ensure that the scope of the regulation is the emissions from treatment, storage and disposal facilities. The WVMA suggests rewriting the first sentence to read as follows:

> The intent and purpose of this rule is to establish a program of regulation over air emissions from the treatment, storage and disposal of hazardous wastes . . .

The suggested change will clear up any misconception regarding the breadth of application of the provisions of the rule.

Section 1.1(b) The meaning and purpose of this subsection are unclear. It seems to negate the expectation that compliance with the provisions of a permit duly issued pursuant to this regulation would serve to shield the permittee from any enforcement action. We urge that the language expressly recognizing that compliance with a permit will be deemed compliance with the Act be added, at least until the permit may be reviewed or reissued.

Section 1.5 This section is discussed broadly above and the WVMA applauds the agency for incorporating federal regulations by reference. However, this section duplicates the incorporation by reference provisions found at Section 3.1 of the rule. Thus, the WVMA suggests striking Section 1.5 in its entirety.

Section 1.6 The WVMA asserts that it is inappropriate to incorporate this section, determination of stringency, into the proposed rule. (See General Comment E above). The WVMA submits that the statement required from the Director should not be included as a section in the rule, but, instead, should be attached to each proposed rule as an addendum. Clearly, the legislature did not

contemplate that the Director's statement regarding stringency of specific provisions in a proposed rule would be incorporated into the rule and adopted as law. This proposed section should, therefore, be deleted from the final rule, and, after examining the proposed rule, the Director should publish an appropriate statement to be filed with the rule with the Secretary of State.

Section 1.7 The WVMA asserts that it is inappropriate to incorporate this section, constitutional takings, into the proposed rule. (See General Comment F above). The WVMA recommends that this proposed section be deleted from the final rule.

Section 3.1 As noted above, the WVMA commends the DEP for incorporating federal regulations by reference, but recommends that the provisions of Reg 25 be adopted by reference into the Hazardous Waste Management Rules, 47 CSR 35, instead of the provisions of 47 CSR 35 being incorporated into Regulation 25. The WVMA would also like to commend the DEP for revising the provisions of Section 3.1.a causing the Director to resolve any conflicts between the Office of Air Quality and the Office of Waste Management.

Section 4.1 This section sets out the scope of the rule as applying to all owners and operators of hazardous waste treatment, storage, and disposal facilities. This section requires less than 90 day accumulation facilities to comply with the requirements of Regulation 25. Federal regulations regarding hazardous waste emissions, however, apply only to specific activities (40 C.F.R. § § 264, 265 subparts AA) or equipment associated with permitted hazardous waste processes (40 C.F.R.

§§ 264, 265 subparts BB). Proposed 40 C.F.R. §§ 245, 265 subparts CC will address tanks and less-than-90-day generators. The DEP should refrain from placing regulatory requirements on less-than-90-day generators until the federal rule is finalized.

Sections 4.7 This section requires controls on tanks with vapor pressures of hazardous liquids at greater than 10.5 kilopascals at 25°C. However, subparts AA and BB of 40 C.F.R. §§ 264 and 265, which Regulation 25 adopts by reference, define "light liquids" as those with a vapor pressure greater than .3 kilopascals. See 40 C.F.R. § 264.1031 ("In light liquid service means that the piece of equipment contains or contacts a waste stream where the vapor pressure of one or more of the components in the stream is greater than 0.3 kilopascals (kPa) at 20°C. . ."). Proposed subpart CC requires controls on units in which any hazardous waste having a volatile organic concentration equal to or greater than 500 parts per million by weight is placed. Thus, the provisions of Regulation 25 would be inconsistent with the federal regulations and may require changes that go beyond the anticipated federal requirements. We urge the DEP to refrain from placing controls on tanks containing hazardous liquids until the federal regulations are finalized so that one set of consistent numerical requirements as to vapor pressure can be adopted.

Section 4.8 This section imposes emission control measures on the loading and unloading of tank trucks, railroad tank cars, and barges. The section requires controls on loading and unloading equipment where the hazardous waste has a vapor pressure greater than 10.5 kilopascals at 25°C. As in the comment above

to section 4.7, the WVMA urges the DEP to refrain from imposing emissions requirements on the loading and unloading activities addressed in this section until the federal regulations of subpart CC are adopted as a final rule. Proposed subpart CC does contain requirements for the loading and unloading of waste to and from tanks, surface impoundments, and containers. See 56 Fed. Reg. 33490 (July 22, 1991).

Section 5.1 This section negates the federal exemption for publicly or privately owned treatment works ("POTW") from RCRA requirements. Under the federal regulations, POTWs are exempt from regulation under RCRA pursuant to 40 C.F.R. § 261.4(a).[3] Section 5.1 makes an exception from the exclusion. Thus, the WVMA proposes the following changes to remedy the inconsistency with the federal regulations in contravention of W. Va. Code §§ 22-1-3a, 22-5-4 and 22-18-6:

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[3] The federal regulations provide in part:

> (a) *Materials which are not solid waste.* The following materials are not solid waste for the purpose of this part:
>
> (1)(i) Domestic sewage; and
>
> (ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.
>
> (2) Industrial wastewater discharges that are point source discharges subject to regulation under [the NPDES permitting program] of the Clean Water Act.

40 C.F.R. § 261.4.

5.1 Wastes and/or materials excluded in ~~Section 3.1.4 of~~ 47 CSR 35, are also excluded from the requirements of this rule. ~~except that mixtures of domestic or industrial sewage and hazardous wastes which pass through a sewer system to a privately owned or publicly owned treatment works are subject to the requirements of this rule.~~

The WVMA urges the DEP to initiate the recommended change to comply with not only West Virginia's statutory law, but also to be consistent with the OWM rules incorporating the federal regulation and other states that recognize the federal exclusion. Specifically, W. Va. Code § 22-1-3a states that "[i]n the absence of a federal rule, the adoption of a state rule shall not be construed to be more stringent than a federal rule, unless the absence of a federal rule is the result of a specific federal exemption." Id. Here, there is a specific federal exemption. Thus, this statutory provision is clearly abrogated by the removal of the specific federal exemption in Section 5.1.

Furthermore, the ramifications of not implementing the suggested change results in West Virginia businesses being placed at a competitive disadvantage as well as causing a regulatory quagmire for private facilities and POTWs that have to comply. Because many POTWs throughout the state receive some hazardous waste, it is conceivable that many if not all POTWs are subject to Regulation 25 but are highly unlikely to be in compliance with it. The WVMA is doubtful that these provisions are being or will be equally enforced as between private and public plants. Again, in order to be consistent, the WVMA urges the DEP to delete the qualifying phrase of Section 5.1.

IV. CONCLUSION

The WVMA appreciates the opportunity to comment on proposed Regulation 25 and to offer its concerns and suggestions for changes.

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RESPONSE TO COMMENTS
PUBLIC HEARING
AUGUST 9, 1994

45CSR25
TO PREVENT AND CONTROL AIR POLLUTION FROM
HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES

Only one oral comment was received. Two written submissions each containing several comments were received. The oral comment was presented by a representative of Hercules Aerospace Company and was directed to a petition for a rule revision allowing the open burning of spent propellant. In addition, the comment noted certain inconsistencies between 45CSR6 and 45CSR25. The comment noted that 40 CFR §265.382 specifically exempted open burning of waste explosives from its overall prohibition of open burning of hazardous waste. The comment noted that open burning of waste explosives represents the only currently available means of disposing of such wastes. The comment noted that Hercules Aerospace Company has been engaged in meetings between itself and the Office of Air Quality ("OAQ") in an effort to resolve inconsistencies between OAQ Rules 6 and 25 in an effort to allow Hercules to burn spent propellant. The comment also noted that the American Table of Distances does not contain a specific requirement for distance to property lines for burning such waste, but that specific language is contained in the "Department of Defense Contractors Safety Manual for Ammunition and Explosives" (DOD 4145.26-M). Hercules presently operates according to the DOD manual.

In addition, the comment noted that open burning of spent explosives is more properly a safety issue relating to distances at which the open burning of the spent propellants is conducted, rather than a health or environmental issue.

OAQ responds by acknowledging that it has been involved in a series of discussions with representatives of Hercules and has responded to Hercules' petition request by revising both 45CSR6 and 45CSR25 to allow such burning. In response to this comment, OAQ agrees to further revise Regulation 25 by adding the distance requirements in the DOD manual to the regulation. OAQ further notes that in hearings on proposed revisions to 45CSR6 which were conducted on the same day as the hearing on this proposed revision, the representative from OAQ, Dale Farley, Chief of OAQ, noted that Hercules is about to or will presently be conducting tests and additional studies to further determine whether there are significant health and environmental effects from the open burning of the spent propellant. Sandia National Laboratories will be conducting the work, and initial results from the studies are expected to be completed by the end of December, 1994. OAQ has expressed a willingness to work with Hercules in an effort to resolve the inconsistencies between the two rules by making revisions to both; however, OAQ is reserving final judgment on the merits of the rule revisions pending results of the additional studies by Sandia National Laboratories.

OAQ notes, also, that the written comments filed by Hercules are answered in the above discussion.

The second written submission of comments was by the West Virginia Manufacturer's Association ("WVMA") and contained several individual comments which will be responded to by using the numbering system in the comment document.

II. GENERAL COMMENTS

A. The comment noted that the proposed 45CSR25 is broader in scope than authorized by the Air Pollution Control Act and further noted that the OAQ has not made a determination that Regulation 25 is necessary to carry out some purpose under the state Air Pollution Control Act.

Chapter 22, Article 5, Section 4 of the West Virginia Code provides that the Director is authorized and empowered to develop ways and means for the regulation and control of pollution of the air of the state, and to promulgate legislative rules relating to the control of air pollution. Such language provides adequate and independent authority for the promulgation of Regulation 25. The promulgation of Regulation 25 does directly further the policy and purpose of the State of West Virginia to achieve and maintain such levels of air quality as will protect human health and safety and prevent injury to plant and animal life.

The comment also noted that Regulation 25 is broader in scope than the federal Resource Conservation and Recovery Act ("RCRA"). The comment further suggested that Regulation 25's broader scope violates W.Va. Code §22-5-4(a)(4) as being more stringent than the federal program. OAQ responds that W.Va. Code §22-5-4 provides independent and adequate authority for the promulgation of Regulation 25. Contrary to the language found at W.Va. Code §22-18-6 which provides that the Director not promulgate rules or regulations more stringent than or more expansive in coverage than federal requirements, the Air Pollution Control Act provides only that no rule or program promulgated by the Director under his authority be more stringent than any federal rule or program. No such language prohibiting requirements more expansive than federal requirements is found in the Air Pollution Control Act or in the provisions of W.Va. Code §22-1-3a.

The comment also stated that the Air Pollution Control Act has no provision which would authorize the DEP to use the Air Pollution Control Act to control pollutants for which no national ambient air standards have been set or for which an amendment to the State Implementation Plan would be required. As cited above, the Air Pollution Control Act specifically provides that the Director is authorized and empowered to develop ways and means for the regulation and control of pollution of the air of the state, and to promulgate legislative rules relating to the control of air pollution. The Air Pollution Control Act includes no language suggesting that the Director is prevented from promulgating regulations to control air pollutants for which no ambient standard

has been set.

Regarding the State Implementation Plan, OAQ responds that it is not necessary to amend the Implementation Plan prior to the adoption of Regulation 25.

The last comment in this section stated that the Director has not complied with the requirements of W.Va. Code §22-1-3a since he has not provided specific written reasons justifying the more stringent provisions. According to this comment, examples of provisions in Regulation 25 considered to be more stringent than the federal regulations are the regulation of tanks and wastewater treatment plants and requiring controls not required by the federal regulations. As will be further explained in this response, the OAQ does not agree that these provisions are more stringent than the federal and therefore W.Va. Code §22-1-3a does not apply.

B. This comment noted the need to coordinate Regulation 25 with the Office of Waste Management's regulations at 47CSR35. OAQ agrees and has in fact made efforts to coordinate the two sets of regulations in the past and intends to continue such efforts in the future.

The comment suggested that Regulation 25 should be incorporated by reference into 47CSR35, rather than vice versa. OAQ responds that both the Hazardous Waste Management Act and the Air Pollution Control Act provide the authority and responsibility to the Director for the promulgation of regulations to control and prevent air pollution from hazardous waste facilities. Regulation 25's incorporation by reference of 47CSR35 will ensure consistency in requirements and further the agency's efforts to coordinate with the Office of Waste Management. In response to this comment, OAQ is revising Section 4.14.e.(modified Section 4.13.e.) and Section 7. to ensure that public notice procedures under this rule are consistent with 47CSR35.

The comment also suggested that Regulation 25 should be limited to emission standards and not invade those areas already covered by 47CSR35. OAQ responds that it is certainly not its intention to unnecessarily duplicate program requirements in 47CSR35; however, in order to fulfill the legislative purposes stated in W.Va. Code §22-5-1 et seq., Regulation 25 must necessarily include more than mere emission standards. OAQ has, however, agreed to provide clarifying language in Section 1.I.a. as discussed below.

The comment also noted its objection to two separate permits being required from the OAQ and the Office of Waste Management. Although consolidation of permitting may be desirable, W.Va. Code §22-18-6(13) requires that two separate permits be issued.

C. This comment noted that this rule should reference the most recent publication of the Code of Federal Regulations, the July 1, 1994 publication. OAQ agrees and will revise the rule in accordance with the WVMA suggestion by adding the following sentence to Section 1.5.:

"Unless otherwise indicated, where reference to a federal regulation or standard appears in this rule, such regulation or standard will, for purposes of this rule, be construed as that version which was in effect as of July 1, 1994."

Likewise, the OAQ will revise Section 3.2. to reference the federal regulations effective "July 1, 1994", instead of "July 1, 1993."

In addition, OAQ will revise this section to include a subparagraph which states that the regulations at 47CSR35 are also incorporated by reference into the proposed rule.

D. This comment reiterated the comments made in Section B, which OAQ has responded to in Section B above. The comment further suggested that wholesale adoption of the Hazardous Waste Management rules creates dual regulatory obligations and the potential for dual enforcement for the same requirement.

As explained above, the adoption of the provisions of Regulation 25 is based upon the authority of both the Hazardous Waste Management Act and the Air Pollution Control Act. The adoption of each provision can identify authority for such promulgation to either one or both of the Acts. The OAQ is cognizant of the desire to avoid unnecessary duplication of regulatory obligations and has made previous efforts in the drafting of Regulation 25 to avoid such duplication. In addition, changes have been made to the proposed language in Section 1.1.a. as described below, which should further ensure that unnecessary duplication is avoided.

E. This comment noted the incorporation of the "determination of stringency" section in the rule itself is inappropriate. The comment noted that W.Va. Code §22-1-3a requires the Director of the DEP to provide a written statement in circumstances in which the Director determines that the rule should not be the same in substance as the counterpart federal regulation. OAQ responds that no reason exists to not include the determination and that as a matter of DEP policy, that the specific "Determination of Stringency" section be included in each rule proposed by the individual Offices within the Division. OAQ responds that the section as stated is satisfactory.

F. Another comment in the written submission was that incorporating the "Constitutional Takings Determination" section in the rule (Section 1.7.) is inappropriate. The comment noted that an explanation of the takings determination simply be included as part of the rule filing. OAQ does not disagree with the comment, but notes that no specific reason exists to exclude the determination, and that as a matter of DEP policy, that the specific "Constitutional Takings Determination" section be included in each rule proposed by the individual Offices within the Division. OAQ responds that the section as stated is satisfactory.

G. Another comment questioned the authority of the DEP to regulate emissions from "generators" of hazardous waste, but only the treatment, storage, or disposal of waste that creates statutory air pollution. OAQ responds that the terms of the Air Pollution Control Act provide that the Director is authorized and empowered to develop ways and means for the regulation and control of pollution of the air of the state. As the generation and accumulation of hazardous wastes may result in emissions of pollution to the air of the State, the authority of the Air Pollution Control Act can provide the basis for the provisions at Section 4.1.a. of the proposed Regulation 25.

The comment further suggested that the provisions of this section are more stringent than the federal regulation and are therefore contrary to W.Va. Code §22-1-3a. Specifically, the comment noted that the federal regulation exempts generators which store hazardous waste on-site for less that ninety(90) days and the State program must recognize this exemption.

OAQ points out, however, that generators who store hazardous waste on-site for less than ninety(90) days are only partially excluded from regulation under the federal program. 40 CFR §262.34 provides that such generators are not subject to permitting requirements or to certain of the financial and closure requirements. They are, however, subject to many of the substantive requirements of the program, including the requirements for containers and tanks in 40 CFR Part 265. Such a partial exemption from federal regulation does not constitute the "absence of a federal rule" and is therefore not subject to the last paragraph of W.Va. Code §22-1-3a.

Furthermore, the primary requirements in Regulation 25 which apply to such generators are tank and container requirements related to potential air emissions. As stated earlier, the federal regulations do not exempt such generators from these requirements. OAQ notes, however, that the federal regulations currently in effect for tanks and containers do not apply to air emissions from those units. EPA has proposed regulations at 40 CFR Subpart CC to address this subject. As explained in Section A above, the Director may be more expansive than the federal program without running afoul of the "no more stringent" proviso in the Code. OAQ's approach is particularly defensible when the Director has adopted regulations at the State level which EPA intends to adopt at some point in the future. (OAQ notes that the facility requirements in Section 4 of this rule have been part of this rule for many years and OAQ is not proposing to make any substantive changes to this section).

III. Specific Comments

Section 1.1.a.-- The comment suggested including the phrase "air emissions from the" in this section in order to clarify the scope of the regulation. OAQ agrees and will revise Section 1.1.a. accordingly. In addition, OAQ has moved Section 4.1. to Section 1.1.b. and has renumbered the succeeding paragraphs in Section 1.1.

Section 1.1.b.-- The comment noted that the meaning and purpose of this section appears to be unclear. OAQ disagrees and will not revise this section of this rule. The language of Section 1.1.b. is not intended to provide a shield to further enforcement action beyond the terms of any permit issued pursuant to the regulation. Such language is intended to clarify that permit compliance or compliance with the terms of Regulation 25 shall not ensure compliance with any other statutory or regulatory requirements imposed under any rule, regulation, order or other authority, nor shall it shield any source in compliance with the terms of a permit or Regulation 25 from further enforcement action pursuant to any other rule, regulation, order or other authority.

Section 1.5.-- The comment recommended striking this "Incorporation by Reference" section as duplicative of Section 3.1. OAQ responds that such language is necessary in both the General section (Section 1) and the more specific Section 3. However, OAQ has made revisions to both Sections 1.5. and to 3.2. to be consistent with one another.

Section 1.6.-- The comment recommended deleting the "Determination of Stringency" section. OAQ responded to this comment in Section E above.

Section 1.7.-- The comment recommended deleting this "Constitutional Takings" section. OAQ responded to this comment in Section F above.

Section 3.1.-- The comment recommended incorporating the provisions of 45CSR25 into 47CSR35 instead of vice versa. OAQ has previously responded to this comment in Section B above.

Section 4.1.-- The comment noted that DEP should refrain from placing regulatory requirements on "less-than-90-day generators." OAQ has previously responded to this comment in Section G above.

Section 4.7.-- The comment noted that the provisions of 40 CFR §264.1031, concerning the physical characteristics of what constitutes a "light liquid" differ from those specified in this rule. OAQ responds that 40 CFR §264.1031 only applies to process vents and not to tanks, and Section 4.7. is therefore not inconsistent with an existing federal regulation. As stated in the comment, the federal regulations covering air emissions from tanks are proposed and not yet final. The comment suggested it is premature to adopt state regulations on the subject. OAQ disagrees and states that where the federal regulations have not yet addressed an area, it may do so.(See Section A above). Further, OAQ believes that such regulations are necessary at the State level to fulfill its statutory mandate as cited above and would note that EPA's regulations at Subpart CC have been proposed since 1991.

Section 4.8.-- The comment noted that emission control measures are being imposed on the loading and unloading of tank trucks, railroad tank cars, and barges, and that federal counterpart regulations, at Subpart CC, have not yet been promulgated. The comment suggests OAQ refrain from regulation at this time. OAQ disagrees for the reasons explained in our response to Section 4.7.

Section 5.1.-- The comment noted that this section negates the federal exemption for publicly or privately-owned treatment works ("POTW") from RCRA requirements and states that POTW's are exempt from regulation under the provisions of 40 CFR §261.4(a). The comment recommended revising Section 5.1. to comply with the exemption.

OAQ responds that the federal exemption referred to in the comment is not as broad as suggested by the comment. The exemption applies only to publicly-owned treatment works, not to privately-owned treatment works. Moreover, publicly-owned treatment works are not completely exempted from the provisions of RCRA, despite the language of 40 CFR §261.4(a). Under the provisions of 40 CFR §264.1(e), publicly-owned treatment works must be covered by a "permit by rule" pursuant to Part 270 of the RCRA regulations, and are therefore still regulated by RCRA. The RCRA permit by rule, however, only ensures that the requirements of the federal Clean Water Act are met by the treatment facility,as well as imposing certain reporting requirements. It does not ensure that any potential air emissions are considered and/or controlled. In light of the absence of federal regulation over the air impacts of publicly-owned treatment works, OAQ believes it is appropriate and necessary for such sources to be regulated under Regulation 25. (OAQ notes that Section 5.1 of this rule has been in existence for several years and the agency is not proposing to change this section).

Miscellaneous

In addition to responding to the public comments and revising Regulation 25 accordingly, OAQ has made corrections to several typographical errors which were contained in the current Regulation 25.

OAQ has also revised the fiscal note to provide better fiscal impact information resulting from grant award negotiations and work plan development since the proposed rule revisions were filed for public hearing.

DIVISION OF ENVIRONMENTAL PROTECTION

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DAVID C. CALLAGHAN
DIRECTOR

September 13, 1994

The Honorable Joe Manchin, III, Co-Chair
The Honorable Brian A. Gallagher, Co-Chair
Legislative Rule-Making Review Committee
Room M-152, State Capitol
Charleston, West Virginia 25305

RE: Filing of Agency Approval of
Proposed Rule - 45CSR25

Dear Sirs:

The West Virginia Division of Environmental Protection, Office of Air Quality, is hereby filing and has attached hereto its notice of agency approval of a proposed rule - "To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities, WV 45CSR25."

We understand that the date of this filing is past the Committee's August 15, 1994 deadline; however, in spite of its diligent efforts, the Office of Air Quality has found it extremely difficult to complete all of its required filings by the August 15, 1994 date due to the voluminous nature of its proposed rules this year. The Office did in fact complete eleven of its thirteen proposed rules and filed them with the Committee before the August 15, 1994 deadline.

The agency believes it is important for the Legislature to authorize the adoption of 45CSR25 during the 1995 session. The proposed rule is necessary to ensure consistency with the State hazardous waste regulations heretofore adopted by the agency's Office of Waste Management, and to ensure that the most recent federal counterpart regulations are adopted. (The proposed rule adopts the Federal and State regulations, effective July 1, 1994). This will ensure consistency in the regulation of hazardous waste management facilities under the State's hazardous waste program.

The Division of Environmental Protection respectfully requests the Legislative Rule-Making Review Committee to consider

the attached rule, 45CSR25, during this legislative session. The agency will of course be available to answer questions and assist the Committee in whatever way requested.

Sincerely,

David C. Callaghan
Director

DCC:cc

cc: Secretary of State
Administrative Law Division

G. Dale Farley, Chief
Office of Air Quality

Attachment