

WEST VIRGINIA
SECRETARY OF STATE
KEN HECHLER
ADMINISTRATIVE LAW DIVISION

Form #1

Do Not Mark In this Box

FILED

JUN 14 4 00 PM '95

OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

NOTICE OF PUBLIC HEARING ON A PROPOSED RULE

DIVISION OF ENVIRONMENTAL PROTECTION
AGENCY: OFFICE OF AIR QUALITY TITLE NUMBER: 45CSR34
RULE TYPE: LEGISLATIVE; 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: 45CSR34

TITLE OF RULE BEING AMENDED: "EMISSION STANDARDS FOR HAZARDOUS AIR
POLLUTANTS PURSUANT TO 40 CFR PART 60"

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED:

TITLE OF RULE BEING PROPOSED:

DATE OF PUBLIC HEARING: JULY 19, 1995 TIME: 6:00 P.M.

LOCATION OF PUBLIC HEARING: WV OFFICE OF AIR QUALITY
CONFERENCE ROOM
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


G. DALE FARLEY
CHIEF

21.00

WEST VIRGINIA
SECRETARY OF STATE

KEN HECHLER

ADMINISTRATIVE LAW DIVISION

Form #2

FILED

JUN 14 4 00 PM '95

OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

NOTICE OF A COMMENT PERIOD ON A PROPOSED RULE

DIVISION OF ENVIRONMENTAL PROTECTION
AGENCY: OFFICE OF AIR QUALITY TITLE NUMBER: 45CSR34

RULE TYPE: LEGISLATIVE; CITE AUTHORITY WV CODE §§22-5-1 et seq.

AMENDMENT TO AN EXISTING RULE: YES ☒ NO ☐

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 45CSR34

TITLE OF RULE BEING AMENDED: "EMISSION STANDARDS FOR HAZARDOUS AIR
POLLUTANTS PURSUANT TO 40 CFR PART 63"

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

TITLE OF RULE BEING PROPOSED: _____

IN LIEU OF A PUBLIC HEARING, A COMMENT PERIOD HAS BEEN ESTABLISHED DURING WHICH
ANY INTERESTED PERSON MAY SEND COMMENTS CONCERNING THESE PROPOSED RULES. THIS
COMMENT PERIOD WILL END ON JULY 19, 1995 AT 5:00 p.m.

ONLY WRITTEN COMMENTS WILL BE ACCEPTED AND ARE TO BE MAILED TO THE FOLLOWING
ADDRESS.

G. DALE FARLEY, CHIEF

OFFICE OF AIR QUALITY

1558 WASHINGTON STREET, EAST

CHARLESTON, WV 25311

THE ISSUES TO BE HEARD SHALL BE
LIMITED TO THIS PROPOSED RULE.

G. DALE FARLEY, CHIEF

ATTACH A BRIEF SUMMARY OF YOUR PROPOSAL



FILED

GASTON CAPERTON
GOVERNOR

BUREAU OF ENVIRONMENT
10 McJunkin Road
Nitro, WV 25143-2506

JUN 14 4 00 PM '95
LAIDLEY ELI MCCOY, PH.D.
COMMISSIONER
OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

June 19, 1995

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

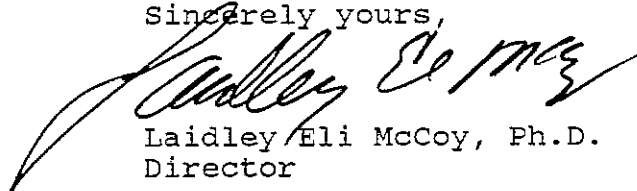
RE: 45 CSR 34 - "Emission Standards for Hazardous
Air Pollutants Pursuant to 40 CFR Part 63"

Dear Ms. Cooper:

This is to advise you that I am giving approval for the filing of the above-captioned rule as a proposed amendment to an existing legislative 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,



Laidley Eli McCoy, Ph.D.
Director

LEM;RTH:cc

Attachment

45CSR34

EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO 40 CFR PART 63

SUMMARY

Title 45, Series 34 provides authority for the Director to determine and enforce case-by-case MACT standards for major hazardous air pollutant sources in the absence of a federal standard under certain circumstances as required for permit program approval under Title V of the Clean Air Act.

The proposed rule also establishes general provisions for emission standards for hazardous air pollutants (NESHAPS) and other regulatory requirements pursuant to section 112 of the federal Clean Air Act (CAA). The rule codifies general procedures and criteria to implement emission standards for stationary sources that emit (or have the potential to emit) one or more of the hazardous air pollutants (HAP) in or pursuant to section 112(b) of the CAA. This rule revision incorporates by reference additional provisions relating to chromium electroplating and anodizing tanks, ethylene oxide commercial sterilization facilities, industrial process cooling towers, gasoline terminals and breakout stations, halogenated solvent cleaning machines, epoxy resins & non-nylon polyamides production facilities, and magnetic tape manufacturing facilities.

45CSR34

EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO 40 CFR PART 63

STATEMENT OF CIRCUMSTANCES

The agency is proposing to revise and update 45CSR34 to incorporate additional provisions promulgated under 40 CFR 63. Specifically, these revisions will incorporate by reference additional provisions relating to chromium electroplating and anodizing tanks, ethylene oxide commercial sterilization facilities, industrial process cooling towers, gasoline terminals and breakout stations, halogenated solvent cleaning machines, epoxy resins & non-nylon polyamides production facilities, and magnetic tape manufacturing facilities.

**EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
PURSUANT TO 40 CFR PART 63**

DETERMINATION OF STRINGENCY

W. Va. Code §22-1-3 in conjunction with W.Va. Code §22-1-3a requires, in part, the Director of the Division of Environmental Protection to determine if a new or amended environmental provision should be the same in substance as a counterpart federal regulation. If the new rule should be the same in substance as the counterpart federal regulation, then the Director shall incorporate by reference, to the greatest extent possible, the federal counterpart rule. If the Director determines the rule should not be the same in substance as the federal counterpart rule, then the Director shall file a statement setting forth the difference between the proposed rule and the counterpart federal regulation. W. Va. Code §22-1-3a requires the Director to conduct the "stringency" determination and provide specific reasons for deviation of the proposed state rule from the federal counterpart regulation.

The Director has determined that this rule is no more or no less stringent than the federal counterpart rule.

**EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
PURSUANT TO 40 CFR PART 63**

PRIVATE REAL PROPERTY PROTECTION ACT ASSESSMENT

The Division of Environmental Protection is required to perform a "constitutional takings determination" or assessment in only limited circumstances (See "Private Real Property Protection Act", W. Va. Code §§22-1A-1 et seq.). Under W. Va. Code §22-1A-3(a), such an assessment is not required, unless the action being contemplated by the Division is reasonably likely to deprive a private real property owner of his or her property in fee simple or to deprive an owner of all productive use of his or her property.

W. Va. Code §22-1A-3(c) expressly exempts rulemaking which simply limits uses pursuant to statute from the assessment requirement. In pertinent part, Section 3(c) provides that the following actions do not require an assessment:

- (1) Licensing or permitting conditions, requirements or limitations to the use of private real property pursuant to any applicable state or federal statutes, rules or regulations; or
- (2) Rules and emergency rules of the division that are reasonably likely to limit the use of private real property pursuant to any applicable state or federal statutes, rules or regulations;

See W. Va. Code §22-1A-3(c)(1) and (2).

Therefore, since this is a rulemaking pursuant to statute, an assessment is not required.

45CSR34

**EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
PURSUANT TO 40 CFR PART 63**

**CONSULTATION WITH THE ENVIRONMENTAL
PROTECTION ADVISORY COUNCIL**

W.Va. Code §22-1-3(c) requires, in part, the Director of the Division of Environmental Protection to consult with the Environmental Protection Advisory Council prior to proposing any new rule. This rule was filed prior to the appointment of the Environmental Protection Advisory Council, therefore, no consultation with the Environmental Protection Advisory Council has been possible.

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title: 45CSR34 - Emission Standards for Hazardous Air Pollutants Pursuant
to 40 CFR Part 63

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	\$ 80,500	\$ -0-	\$ 6,000	\$ 74,000	\$ 80,500
Personal Services	74,000	-0-	4,300	68,000	74,000
Current Expense	6,500	-0-	1,700	6,000	6,500
Repairs and Alterations	-0-	-0-	-0-	-0-	-0-
Equipment	-0-	-0-	-0-	-0-	-0-
Other	-0-	-0-	-0-	-0-	-0-

2. Explanation of above estimates: Most costs anticipated to be incurred in the implementation of federal rules promulgated under 40CFR63 as of June 1, 1995 will be covered under prior budget estimates for implementing Title V of the Clean Air Act, as amended, under 45CSR30 authorized by the Legislature during the 1994 session. In the likely event that the federal emission standards must be implemented and enforced outside of the Title V (45CSR30) program, costs for such implementation must be paid from the federal grant award which must in turn be matched with state funds from general revenue and non-Title V fees (40% state/60% federal ratio). The program cost estimates in Item 1 reflect only those estimated costs not covered by the Title V (45CSR30) program for state implementation of the new standards. Staff time representing approximately 2.0 FTE is anticipated for the regulation of chromium electroplating and anodizing tanks, ethylene oxide sterilization facilities, industrial process cooling towers, gasoline terminals and breakout stations, halogenated solvent cleaning machines, epoxy resins & non-nylon polyamides production facilities, and magnetic tape manufacturing facilities.

Appendix B
Fiscal Note For Proposed Rules
Page Two

3. Objectives of these rules: This rule establishes additional provisions for emission standards for hazardous air pollutants and other regulatory requirements pursuant to section 112 of the Clean Air Act, as amended. Promulgation of this rule by the Legislature is necessary for the State to fulfill its responsibilities under the Clean Air Act, as amended.

4. Explanation of overall economic impact of proposed rule.

A. Economic impact on state government.

See Section 2.

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

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

C. Economic impact on citizens/public at large.

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

Date:

June 14, 1995

Signature of agency head or authorized representative:



G. Dale Farley
Chief, Office of Air Quality

FILED

45CSR34

JUN 14 4 00 PM '95

TITLE 45
LEGISLATIVE RULE

OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY

SERIES 34
EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
PURSUANT TO 40 CFR PART 63

§45-34-1. General.

1.1. Scope. - This rule establishes general provisions for national emission standards for hazardous air pollutants (NESHAPS) and other regulatory requirements pursuant to section 112 of the federal Clean Air Act as amended in 1990 (CAA). This rule codifies general procedures and criteria to implement emission standards for stationary sources that emit (or have the potential to emit) one or more of the substances listed as hazardous air pollutants (HAP) in or pursuant to section 112(b) of the CAA. It is the intent of the Director to adopt these standards by reference. It is also the intent of the Director to adopt associated reference methods, performance specifications and other test methods which are appended to these standards.

1.2. Authority. - W.Va. Code §§22-5-1 et seq.

1.3. Filing Date. -

1.4. Effective Date. -

1.5. Incorporation by Reference - Federal Counterpart Regulation. The Director has determined that a federal counterpart regulation exists, and in accordance with the Director's recommendation, with limited exception, this rule incorporates by reference, 40 CFR Part 63, effective June 1, 1995.

§45-34-2. Requirements.

2.1. After the effective date of the state permit program under ~~¶~~Title V of the CAA, no person may modify a major source of hazardous air pollutants, unless the Director determines that the maximum achievable control technology emission limitation under this rule for existing sources will be met.

2.2. After the effective date of the state permit program under ~~¶~~Title V of the CAA, no person may construct or reconstruct any major source of hazardous air pollutants, unless the Director

determines that the maximum achievable control technology emission limitation under this rule for new sources will be met.

2.3. After the effective date of the state permit program under ~~†~~Title V of the CAA, the Director shall determine and apply case-by-case maximum achievable control technology standards to existing sources categorized by the Administrator pursuant to Section 112(c)(1) of the CAA for which the Administrator has not promulgated emission standards in accordance with Section 112(d) and 112(e) of the CAA.

2.4. Prior to constructing, reconstructing or modifying any facility subject to this rule, the owner or operator shall obtain a permit in accordance with the applicable requirements of 45CSR13, 45CSR14, 45CSR30 and this rule.

§45-34-3. Definitions.

3.1. "Administrator" shall mean the Administrator of the United States Environmental Protection Agency.

3.2. "Director" shall mean the Director of the West Virginia Division of Environmental Protection.

3.3. "Hazardous air pollutant" shall mean any air pollutant listed pursuant to §112(b) of the CAA as ~~July 1, 1994~~ of June 1, 1995.

§45-34-4. Adoption of Standards.

4.1. The Director hereby adopts and incorporates by reference the provisions of 40 CFR Part 63 including any reference methods, performance specifications and other test methods which are appended to such standards and contained in 40 CFR Part 63 as in effect on ~~July 1, 1994~~ June 1, 1995, for the purposes of implementing a program for national emission standards for hazardous air pollutants for source categories, except as follows:

4.1.a. Part 63.15 is amended to provide that information shall be available to the public in accordance with W.Va. Code §§22-5-1 et seq. and 29B-1-1 et seq.

4.1.b. Any provision related to section 112(r) of the CAA.

4.1.c. Part 63.150 is excluded from adoption.

§45-34-5. Director.

5.1. Any and all references in 40 CFR Part 63 to the "Administrator" is amended to be the "Director" except in the following references which shall remain "Administrator."

- 5.1.a. Part 63.1(a)(2)
 - 5.1.b. Part 63.1(a)(3)
 - 5.1.c. Part 63.1(b)(2)
 - 5.1.d. Part 63.1(c)(2)(ii)
 - 5.1.e. Part 63.2 pertaining to the definition of:
 - Administrator
 - Alternative Emission Limitation
 - Alternative Emission Standard
 - Alternative Test Method
 - Approved Permit Program
 - Equivalent Emission Limitation
 - Federally Enforceable
 - Lesser Quantities
 - Major Source
 - Performance Audit
 - Permitting Authority
 - Regulation Promulgation Schedule
 - Responsible Official
 - 5.1.f. Part 63.5(b)(4)
 - 5.1.g. Part 63.5(b)(5)
 - 5.1.h. Part 63.6(g)(i)
 - 5.1.i. Part 63.6(g)(9)(i)
 - 5.1.j. Part 63.6(g)(9)(ii)
-

5.1.k.	Part 63.6(h)(9)
5.1.l.	Part 63.7(c)(4)(iii)
5.1.m.	Part 63.9(a)(3)
5.1.n.	Part 63.9(a)(3)
5.1.o.	Part 63.10(3)
5.1.p.	Part 63.12(b)(1)
5.1.q.	Part 63.12(c)
5.1.r.	Part 63.13(a)
5.1.s.	Part 63.13(b)
5.1.t.	Part 63.52(a)
5.1.u.	Part 63.56
5.1.v.	Part 63.100 (l)(1)(iii)
5.1.w.	Part 63.101(a)
5.1.x.	Part 63.102(a)(2)(b)
5.1.y.	Part 63.102(b)(3)
5.1.z. Administrator.	Part 63.103(b)(3)(d), pertaining to the second occurrence of the definition of
5.1.aa.	Part 63.106(a)
5.1.ab.	Part 63.111(4) pertaining to the definition of Administrator
5.1.ac.	Part 63.150(c)(3)
5.1.ad.	Part 63.150(c)(5)(ii)
5.1.ae.	Part 63.191(a)
5.1.af.	Part 63.192(d)(2)(e)
5.1.ag.	Part 63.192(g)(2)(h)

5.1.ah.	Part 63.193
5.1.ai.	Part 63.301
5.1.aj.	Part 63.302(a)(2)
5.1.ak.	Part 63.304(b)(3)
5.1.al.	Part 63.304(d)
5.1.am.	Part 63.307(e)(1)
5.1.an.	Part 63.311(g)(2)
5.1.ao.	Part 63.313
5.1.ap.	Part 63.321
5.1.aq.	Part 63.325(a)
5.1.ar.	Part 63.325(b)
5.1.as.	Part 63.325(c)
<u>5.1.at.</u>	<u>Part 63.342 pertaining to the use of "Administrator" in Table 1 to 63.342</u>
<u>5.1.au.</u>	<u>Part 63.342(f)(3)(i)(c)</u>
<u>5.1.av.</u>	<u>Part 63.343(c)(8)(ii)</u>
<u>5.1.aw.</u>	<u>Part 63.343(d)</u>
<u>5.1.ax.</u>	<u>Part 63.344(c)(4)</u>
<u>5.1.ay.</u>	<u>Part 63.347(a)</u>
<u>5.1.az.</u>	<u>Part 63.347(c)(1)</u>
<u>5.1.ba.</u>	<u>Reference 63.8(F)(2) of Table 1 to Subpart N</u>
<u>5.1.bb.</u>	<u>Part 63 Appendix A Method 306A Section 5.1.1.2.b</u>
<u>5.1.bc.</u>	<u>Part 63.366(a)</u>
<u>5.1.bd.</u>	<u>Part 63.366(a)(1)(ii)</u>

<u>5.1.be.</u>	<u>Part 63.366(a)(2)</u>
<u>5.1.bf.</u>	<u>Part 63.401(3), pertaining to the second occurrence of "Administrator" in the definition of Responsible official</u>
<u>5.1.bg.</u>	<u>Part 63.404</u>
<u>5.1.bh.</u>	<u>Part 63.428(h)</u>
<u>5.1.bi.</u>	<u>Part 63.429(a)</u>
<u>5.1.bj.</u>	<u>Part 63.460(e)</u>
<u>5.1.bk.</u>	<u>Part 63.461 pertaining to the definition of Administrator</u>
<u>5.1.bl.</u>	<u>Reference 63.2 of Appendix C to Subpart T</u>
<u>5.1.bm.</u>	<u>Part 63.522 (three times in one sentence)</u>
<u>5.1.bn.</u>	<u>Part 63.703(h)(3)</u>
<u>5.1.bo.</u>	<u>Part 63.707(a)</u>
<u>5.1.bp.</u>	<u>Part 63.708(a)</u>

§45-34-6. Permits.

6.1. Nothing contained in this rule shall be construed or inferred to mean that permit requirements in accordance with applicable rules shall in any way be limited or inapplicable.

§45-34-7. Inconsistency Between Rules.

7.1. In the event of any inconsistency between this rule and any other existing rule of 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, rule or regulation.

40 CFR citation

OMB Control No.

National Emissions Standards for Hazardous Air Pollutants for Source Categories:

63.363-63.367

2060-0283

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

2. Section 63.14 is amended by adding paragraph (b)(4) to read as follows:

§ 63.14 Incorporation by reference.

(b) * * *

(4) ASTM D 3695-88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas

Chromatography, IBR approved for § 63.365(e)(1) of subpart O of this part.

3. By adding a new subpart O to read as follows:

Subpart O—Ethylene Oxide Emissions Standards for Sterilization Facilities

Sec.

63.360 Applicability.

63.361 Definitions.

63.362 Standards.

63.363 Compliance and performance testing.

63.364 Monitoring requirements.

63.365 Test methods and procedures.

63.366 Reporting requirements.

63.367 Recordkeeping requirements.

Subpart O—Ethylene Oxide Emissions Standards for Sterilization Facilities

§ 63.360 Applicability.

(a) All sterilization sources using 1 ton (see definition) in sterilization or fumigation operations are subject to the emissions standards in § 63.362, except as specified in paragraphs (b) through (e) of this section. Owners or operators of sources using 1 ton (see definition) subject to the provisions of this subpart must comply with the requirements of subpart A, of this part according to the applicability of subpart A of this part to such sources in Table 1 of this section.

TABLE 1 OF SECTION 63.360. GENERAL PROVISIONS, APPLICABILITY TO SUBPART Q

Reference	Applies to sources using 10 tons in subpart O*	Applies to sources using 1 to 10 tons in subpart O*	Comment
63.1(a)(1)		Yes	Additional terms defined in § 63.361; when overlap between subparts A and O occurs, subpart O takes precedence.
63.1(a)(2)		Yes	
63.1(a)(3)		Yes	
63.1(a)(4)		Yes	Subpart O clarifies the applicability of each paragraph in subpart A to sources subject to subpart O.
63.1(a)(5)		No	Reserved.
63.1(a)(6)		Yes	
63.1(a)(7)		Yes	
63.1(a)(8)		Yes	
63.1(a)(9)		No	Reserved.
63.1(a)(10)		Yes	
63.1(a)(11)		Yes	§ 63.366(a) of subpart O also allows report submissions via fax and on electronic media.
63.1(a)(12)–(14)		Yes	
63.1(b)(1)–(2)		Yes	
63.1(b)(3)		No	§ 63.367 clarifies the applicability of recordkeeping requirements for sources that determine they are not subject to the emissions standards.
63.1(c)(1)		Yes	Subpart O clarifies the applicability of each paragraph in subpart A to sources subject to subpart O in this table.
63.1(c)(2)		Yes	Subpart O also specifies which sources are required to obtain a Title V permit in § 63.360.
63.1(c)(3)		No	Reserved.
63.1(c)(4)		Yes	
63.1(c)(5)		No	§ 63.360 specifies applicability.
63.1(d)		No	Reserved.
63.1(e)		Yes	
63.2		Yes	Additional terms defined in § 63.361; when overlap between subparts A and O occurs, subpart O takes precedence.
63.3		Yes	Other units used in subpart O are defined in the text of subpart O.
63.4(a)(1)–(3)		Yes	
63.4(a)(4)		No	Reserved.
63.4(a)(5)		Yes	
63.4(b)		Yes	

to later

TABLE 1 OF SECTION 63.360. GENERAL PROVISIONS APPLICABILITY TO SUBPART Q—Continued

Reference	Applies to sources using 10 tons in subpart Q*	Applies to sources using 1 to 10 tons in subpart Q*	Comment
63.4(a)(5)		Yes	
63.4(b)		Yes	
63.4(c)		Yes	
63.5(a)		No	§ 63.366(b)(1) contains applicability requirements for constructed or reconstructed sources.
63.5(b)(1)	Yes	No	
63.5(b)(2)		No	Reserved.
63.5(b)(3)		No	See § 63.366(b)(2).
63.5(b)(4)	Yes	No	
63.5(b)(5)	Yes	No	
63.5(b)(6)	Yes	No	
63.5(c)		No	Reserved.
63.5(d)(1)-(2)		No	See § 63.366(b)(3).
63.5(d)(3)-(4)	Yes	No	
63.5(e)	Yes	No	
63.5(f)(1) and (2)		No	See § 63.366(b)(4).
63.6(a)(1)		Yes	
63.6(a)(2)		No	§ 63.360 specifies applicability.
63.6(b) and (c)		No	§ 63.360(g) specifies compliance dates for sources.
63.6(d)		No	Reserved.
63.6(e)		No	Subpart Q does not contain any operation and maintenance plan requirements.
63.6(f)(1)		No	§ 63.362(b) specifies when the standards apply.
63.6(f)(2)(i)		Yes	
63.6(f)(2)(ii)		Yes	§ 63.363 specifies parameters for determining compliance.
63.6(f)(2)(iii)-(iv)		No	
63.6(f)(2)(v)		Yes	
63.6(f)(3)		Yes	
63.6(g)		Yes	
63.6(h)		No	Subpart Q does not contain any opacity or visible emission standards.
63.6(i)(1)-(14)		Yes	
63.6(i)(15)		No	Reserved
63.6(i)(16)		Yes	
63.6(j)		Yes	
63.7(a)(1)		Yes	
63.7(a)(2)		No	§ 63.365(a)(2) specifies performance test dates.
63.7(a)(3)		Yes	
63.7(b)		Yes	
63.7(c)	Yes	No	
63.7(d)	Yes	No	
63.7(e)		Yes	§ 63.365 also contains test methods specific to sources subject to the emissions standards.
63.7(f)		Yes	
63.7(g)(1)		Yes	
63.7(g)(2)		No	Reserved
63.7(g)(3)		Yes	
63.7(h)		Yes	
63.8(a)(1)		Yes	
63.8(a)(2)		Yes	
63.8(a)(3)		No	Reserved
63.8(a)(4)		Yes	
63.8(b)(1)		Yes	
63.8(b)(2)		Yes	
63.8(b)(3)		No	
63.8(c)(1) (i) and (ii)		No	A startup, shutdown, and malfunction plan is not required for these standards.
63.8(c)(1)(iii)		Yes	
63.8(c)(2)-(3)		Yes	
63.8(c)(4)-(5)		No	Frequency of monitoring measurements is provided in § 63.364; opacity monitors are not required for these standards.
63.8(c)(6)		No	Performance specifications for gas chromatographs and temperature monitors are contained in § 63.365.
63.8(c)(7)(A)-(B)		No	Performance specifications for gas chromatographs and temperature monitors are contained in § 63.365.
63.8(c)(7)(i)(C)		No	Opacity monitors are not required for these standards.
63.8(c)(7)(ii)		No	Performance specifications for gas chromatographs and temperature monitors are contained in § 63.365.
63.8(c)(8)		No	

TABLE 1 OF SECTION 63.368. GENERAL PROVISIONS APPLICABILITY TO SUBPART Q—Continued

Reference	Applies to sources using 10 tons in subpart Q*	Applies to sources using 1 to 10 tons in subpart Q*	Comment
63.8(c)	Yes	No	
63.8(e)(1)		Yes	
63.8(e)(2)		Yes	
63.8(e)(3)	Yes	No	
63.8(e)(4)		Yes	
63.8(e)(5)(i)		Yes	
63.8(e)(5)(ii)		No	Opacity monitors are not required for these standards.
63.8(f)(1)–(5)		Yes	
63.8(f)(6)		No	
63.8(g)(1)		Yes	
63.8(g)(2)		No	
63.8(g)(3)–(5)		Yes	
63.9(a)		Yes	
63.9(b)(1)–(i)		Yes	
63.9(b)(1)(ii)–(iv)		No	§ 63.368(c)(1)(i) contains language for sources that increase usage such that the source becomes subject to the emissions standards.
63.9(b)(2)–(3)		Yes	§ 63.368(c)(3) contains additional information to be included in the initial report for existing and new sources.
63.9(b)(4)–(5)		No	§ 63.368(c)(1)(ii) and (iv) contains requirements for new or reconstructed sources subject to the emissions standards.
63.9(c)		Yes	
63.9(d)		No	
63.9(e)		Yes	
63.9(f)		No	Opacity monitors are not required for these standards.
63.9(g)(1)		Yes	
63.9(g)(2)–(3)		No	Opacity monitors and relative accuracy testing are not required for these standards.
63.9(h)(1)–(3)		Yes	
63.9(h)(4)		No	
63.9(h)(5)		No	
63.9(h)(6)		Yes	Reserved.
63.9(i)		Yes	§ 63.368(c)(2) instructs sources to submit actual data.
63.9(j)		Yes	
63.9(k)		Yes	
63.10(a)(1)		Yes	
63.10(a)(2)(i)		No	Not applicable due to batch nature of the industry.
63.10(a)(2)(ii)		Yes	
63.10(a)(2)(iii)		No	
63.10(a)(2)(iv)–(v)		No	A startup, shutdown, and malfunction plan is not required for these standards.
63.10(a)(2)(vi)–(xii)		Yes	
63.10(b)(2)(i)–(iii)		No	
63.10(b)(2)(iv)		Yes	
63.10(b)(3)		No	§ 63.367 (b) and (c) contains applicability determination requirements.
63.10(c)(1)		Yes	
63.10(c)(2)–(4)		No	Reserved.
63.10(c)(5)		Yes	
63.10(c)(6)		No	
63.10(c)(7)		No	Not applicable due to batch nature of the industry.
63.10(c)(8)		Yes	
63.10(c)(9)		No	
63.10(c)(10)–(13)		Yes	Reserved.
63.10(c)(14)	Yes	No	A startup, shutdown, and malfunction plan is not required for these standards.
63.10(c)(15)		No	
63.10(d)(1)		Yes	
63.10(d)(2)		Yes	
63.10(d)(3)		No	Subpart Q does not contain opacity or visible emissions standards.
63.10(d)(4)		Yes	
63.10(d)(5)		No	A startup, shutdown, and malfunction plan is not required for these standards.
63.10(e)(1)		Yes	
63.10(e)(2)(i)		Yes	
63.10(e)(2)(ii)		No	
63.10(e)(3)–(iv)		Yes	Opacity monitors are not required for these standards.

TABLE 1 OF SECTION 63.360. GENERAL PROVISIONS APPLICABILITY TO SUBPART Q

Reference	Applies to sources using 10 tons in subpart Q*	Applies to sources using 1 to 10 tons in subpart Q*	Comment
63.10(e)(3)(v)		No	\$ 63.366(a)(3) specifies contents and submittal dates for excess emissions and monitoring system performance reports. Opacity monitors are not required for these standards.
63.10(e)(3)(vi)-(viii)		Yes	
63.10(e)(4)		No	
63.10(f)		Yes	
63.11		Yes	
63.12-63.15		Yes	

* See definition.

(b) Sterilization sources using less than 1 ton (see definition) are not subject to the emissions standards in § 63.362. The recordkeeping requirements of § 63.367(c) apply.

(c) This subpart does not apply to beehive fumigators.

(d) This subpart does not apply to research or laboratory facilities as defined in section 112(c)(7) of title III of the Clean Air Act Amendment of 1990.

(e) This subpart does not apply to ethylene oxide sterilization operations at stationary sources such as hospitals, doctors offices, clinics, or other facilities whose primary purpose is to provide medical services to humans or animals.

(f) The owner or operator of a source using 1 ton (see definition) is required to obtain a title V permit from the permitting authority in which the source is located.

(g) The owner or operator shall comply with the provisions of this subpart as follows:

(1) All sources subject to the emissions standards in § 63.362 with an initial startup date before December 8, 1997, no later than 3 years after the effective date.

(2) All sources subject to the emissions standards in § 63.362 with an initial startup date after December 8, 1997, immediately upon initial startup of the source.

(3) All sources using less than 10 tons that increase their ethylene oxide usage after December 8, 1997 such that any vent becomes subject to the emissions standards in § 63.362, immediately upon becoming subject to the emissions standards.

§ 63.361 Definitions.

Terms and nomenclature used in this subpart are defined in the Clean Air Act (the Act) as amended in 1990, §§ 63.2 and 63.3 of subpart A of this part, or in this section. For the purposes of subpart Q, if the same term is defined in subpart A and in this section, it shall have the meaning given in this section.

Aeration room means any vessel or room that is used to facilitate off-gassing

of ethylene oxide at a sterilization facility.

Aeration room vent means the point(s) through which the evacuation of ethylene oxide-laden air from an aeration room occurs.

Baseline temperature means any temperature at the outlet point of a catalytic oxidation unit control device or at the exhaust point from the combustion chamber for a thermal oxidation unit control device established during the performance test when the respective unit achieves at least 99-percent control of ethylene oxide emissions.

Chamber exhaust vent means the point(s) through which ethylene oxide-laden air is removed from the sterilization chamber during chamber unloading following the completion of sterilization and associated air washes.

Compliance date means the date by which a source subject to the emissions standards in § 63.362 is required to be in compliance with the standard.

Effective date means the date of promulgation in the Federal Register notice.

Initial startup date means the date when a source subject to the emissions standards in § 63.362 first begins operation of a sterilization process.

Manifolding emissions means combining ethylene oxide emissions from two or more different vent types for the purpose of controlling these emissions with a single control device.

Maximum ethylene glycol concentration means any concentration of ethylene glycol in the scrubber liquor of an acid-water scrubber control device established during a performance test when the scrubber achieves at least 99-percent control of ethylene oxide emissions.

Maximum liquor tank level means any level of scrubber liquor in the acid-water scrubber liquor recirculation tank established during a performance test when the scrubber achieves at least 99-percent control of ethylene oxide emissions.

Oxidation temperature means the temperature at the outlet point of a catalytic oxidation unit control device or at the exhaust point from the combustion chamber for a thermal oxidation unit control device.

Parametric monitoring means monitoring of a specific operating parameter of the control device that demonstrates that the control device is operating under conditions that meet the standard.

Source(s) using less than 1 ton means source(s) using less than 907 kg (1 ton) of ethylene oxide within all consecutive 12-month periods after December 8, 1996.

Source(s) using 1 ton means source(s) using 907 kg (1 ton) or more of ethylene oxide within any consecutive 12-month period after December 8, 1996.

Source(s) using 1 to 10 tons means source(s) using 907 kg (1 ton) or more of ethylene oxide in any consecutive 12-month period but less than 9,070 kg (10 tons) of ethylene oxide in all consecutive 12-month periods after December 6, 1996.

Source(s) using less than 10 tons means source(s) using less than 9,070 kg (10 tons) of ethylene oxide in all consecutive 12-month periods after December 6, 1996.

Source(s) using 10 tons means source(s) using 9,070 kg (10 tons) or more of ethylene oxide in any consecutive 12-month period after December 6, 1996.

Sterilization chamber means any enclosed vessel or room that is filled with ethylene oxide gas, or an ethylene oxide/inert gas mixture, for the purpose of sterilizing and/or fumigating at a sterilization facility.

Sterilization chamber vent means the point (prior to the vacuum pump) through which the evacuation of ethylene oxide from the sterilization chamber occurs following sterilization or fumigation, including any subsequent air washes.

Sterilization facility means any stationary source where ethylene oxide

is used in the s
of materials
St

is used in the sterilization or fumigation of materials.

Sterilization operation means any time when ethylene oxide is removed from the sterilization chamber through the sterilization chamber vent or the

chamber exhaust vent or when ethylene oxide is removed from the aeration room through the aeration room vent.

§ 63.362 Standards.

(a) Each owner or operator of a source subject to the provisions of this subpart

shall comply with these requirements on and after the compliance date specified in § 63.365(g). The standards of this section are summarized in Table 1 of this section.

TABLE 1 OF SECTION 63.362.—STANDARDS FOR ETHYLENE OXIDE COMMERCIAL STERILIZERS AND FUMIGATORS

Existing and new sources	Source type	Sterilization chamber vent	Aeration room vent	Chamber exhaust vent
Source size	<907 kg (<1 ton) ≥907 kg and <9,070 kg (≥1 ton and <10 tons) ≥9,070 kg (≥10 tons)	No controls required; minimal recordkeeping requirements apply (see § 63.367(c)). 99% emission reduction (see § 63.362(c)). 99% emission reduction (see § 63.362(c)).	No control 1 ppm maximum outlet concentration or 99% emission reduction (see § 63.362(d)).	Maximum chamber concentration limit of 5,300 ppm prior to activation of the chamber exhaust ¹ (see § 63.362(a)(2)). Manifesto to a control device used to comply with § 63.362 (c) or (d) or 99 percent emission reduction (see § 63.362(e)(7)).

¹ Affected sources may show compliance by manifolding emissions to a control device used to comply with § 63.362 (c) or (d) by reducing emissions by at least 99 percent.

(b) *Applicability of emission limits.* The emission limitations of paragraphs (c), (d), and (e) of this section apply during sterilization operation. The emission limitations do not apply during periods of malfunction.

(c) *Sterilization chamber vent at sources using 1 ton.* Each owner or operator of a sterilization source using 1 ton shall reduce ethylene oxide emissions to the atmosphere by at least 99 percent from each sterilization chamber vent.

(d) *Aeration room vent at sources using 10 tons.* Each owner or operator of a sterilization source using 10 tons shall reduce ethylene oxide emissions to the atmosphere from each aeration room vent to a maximum concentration of 1 ppmv or by at least 99 percent, whichever is less stringent, from each aeration room vent.

(e) (1) *Chamber exhaust vent at sources using 10 tons.* Each owner or operator of a sterilization source using 10 tons shall either reduce ethylene oxide emissions to the atmosphere by manifolding emissions from each chamber exhaust vent to a control device used to comply with paragraphs (c) or (d) of this section or shall reduce ethylene oxide emissions by at least 99 percent from each chamber exhaust vent (without manifolding).

(2) *Chamber exhaust vent at sources using 1 to 10 tons.* Each owner or operator of a sterilization source using 1 to 10 tons shall limit ethylene oxide emissions from the chamber exhaust vent to the atmosphere to a maximum concentration of 5,300 ppmv from each chamber exhaust vent. If the owner or

operator chooses to limit emissions to 5,300 ppmv concentration through the use of a control device, the owner or operator may choose either to manifold ethylene oxide emissions from each chamber exhaust vent to a control device used to comply with paragraph (c) of this section or to reduce ethylene oxide emissions by at least 99 percent (without manifolding).

§ 63.363. Compliance and performance testing.

(a) (1) The owner or operator of a source subject to emissions standards in § 63.362 shall conduct an initial performance test using the procedures listed in § 63.7 of subpart A of this part according to the applicability in Table 1 of § 63.362, the procedures listed in this section, and the test methods listed in § 63.365.

(2) The owner or operator of all sources subject to these emissions standards shall complete the performance test within 180 days after the compliance date for the specific source as determined in § 63.365(g).

(b) The following procedures shall be used to determine compliance with the emission limits under § 63.362(c), the sterilization chamber vent standard:

(1) During the performance test required in paragraph (a) of this section, the owner or operator shall determine the efficiency of control devices used to comply with § 63.362(c) using the test methods and procedures in § 63.365(b)(1). The owner or operator shall also determine the following:

(i) For facilities with acid-water scrubbers, the owner or operator shall establish as a site-specific operating

parameter during the test methods and procedures in § 63.365(b)(1) either:

(A) The maximum ethylene glycol concentration using the procedures described in § 63.365(e)(1); or

(B) The maximum liquor tank level using the procedures described in § 63.365(e)(2).

(ii) For facilities with catalytic oxidizers or thermal oxidizers, the owner or operator shall establish as a site-specific operating parameter the baseline temperature during the performance test in § 63.365(b)(2) using the procedures described in § 63.365(f)(1).

(2) Following the date on which the initial performance test is completed, the owner or operator shall comply with one of the following provisions:

(i) For facilities with acid-water scrubbers, operation of the facility with an ethylene glycol concentration in the scrubber liquor in excess of the maximum ethylene glycol concentration or the liquor tank level in excess of the maximum liquor tank level shall constitute a violation of the sterilization chamber vent standard.

(ii) For facilities with catalytic oxidizers or thermal oxidizers, operation of the facility with the oxidation temperature, averaged over three cycles, more than 5.6°C (10°F) below the baseline temperature shall constitute a violation of the sterilization chamber vent standard.

(c) The following procedures shall be used to determine compliance with the emission limits under § 63.362(d), the aeration room vent standard:

(1) During the performance test required in paragraph (a) of this section, the owner or operator shall determine either:

- (i) The concentration of ethylene oxide emitted from the aeration room into the atmosphere (after any control device used to comply with § 63.362(d)) using the methods in § 63.365(c)(1); or
- (ii) The efficiency of the control device used to comply with § 63.362(d) using the test methods and procedures in § 63.365(d)(1).

(2) For facilities seeking to comply with paragraph (c)(1)(ii) of this section with catalytic oxidizers or thermal oxidizers, the owner or operator must also establish as a site-specific operating parameter the baseline temperature using the procedures described in § 63.365(f)(2).

(3) Following the date on which the initial performance test is completed, the owner or operator of a facility shall comply with one of the following provisions:

(i) For facilities continuously measuring the ethylene oxide concentration emitted from the aeration room (after any control device), operation of the facility with a 3-hour average ethylene oxide concentration in excess of the 1 ppmv ethylene oxide concentration limit shall constitute a violation of the aeration room vent standard.

(ii) For facilities with catalytic oxidizers or thermal oxidizers, operation of the facility with the oxidation temperature, averaged over three hours, more than 5.6°C (10°F) below the baseline temperature shall constitute a violation of the aeration room vent standard.

(d) The following procedures shall be used to determine compliance with the emission limits under § 63.362(e)(1), the chamber exhaust vent standard for sources using 10 tons:

(1) For facilities manifolding emissions from the chamber exhaust vent to a control device controlling emissions from the sterilization chamber vent and/or the aeration room vent, the owner or operator shall comply with the appropriate compliance provisions for that vent type and control device (see paragraphs (b) and (c) of this section).

(2) For facilities not manifolding emissions from the chamber exhaust vent (to a control device used to comply with § 63.362(c) or (d)), the owner or operator shall comply with the following:

(i) During the performance test required in paragraph (a) of this section, the owner or operator shall determine the efficiency of control devices used to

comply with § 63.362(e)(1) using the test methods and procedures in § 63.365(d)(2) as well as the following:

(A) For facilities with acid-water scrubbers, the owner or operator shall establish as a site-specific operating parameter either:

- (1) The maximum ethylene glycol concentration using the procedures described in § 63.365(e)(1); or
- (2) The maximum liquor tank level using the procedures described in § 63.365(e)(2).

(B) For facilities with catalytic oxidizers or thermal oxidizers, the owner or operator shall establish as a site-specific operating parameter the baseline temperature using the procedures described in § 63.365(f)(3).

(ii) Following the date on which the initial performance test is completed, the owner or operator of a facility shall comply with one of the following provisions:

(A) For facilities with acid-water scrubbers, operation of the facility with an ethylene glycol concentration in the scrubber liquor in excess of the maximum ethylene glycol concentration or the liquor tank level in excess of the maximum liquor tank level shall constitute a violation of the chamber exhaust vent standard for sources using 10 tons.

(B) For facilities with catalytic oxidizers or thermal oxidizers, operation of the facility with the oxidation temperature, averaged over the cycle, more than 5.6°C (10°F) below the baseline temperature shall constitute a violation of the chamber exhaust vent standard for sources using 10 tons.

(e) The following procedures shall be used to determine compliance with the emission limits under § 63.362(e)(2), the chamber exhaust vent standard for sources using 1 to 10 tons:

(1) For facilities manifolding emissions from the chamber exhaust vent to a control device controlling emissions from the sterilization chamber vent, the owner or operator shall comply with the appropriate compliance provisions for the appropriate control technology (see paragraph (b) of this section).

(2) For facilities not manifolding emissions from the chamber exhaust vent (to a control device used to comply with § 63.362(c)), during the performance test required in paragraph (a) of this section, the owner or operator shall either:

- (i) Determine the concentration of ethylene oxide in the sterilization chamber immediately prior to the operation of the chamber exhaust using the test methods and procedures in § 63.365(c)(2); or

(ii) Determine the efficiency of control devices used to comply with § 63.362(e)(2) using the test methods and procedures in § 63.365(d)(2) as well as the following:

(A) For facilities with acid-water scrubbers, the owner or operator shall establish as a site-specific operating parameter either:

- (1) The maximum ethylene glycol concentration using the procedures described in § 63.365(e)(1); or
- (2) The maximum liquor tank level using the procedures described in § 63.365(e)(2).

(B) For facilities with catalytic oxidizers or thermal oxidizers, the owner or operator shall establish as a site-specific operating parameter the baseline temperature using the procedures described in § 63.365(f)(3).

(3) Following the date on which the initial performance test is completed, the owner or operator of a facility shall comply with one of the following provisions:

(i) For facilities determining the ethylene oxide concentration, operation of the facility with the ethylene oxide concentration in the sterilization chamber (immediately prior to activation of the chamber exhaust) in excess of the 5,300 ppmv ethylene oxide concentration standard shall constitute a violation of the chamber exhaust vent standard for sources using 1 to 10 tons.

(ii) Following the date on which the initial performance test is completed, the owner or operator of a facility shall comply with one of the following provisions:

(A) For facilities with acid-water scrubbers, operation of the facility with an ethylene glycol concentration in the scrubber liquor in excess of the maximum ethylene glycol concentration or the liquor tank level in excess of the maximum liquor tank level shall constitute a violation of the chamber exhaust vent standard for sources using 1 to 10 tons.

(B) For facilities with catalytic oxidizers or thermal oxidizers, operation of the facility with the oxidation temperature, averaged over the cycle, more than 5.6°C (10°F) below the baseline temperature shall constitute a violation of the chamber exhaust vent standard for sources using 1 to 10 tons.

(f) For facilities complying with the emission limits under § 63.362 with a control technology other than acid-water scrubbers or catalytic or thermal oxidizers:

(1) The owner or operator of the facility shall provide to the Administrator information describing the design and operation of the air pollution control system including

recommendations for the operating parameters to be monitored to indicated proper operation and maintenance of the air pollution control system. Based on this information, the Administrator will determine the site-specific operating parameter(s) to be established during the performance test. During the performance test required in paragraph (a) of this section using the methods approved in § 63.365(g), the owner or operator shall determine the site-specific operating parameter(s) approved by the Administrator.

(2) Operation of the facility in a manner that exceeds a site-specific parameter established as a maximum requirement or falls below a site-specific parameter established as a minimum requirement (depending on the parameters monitored) shall constitute a violation of the applicable emissions standard under § 63.362.

§ 63.364 Monitoring requirements.

(a)(1) The owner or operator of a source subject to emissions standards in § 63.362 shall comply with the monitoring requirements in § 63.8 of subpart A of this part, according to the applicability in Table 1 of § 63.360, and in this section.

(2) Each owner or operator of an ethylene oxide sterilization facility subject to these emissions standards shall monitor the parameters specified in this section. All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the source are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(b) For sterilization facilities complying with § 63.363 (b), (d), or (e) through the use of an acid-water scrubber, the owner or operator shall either:

(1) Sample the scrubber liquor and analyze and record once per week the ethylene glycol concentration of the scrubber liquor using the test methods and procedures in § 63.365(e)(1). Monitoring is required during a week only if the scrubber unit has been operated; or

(2) Measure and record once per week the level of the scrubber liquor in the recirculation tank. The owner or operator shall install, maintain, and use a liquid level indicator to measure the scrubber liquor tank level (i.e., a marker on the tank wall, a dipstick, a magnetic indicator, etc.).

(c) For sterilization facilities complying with § 63.363(b), (c); (d), or (e) through the use of catalytic oxidation or thermal oxidation, the owner or operator shall continuously monitor and record the oxidation temperature at the outlet to the catalyst bed or at the exhaust point from the thermal combustion chamber using the temperature monitor described in paragraph (c)(4) of this section.

(1) For the sterilization chamber vent, a data acquisition system for the temperature monitor shall compute and record an average oxidation temperature over the length of the cycle (based on the length of the cycle used during the performance test in § 63.365(b)(2)) and a three-cycle block average every third cycle.

(2) For the aeration room vent, a data acquisition system for the temperature monitor shall compute and record an average oxidation temperature each hour and a 3-hour block average every third hour.

(3) For the chamber exhaust vent, a data acquisition system for the temperature monitor shall compute and record an average oxidation temperature over the length of the cycle (based on the length of the cycle used during the performance test in § 63.365(d)(2)).

(4) The owner or operator shall install, calibrate, operate, and maintain a temperature monitor accurate to within $\pm 5.5^{\circ}\text{C}$ ($\pm 10^{\circ}\text{F}$) to measure the oxidation temperature. The owner or operator shall verify the accuracy of the temperature monitor twice each calendar year with a reference temperature monitor (traceable to National Institute of Standards and Technology (NIST) standards or an independent temperature measurement device dedicated for this purpose). During accuracy checking, the probe of the reference device shall be at the same location as that of the temperature monitor being tested.

(d) For sterilization facilities complying with § 63.363(b), (c), (d), or (e) through the use of a control device other than acid-water scrubbers or catalytic or thermal oxidizers, the owner or operator shall monitor the parameters as approved by the Administrator using the methods and procedures in § 63.365(g).

(e) For sterilization facilities complying with § 63.363(c)(3)(i) or (e)(2)(i) through the use of direct measurement of ethylene oxide concentration, the owner or operator shall follow either paragraph (e)(1) or (2) of this section:

(1) Measure and record once per hour the ethylene oxide concentration at the outlet to the atmosphere from the

aeration room vent after any control device according to the procedures specified in § 63.365(c)(1). The owner or operator shall compute and record a 3-hour average every third hour. The owner or operator will install, calibrate, operate, and maintain a gas chromatograph consistent with the requirements of performance specification (PS) 9 in 40 CFR part 60, Appendix B, to measure ethylene oxide. The daily calibration requirements of section 7.2 of PS 9 are required only on days when ethylene oxide emissions are vented to the control device from the aeration room vent.

(2) Measure and record the ethylene oxide concentration in the sterilization chamber immediately before the chamber exhaust is activated according to the procedures specified in § 63.365(c)(2). The owner or operator shall install, calibrate, operate, and maintain a gas chromatograph consistent with the requirements of PS 9 to measure ethylene oxide concentration. The daily calibration requirements of section 7.2 of PS 9 are required only on days when the chamber exhaust is activated.

(f) For sterilization facilities complying with § 63.363(d)(1) or (e)(1) by manifolded emissions from the chamber exhaust vent to a control device controlling emissions from another vent type, the owner or operator shall monitor the control device to which emissions from the chamber exhaust vent are manifolded using the appropriate monitoring requirements in paragraphs (a) through (e) of this section and record the monitoring data.

§ 63.365 Test methods and procedures.

(a) *Performance testing.* The owner or operator of a source subject to the emissions standards in § 63.362 shall comply with the performance testing requirements in § 63.7 of subpart A of this part, according to the applicability in Table 1 of § 63.360, and in this section.

(b) *Efficiency at the sterilization chamber vent.* The following procedures shall be used to determine the efficiency of all types of control devices used to comply with § 63.362(c), sterilization chamber vent standard.

(1) *First evacuation of the sterilization chamber.* This procedure shall be performed on an empty sterilizer for the duration of the first evacuation under normal operating conditions (i.e., sterilization cycle pressure and temperature) and charging a typical amount of ethylene oxide to the sterilization chamber.

(i) The amount of ethylene oxide loaded into the sterilizer (W_L) shall be determined by either:

(A) Weighing the ethylene oxide gas cylinder(s) used to charge the sterilizer before and after charging. Record these weights to the nearest 45 g (0.1 lb). Multiply the total mass of gas charged by the weight percent ethylene oxide present in the gas.

(B) Installing calibrated rotameters at the sterilizer inlet and measuring flow rate and duration of sterilizer charge. Use the following equation to convert flow rate to weight of ethylene oxide:

$$W_c = F_v \times t \times \%EO_v \times \left(\frac{MW}{SV} \right)$$

where:

W_c =weight of ethylene oxide charged, g (lb)

F_v =volumetric flow rate, liters per minute (L/min) corrected to 20 °C and 101.325 kilopascals (kPa) [scf per minute (scfm) corrected to 68 °F and 1 atmosphere of pressure (atm)]; the flowrate must be constant during time (t)

t=time, min

$\%EO_v$ =volume fraction ethylene oxide

SV=standard volume, 24.45 liters per mole (L/mole)=22.414 L/mole ideal gas law constant corrected to 20 °C and 101.325 kPa (345.32 scf per mole (scf/mole)=359 scf/mole ideal gas law constant corrected to 68 °F and 1 atm).

MW=molecular weight of ethylene oxide, 44.05 grams per gram-mole (g/g-mole) (44.05 pounds per pound-mole (lb/lb-mole)), or

(C) Calculating the mass based on the conditions of the chamber immediately after it has been charged using the following equation:

$$W_c = \frac{MW \times \%EO_v \times P \times V}{R \times T}$$

where:

P=chamber pressure, kPa (psia)

V=chamber volume, liters (L) (ft³)

R=gas constant, 8.313 L·kPa/g-mole·(10.73 psia·ft³/mole·R)

T=temperature, K (°R)

Note: If the ethylene oxide concentration is in weight percent, use the following equation to calculate mole fraction:

$$\%EO_v = \frac{W_{EO}}{W_{EO} + \left(W_1 \times \frac{MW}{MW_1} \right)}$$

where:

W_{EO} =weight percent of ethylene oxide

W_1 =weight percent of compound in the balance of the mixture

MW₁=molecular weight of compound in the balance gas mixture

(ii) The residual mass of ethylene oxide in the sterilizer shall be determined by recording the chamber temperature, pressure, and volume after the completion of the first evacuation and using the following equation:

$$W_r = \frac{MW \times \%EO_v \times P \times V}{R \times T}$$

where:

W_r =weight of ethylene oxide remaining in chamber (after the first evacuation), in g (lb)

(iii) Calculate the total mass of ethylene oxide at the inlet to the control device (W_i) by subtracting the residual mass (W_r) calculated in paragraph (b)(1)(ii) of this section from the charged weight (W_c) calculated in paragraph (b)(1)(i) of this section.

(iv) The mass of ethylene oxide emitted from the control device outlet (W_o) shall be calculated by continuously monitoring the flow rate and concentration using the following procedure:

(A) Measure the flow rate through the control device exhaust continuously during the first evacuation using the procedure found in 48 CFR part 80, appendix A, Test Methods 2, 2A, 2C, or 2D, as appropriate. Method 2D (using orifice plates or flowtype meters) is recommended for measuring flow rates from sterilizer control devices.) Record the flow rate at 1-minute intervals throughout the test cycle, taking the first reading within 15 seconds after time zero. Time zero is defined as the moment when the pressure in the sterilizer is released. Connect the flow to standard conditions (20 °C and 101.325 kPa (68 °F and 1 atm)) and determine the flow rate for the run as outlined in the test methods listed in paragraph (b) of this section.

(B) The Tedlar bag sampling procedure in section 7.1 of Test Method 18, 40 CFR part 80, appendix A (hereafter referred to as Method 18) shall be used to collect samples of exhaust gas throughout the test cycle. Follow the procedures in paragraph (b)(1)(iv)(B)(1) or (2) of this section.

(1) Continuously sample a slipstream of the control device outlet into a Tedlar bag by having a Tedlar bag attached to the slipstream for the entire duration of the run for an integrated bag sample. Whenever a Tedlar bag is full, a new bag must be reattached immediately. Note the time the bag is changed so the sample time and corresponding flow rates can be determined for each bag.

(2) Follow the procedures in section 6 of Method 18 and choose the

appropriate column, analytical apparatus, and calibration gases for the analysis of the bag samples collected. The bag samples shall be analyzed within 8 hours of collection.

(ii) Prepare a graph of volumetric flow rate versus time corresponding to the period each bag was sampled. Integrate the area under the curve to determine the volume.

(iii) Calculate the mass of ethylene oxide for each bag by using the following equation:

$$W_b = C \times V \times \frac{MW}{SV} \times \frac{1}{10^6}$$

where:

W_b =Mass of ethylene oxide for each bag, g (lb)

C=concentration of ethylene oxide in ppmv

V=volume of gas exiting the control device corresponding to each bag sample corrected to standard conditions, L (ft³)

$1/10^6$ =correction factor $L_{EO}/10^6 L_{TOTAL GAS}$ ($ft^3 EO/10^6 ft^3 TOTAL GAS$)

Sum the mass corresponding to each bag (W_b) used during the evacuation to calculate the total mass (W_o).

(iv) Calculate the efficiency by the equation in paragraph (b)(1)(v) of this section.

(2) Collect a Tedlar bag (or equivalent collection device) sample at 1-minute intervals throughout the test cycle. (The first bag must be in place and sampling at t=15 seconds. A fresh bag shall be in place and sampling exhaust gas at each 1-minute mark after time zero.) Collect enough sample gas in each bag to complete the analysis. Each bag sample shall be labeled with the sampling time and run number.

(i) Follow the procedures in section 6 of Method 18 and choose the appropriate column, analytical apparatus, and calibration gases for the analysis of the bag samples collected. The bag samples shall be analyzed within 8 hours of collection. (Syringe samples should be analyzed within 4 hours.)

(ii) Plot a concentration versus time curve using the average concentration, in ppmv, determined in each bag sample. Prepare another graph of volumetric flow rate versus time. Calculate the mass flow at each 1-minute interval point by selecting the concentration (C) and volumetric flow rate corrected to standard conditions (F_v) at each 1-min point.

(iii) Use the following equation to determine the mass flow rate of ethylene oxide exiting the control device:

$$W_i = C \times F_v \times \frac{MW}{SV} \times \frac{1}{10^6}$$

where:

W_i = mass flow rate of ethylene oxide

(iv) Plot a curve of mass flow rate versus time and integrate for total mass of ethylene oxide for the control device outlet (W_o).

(v) Calculate efficiency by the equations in paragraphs (b)(1)(v) and (vi) of this section.

(C) As an alternative to paragraph (b)(1)(ii) of this section, the direct interface sampling and analysis procedure described in Method 18, section 7.2, may be used to continuously monitor ethylene oxide concentration at the inlet and outlet of the control device using a gas chromatograph with flame ionization detector (GC/FID) or photoionization detector (GC/PID). This procedure may be used only if a vent sample may be sampled and analyzed by the GC/FID or GC/PID at least once per minute.

(1) Follow the procedures in section 6 of Method 18 and choose the appropriate column, analytical apparatus, and calibration gases for the analysis of the sample.

(2) Follow the procedures in paragraphs (b)(1)(iv)(B)(2)(ii) through (v) of this section.

(v) Determine control device efficiency (% Eff) using the following equation:

$$\% \text{Eff} = \frac{W_i - W_o}{W_i} \times 100$$

where:

% Eff = percent efficiency

W_i = mass flow rate into the control device

W_o = mass flow rate out of the control device

(vi) Repeat the procedures in paragraphs (b)(1)(i) through (v) of this section three times. The arithmetic average percent efficiency of the three runs shall determine the overall efficiency of the control device.

(2) *Last evacuation of the sterilization chamber.* One of the following procedures (paragraph (b)(2)(i) or (ii) of this section) shall be performed during the last evacuation of the sterilization chamber:

(i) The direct interface sampling and analysis procedure described in Method 18, section 7.2, may be used to continuously monitor ethylene oxide concentration at the inlet and outlet of the control device using a GC/FID or GC/PID; this procedure may be used only if a vent may be sampled and analyzed by the GC/FID or GC/PID once

per minute for the duration of the last cycle.

(A) Follow the procedures in section 6 of Method 18 and choose the appropriate column, analytical apparatus, and calibration gases for the analysis of the sample.

(B) Follow the procedures in paragraphs (b)(1)(iv)(B)(2)(ii) through (iv) of this section.

(C) Determine control device efficiency (% Eff) using the following equation:

$$\% \text{Eff} = \frac{W_i - W_o}{W_i} \times 100$$

where:

% Eff = percent efficiency

W_i = mass flow rate into the control device

W_o = mass flow rate out of the control device

(D) Repeat the procedures in paragraphs (b)(2)(i)(A) through (C) of this section three times. The arithmetic average percent efficiency of the three runs shall determine the overall efficiency of the control device.

(ii) The Tedlar bag sampling procedure in section 7.1 of Method 18, may be used to collect samples of inlet and exhaust gas for the duration of the last cycle.

(A) Continuously sample a slipstream of the control device inlet and outlet into a Tedlar bag by having a Tedlar bag attached to the slipstream for the entire duration of the run for an integrated bag sample. Whenever a Tedlar bag is full, a new bag must be reattached immediately. Note the time the bag is changed so the sample time and corresponding flow rates can be determined for each bag.

(B) Follow the procedures in section 6 of Method 18 and choose the appropriate column, analytical apparatus, and calibration gases for the analysis of the bag samples collected. The bag samples shall be analyzed within 8 hours of collection.

(C) Follow the procedures in paragraphs (b)(1)(iv)(B)(2)(ii) through (iv) of this section.

(D) Determine control device efficiency (% Eff) using the equation in paragraph (b)(2)(i)(C) of this section.

(E) Repeat the procedures in paragraphs (b)(2)(ii)(A) through (D) of this section three times. The arithmetic average percent efficiency of the three runs shall determine the overall efficiency of the control device.

(iii) In the event that the outlet concentration from the control device is below the detection limit for ethylene oxide for determining the efficiency in

paragraph (b)(2)(i)(C) or (ii)(D) of this section, the owner or operator shall assume the control device is meeting the standard in § 63.362(e)(1) or (2) if the inlet ethylene oxide concentration is at or below approximately 50 ppmv.

(c) *Concentration determination.* The following procedures shall be used to determine the ethylene oxide concentration as the monitored parameter established in § 63.363(c) and (e) for aeration room emissions and chamber exhaust vents, respectively, and to continuously monitor the ethylene oxide concentration for aeration room vents as established in § 63.364(e)(1) and to monitor the ethylene oxide concentration before activation of the chamber exhaust for chamber exhaust vents as established in § 63.364(e)(2).

(1) *Aeration room vent.* For determining the ethylene oxide concentration for aeration room emissions, the procedures outlined in section 7.2 of Method 18 shall be used. Repeat these procedures three times. The arithmetic average of the ethylene oxide concentration of the three test runs shall determine the overall outlet ethylene oxide concentration from the control device. Compliance testing of gas chromatographs shall be performed using PS 9 in 40 CFR part 60.

(2) *Sterilization chamber prior to activation of the chamber exhaust.* For determining the ethylene oxide concentration in the sterilization chamber before activation of the chamber exhaust, the procedures outlined in sections 7.2 or 7.3 of Method 18 shall be used. The ethylene oxide concentration from one test run shall determine the outlet ethylene oxide concentration from the chamber exhaust vent. Compliance testing of gas chromatographs shall be performed using PS 9 in 40 CFR part 60.

(d) *Efficiency determination at the aeration room vent and at the chamber exhaust vent (not manifolded).* The following procedures shall be used to determine the efficiency of a control device used to comply with § 63.362(d) or (e), the aeration room vent standard or the chamber exhaust vent standards (without manifolded the chamber exhaust vent emissions to another vent type):

(1) *Aeration room vent:* For determining the efficiency of aeration room vent control devices, either of the following test methods (paragraph (d)(1)(i) or (ii) of this section) may be used:

(i) the direct interface sampling and analysis procedure described in Method 18, section 7.2, may be used to continuously monitor ethylene oxide

concentration at the inlet and outlet of the control device using a GC/FID or GC/PID; this procedure may be used only if a vent may be sampled and analyzed by the GC/FID or GC/PID once every 5 minutes throughout a 1-hour test run.

(A) Follow the procedures in section 6 of Method 18 and choose the appropriate column, analytical apparatus, and calibration gases for the analysis of the sample.

(B) Follow the procedures in paragraphs (b)(1)(iv)(B)(2)(i) through (iv) of this section.

(C) Determine control device efficiency (% Eff) using the following equation:

$$\% \text{ Eff} = \frac{W_i - W_o}{W_i} \times 100$$

where:

% Eff = percent efficiency

W_i = mass flow rate into the control device

W_o = mass flow rate out of the control device

(D) Repeat the procedures in paragraphs (d)(1)(i)(A) through (C) of this section three times. The arithmetic average percent efficiency of the three runs shall determine the overall efficiency of the control device.

(ii) The Tedlar bag sampling procedure in section 7.1 of Method 18 may be used to collect samples of inlet and exhaust gas throughout a 1-hour test run.

(A) Continuously sample a slipstream of the control device inlet and outlet into a Tedlar bag by having a Tedlar bag attached to the slipstream for the entire duration of the run for an integrated bag sample. Whenever a Tedlar bag is full, a new bag must be reattached immediately. Note the time the bag is changed so the sample time and corresponding flow rates can be determined for each bag.

(B) Follow the procedures in section 6 of Method 18 and choose the appropriate column, analytical apparatus, and calibration gases for the analysis of the bag samples collected. The bag samples shall be analyzed within 8 hours of collection.

(C) Follow the procedures in paragraphs (b)(1)(iv)(B)(2)(i) through (iv) of this section.

(D) Determine control device efficiency (% Eff) using the equation in paragraph (d)(1)(i)(C) of this section.

(E) Repeat the procedures in paragraphs (d)(1)(ii)(A) through (D) of this section three times. The arithmetic average percent efficiency of the three runs shall determine the overall efficiency of the control device.

(2) *Chamber exhaust vent (not manifolded).* For determining the efficiency of non-manifolded chamber exhaust vent control devices, either of the following test methods (paragraph (d)(2)(i) or (ii) of this section) may be used:

(i) The direct interface sampling and analysis procedures described in Method 18, section 7.2 or 7.3, may be used to continuously monitor ethylene oxide concentration at the inlet and outlet of the control device using a GC/FID or GC/PID; these procedures may be used only if a vent may be sampled and analyzed by the GC/FID or GC/PID once per minute for the duration of each cycle when the chamber exhaust vent is operated.

(A) Follow the procedures in section 6 of Method 18 and choose the appropriate column, analytical apparatus, and calibration gases for the analysis of the sample.

(B) Follow the procedures in paragraphs (b)(1)(iv)(B)(2)(i) through (iv) of this section.

(C) Determine control device efficiency (% Eff) using the following equation: where:

$$\% \text{ Eff} = \frac{W_i - W_o}{W_i} \times 100$$

where:

% Eff = percent efficiency

W_i = mass flow rate into the control device

W_o = mass flow rate out of the control device

(D) Repeat the procedures in paragraphs (d)(2)(i)(A) through (C) of this section three times. The arithmetic average percent efficiency of the three runs shall determine the overall efficiency of the control device.

(ii) The Tedlar bag sampling procedure in section 7.1 of Method 18 may be used to collect samples of inlet and exhaust gas for the duration of each cycle when the chamber exhaust vent is operated.

(A) Continuously sample a slipstream of the control device inlet and outlet into a Tedlar bag by having a Tedlar bag attached to the slipstream for the entire duration of the run for an integrated bag sample. Whenever a Tedlar bag is full, a new bag must be reattached immediately. Note the time the bag is changed so the sample time and corresponding flow rates can be determined for each bag.

(B) Follow the procedures in section 6 of Method 18 and choose the appropriate column, analytical apparatus, and calibration gases for the analysis of the bag samples collected.

The bag samples shall be analyzed within 8 hours of collection.

(C) Follow the procedures in paragraphs (b)(1)(iv)(B)(2)(i) through (iv) of this section.

(D) Determine control device efficiency (% Eff) using the equation in paragraph (d)(2)(i)(C) of this section.

(E) Repeat the procedures in paragraphs (d)(2)(ii)(A) through (D) of this section three times. The arithmetic average percent efficiency of the three runs shall determine the overall efficiency of the control device.

(iii) In the event that the outlet concentration from the control device is below the detection limit for ethylene oxide for determining the efficiency in paragraph (d)(2)(i)(C) or (ii)(D) of this section, the owner or operator shall assume the control device is meeting the standard in § 63.362(e)(1) or (2) if the inlet ethylene oxide concentration is at or below approximately 50 ppmv.

(e) *Determination of baseline parameters for acid-water scrubbers.* The procedures in this paragraph shall be used to determine the monitored parameters established in § 63.363(b), (d), or (e) for acid-water scrubbers and to monitor the parameters as established in § 63.364(b).

(1) *Ethylene glycol concentration.* For determining the ethylene glycol concentration, the facility owner or operator shall establish the maximum ethylene glycol concentration as the ethylene glycol concentration averaged over three test runs; the sampling and analysis procedures in ASTM D 3695-88, Standard Test Method for Volatile Alcohols in Water By Direct Aqueous-Injection Gas Chromatography, (incorporated by reference—see § 63.14) shall be used to determine the ethylene glycol concentration.

(2) *Scrubber liquor tank level.* For determining the scrubber liquor tank level, the sterilization facility owner or operator shall establish the maximum liquor tank level based on a single measurement of the liquor tank level during one test run.

(f) *Determination of baseline temperatures for oxidation units.* The procedures in this paragraph shall be used to demonstrate the baseline temperature required in § 63.363(b), (c), (d), or (e) for catalytic oxidation units or thermal oxidation units and to continuously monitor the oxidation temperature as established in § 63.364(c).

(1) *Sterilization chamber vent.* The sterilization facility owner or operator shall establish the baseline temperature for the sterilization chamber vent as the temperature for the catalytic oxidation unit or the oxidation temperature at the

exhaust point
oxidation unit

exhaust point from the thermal oxidation unit averaged over three test runs using the procedures in paragraph (b)(2) of this section.

(2) *Aeration room vent.* The sterilization facility owner or operator shall establish the baseline temperature for the aeration room vent as the temperature for the catalytic oxidation unit or the oxidation temperature at the exhaust point from the thermal oxidation unit averaged over three test runs using the procedures in paragraph (d)(1) of this section.

(3) *Chamber exhaust vent.* The sterilization facility owner or operator shall establish the baseline temperature for the chamber exhaust vent as the temperature for the catalytic oxidation unit or the oxidation temperature at the exhaust point from the thermal oxidation unit averaged over three test runs using the procedures in paragraph (d)(2) of this section.

(g) An owner or operator of a sterilization facility seeking to demonstrate compliance with the standards found at § 63.362(c), (d), or (e) with a control device other than an acid-water scrubber or catalytic or thermal oxidation unit shall provide to the Administrator the information requested under § 63.363(f). The owner or operator shall submit: a description of the device; test results collected in accordance with § 63.363(f) verifying the performance of the device for controlling ethylene oxide emissions to the atmosphere to the levels required by the applicable standards; the appropriate operating parameters that will be monitored; and the frequency of measuring and recording to establish continuous compliance with the standards. The monitoring plan submitted identifying the compliance monitoring is subject to the Administrator's approval. The owner or operator of the sterilization facility shall install, calibrate, operate, and maintain the monitor(s) approved by the Administrator based on the information submitted by the owner or operator. The owner or operator shall include in the information submitted to the Administrator proposed performance specifications and quality assurance procedures for their monitors. The Administrator may request further information and shall approve appropriate test methods and procedures.

(h) An owner or operator of a sterilization facility seeking to demonstrate compliance with the standards found at §§ 63.362(d) or (e) with a monitoring device or procedure other than a gas chromatograph shall provide to the Administrator information describing the operation of

the monitoring device or procedure and the parameter(s) that would indicate proper operation and maintenance of the device or procedure. The Administrator may request further information and will specify appropriate test methods and procedures.

§ 63.366 Reporting requirements.

(a) The owner or operator of a source subject to the emissions standards in § 63.362 shall fulfill all reporting requirements in §§ 63.10(a), (d), (e), and (f) of subpart A, according to the applicability in Table 1 of § 63.360. These reports will be made to the Administrator at the appropriate address identified in § 63.13 of subpart A of this part.

(1) Reports required by subpart A and this section may be sent by U.S. mail, fax, or by another courier.

(i) Submittals sent by U.S. mail shall be postmarked on or before the specified date.

(ii) Submittals sent by other methods shall be received by the Administrator on or before the specified date.

(2) If acceptable to both the Administrator and the owner or operator of a source, reports may be submitted on electronic media.

(3) Content and submittal dates for excess emissions and monitoring system performance reports. All excess emissions and monitoring system performance reports and all summary reports, if required per § 63.10(e)(3)(vii) and (viii) of subpart A of this part, shall be delivered or postmarked within 30 days following the end of each calendar half or quarter as appropriate (see § 63.10(e)(3)(i) through (iv) for applicability). Written reports of excess emissions or exceedances of process or control system parameters shall include all information required in § 63.10(c)(5) through (13) of subpart A of this part as applicable in Table 1 of § 63.360 and information from any calibration tests in which the monitoring equipment is not in compliance with PS-9 or the method used for temperature calibration. The written report shall also include the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances have occurred or monitoring equipment has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(b) *Construction and Reconstruction.* The owner or operator of each source using 10 tons shall fulfill all requirements for construction or reconstruction of a source in § 63.5 of subpart A of this part, according to the

applicability in Table 1 of § 63.360, and in this paragraph.

(1) *Applicability.* (i) This paragraph and § 63.5 of subpart A of this part implement the preconstruction review requirements of section 112(i)(1) for sources subject to these emissions standards. In addition, this paragraph and § 63.5 of subpart A of this part include other requirements for constructed and reconstructed sources that are or become subject to these emissions standards.

(ii) After the effective date, the requirements in this section and in § 63.5 of subpart A of this part apply to owners or operators who construct a new source or reconstruct a source subject to these emissions standards after December 6, 1994. New or reconstructed sources subject to these emissions standards with an initial startup date before the effective date are not subject to the preconstruction review requirements specified in paragraphs (b)(2) and (3) of this section and § 63.5(d)(3) and (4) and (e) of subpart A of this part.

(2) After the effective date, whether or not an approved permit program is effective in the State in which a source is (or would be) located, no person may construct a new source or reconstruct a source subject to these emissions standards, or reconstruct a source such that the source becomes a source subject to these emissions standards, without obtaining advance written approval from the Administrator in accordance with the procedures specified in paragraph (b)(3) of this section and § 63.5(d)(3) and (4) and (e) of subpart A of this part.

(3) *Application for approval of construction or reconstruction.* The provisions of paragraph (b)(3) of this section and § 63.5(d)(3) and (4) of subpart A of this part implement section 112(i)(1) of the Act.

(i) General application requirements.

(A) An owner or operator who is subject to the requirements of paragraph (b)(2) of this section shall submit to the Administrator an application for approval of the construction of a new source subject to these emissions standards, the reconstruction of a source subject to these emissions standards, or the reconstruction of a source such that the source becomes a source subject to these emissions standards. The application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but not sooner than the effective date) if the construction or reconstruction commences after the effective date. The application shall be submitted as soon as practicable before the initial startup

date but no later than 60 days after the effective date of the construction or reconstruction had commenced and the initial startup date had not occurred before the effective date. The application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of paragraph (c)(1)(iii) of this section. The owner or operator may submit the application for approval well in advance of the date construction or reconstruction is planned to commence in order to ensure a timely review by the Administrator and that the planned commencement date will not be delayed.

(B) A separate application shall be submitted for each construction or reconstruction. Each application for approval of construction or reconstruction shall include at a minimum:

- (1) The applicant's name and address.
- (2) A notification of intention to construct a new source subject to these emissions standards or make any physical or operational change to a source subject to these emissions standards that may meet or has been determined to meet the criteria for a reconstruction, as defined in § 63.2 of subpart A of this part.
- (3) The address (i.e., physical location) or proposed address of the source.
- (4) An identification of the relevant standard that is the basis of the application.
- (5) The expected commencement date of the construction or reconstruction.
- (6) The expected completion date of the construction or reconstruction.
- (7) The anticipated date of (initial) startup of the source.
- (8) The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in the standard, or if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source reported in units and averaging times specified. The owner or operator may submit percent reduction information, if the standard is established in terms of percent reduction. However, operating parameters, such as flow rate, shall be included in the submission to the extent that they demonstrate performance and compliance.
- (9) Other information as specified in paragraph (b)(3)(ii) of this section and § 63.5(d)(3) of subpart A of this part.

(C) An owner or operator who submits estimates or preliminary information in place of the actual emissions data and

analysis required in paragraphs (b)(3)(i)(B)(8) and (ii) of this section shall submit the actual, measured emissions data and other correct information as soon as available but no later than with the notification of compliance status required in paragraph (c)(2) of this section.

(ii) *Application for approval of construction.* Each application for approval of construction shall include, in addition to the information required in paragraph (b)(3)(i)(B) of this section, technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source subject to these emissions standards, including an identification of each point of emission for each hazardous air pollutant that is emitted (or could be emitted) and a description of the planned air pollution control system (equipment or method) for each emission point. The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations. An owner or operator who submits approximations of control efficiencies under paragraph (b)(3) of this section shall submit the actual control efficiencies as specified in paragraph (b)(3)(i)(C) of this section.

(4) *Approval of construction or reconstruction based on prior State preconstruction review.*

(i) The Administrator may approve an application for construction or reconstruction specified in paragraphs (b)(2) and (3) of this section and § 63.5(d)(3) and (4) of subpart A of this part if the owner or operator of a new or reconstructed source who is subject to such requirement demonstrates to the Administrator's satisfaction that the following conditions have been (or will be) met:

(A) The owner or operator of the new or reconstructed source subject to these emissions standards has undergone a preconstruction review and approval process in the State in which the source is (or would be) located before the effective date and has received a federally enforceable construction permit that contains a finding that the source will meet these emissions standards as proposed, if the source is properly built and operated;

(B) In making its finding, the State has considered factors substantially equivalent to those specified in § 63.5(e)(1) of subpart A of this part.

(ii) The owner or operator shall submit to the Administrator the request for approval of construction or reconstruction no later than the application deadline specified in paragraph (b)(3)(i) of this section. The owner or operator shall include in the request information sufficient for the Administrator's determination. The Administrator will evaluate the owner or operator's request in accordance with the procedures specified in § 63.5 of subpart A of this part. The Administrator may request additional relevant information after the submittal of a request for approval of construction or reconstruction.

(c) *Notification requirements.* The owner or operator of each source subject to the emissions standards in § 63.362 shall fulfill all notification requirements in § 63.9 of subpart A of this part, according to the applicability in Table 1 of § 63.360, and in this paragraph.

(1) Initial Notifications

(i)(A) If a source that otherwise would be subject to these emissions standards subsequently increases its use of ethylene oxide within any consecutive 12-month period after December 6, 1996, such that the source becomes subject to these emissions standards or other requirements, such source shall be subject to the notification requirements of § 63.9 of subpart A of this part.

(B) Sources subject to these emissions standards may use the application for approval of construction or reconstruction under paragraph (b)(3)(ii) of this section and § 63.5(d)(3) of subpart A of this part, respectively, if relevant to fulfill the initial notification requirements.

(ii) The owner or operator of a new or reconstructed source subject to these emissions standards that has an initial startup date after the effective date and for which an application for approval of construction or reconstruction is required under paragraph (b)(3) of this section and § 63.5(d)(3) and (4) of subpart A of this part shall provide the following information in writing to the Administrator:

(A) A notification of intention to construct a new source subject to these emissions standards, reconstruct a source subject to these emissions standards, or reconstruct a source such that the source becomes a source subject to these emissions standards with the application for approval of construction or reconstruction as specified in paragraph (b)(3)(i)(A) of this section.

(B) A notification of the date when construction or reconstruction was commenced, submitted simultaneously with the application for approval of construction or reconstruction, if construction or reconstruction was commenced before the effective date of these standards;

(C) A notification of the date when construction or reconstruction was commenced, delivered or postmarked not later than 30 days after such date, if construction or reconstruction was commenced after the effective date of these standards;

(D) A notification of the anticipated date of startup of the source, delivered or postmarked not more than 60 days nor less than 30 days before such date; and

(E) A notification of the actual date of initial startup of the source, delivered or postmarked within 15 calendar days after that date;

(iii) After the effective date, whether or not an approved permit program is effective in the State in which a source subject to these emissions standards is (or would be) located, an owner or operator who intends to construct a new source subject to these emissions standards or reconstruct a source subject to these emissions standards, or reconstruct a source such that it becomes a source subject to these emissions standards, shall notify the Administrator in writing of the intended construction or reconstruction. The notification shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date of these standards) if the construction or reconstruction commences after the effective date of the standard. The notification shall be submitted as soon as practicable before the initial startup date but no later than 60 days after the effective date of this standard if the construction or reconstruction had commenced and the initial startup date has not occurred before the standard's effective date. The notification shall include all the information required for an application for approval of construction or reconstruction as specified in paragraph (b)(3) of this section and § 63.5(d)(3) and (4) of subpart A of this part. For sources subject to these emissions standards, the application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of § 63.9 of subpart A of this part.

(2) If an owner or operator of a source subject to these emissions standards submits estimates or preliminary information in the application for approval of construction or

reconstruction required in paragraph (b)(3)(ii) of this section and § 63.5(d)(3) of subpart A of this part, respectively, in place of the actual emissions data or control efficiencies required in paragraphs (b)(3)(i)(B)(8) and (ii) of this section, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status.

(3) The owner or operator of any existing sterilization facility subject to this subpart shall also include the amount of ethylene oxide used during the previous consecutive 12-month period in the initial notification report required by § 63.9(b)(2) and (3) of subpart A of this part. For new sterilization facilities subject to this subpart, the amount of ethylene oxide used shall be an estimate of expected use during the first consecutive 12-month period of operation.

§ 63.367 Recordkeeping requirements.

(a) The owner or operator of a source subject to the emissions standards in § 63.362 shall comply with the recordkeeping requirements in §§ 63.10(b) and (c) of subpart A of this part, according to the applicability in Table 1 of § 63.360, and in this section.

(b) The owners or operators of a source using 1 to 10 tons not subject to an emissions standard in § 63.362 shall maintain records of ethylene oxide use on a 12-month rolling average basis (until the source changes its operations to become a source subject to an emissions standard in § 63.362). These records shall be kept onsite at the source for a period of 5 years.

(c) The owners or operators of a source using less than 1 ton shall maintain records of ethylene oxide use on a 12-month rolling average basis (until the source changes its operations to become a source subject to the emissions standards in § 63.362). These records shall be kept onsite at the source for a period of 3 years.

[FR Doc. 94-29823 Filed 12-5-94; 8:45 am]
BILLING CODE 6899-29-P

GENERAL SERVICES ADMINISTRATION

41 CFR Part 101-9

[FPMR Amendment A-63]

RIN 3090-AF14

Federal Mail Management

AGENCY: Federal Supply Service, GSA.

ACTION: Final rule.

SUMMARY: This regulation establishes Federal mail management policy within the Federal Property Management Regulations. The regulation is necessary to improve the management of Federal incoming, internal, and outgoing mail, and to reduce mail costs through a comprehensive mail management program. This mail management program requires that agencies keep mail processing steps to a minimum; apply sound workflow principles; use automation and modern equipment, supplies, and training to the maximum extent cost-effective; and streamline operations to increase efficiency. Each Federal agency is expected to establish an appropriate program for the management of mail at each agency facility as well as on an agencywide basis.

EFFECTIVE DATE: December 6, 1994.

FOR FURTHER INFORMATION CONTACT: Bill Percival, Mail Management Branch (703-305-7577).

SUPPLEMENTARY INFORMATION: The General Services Administration (GSA) has determined that this rule is not a significant rule for the purposes of Executive Order 12866.

Regulatory Flexibility Act

This final rule is not required to be published in the Federal Register for notice and comment. Therefore the Regulatory Flexibility Act does not apply.

List of Subjects in 41 CFR Part 101-9

Government property management.
Mail management.

For the reasons set forth in the preamble, 41 CFR Chapter 101 is amended as follows:

Part 101-9 is added to Subchapter A, General, to read as follows:

PART 101-9—FEDERAL MAIL MANAGEMENT

Sec.

101-9.000 Scope of part.

Subpart 101-9.1—General Provisions

101-9.101 Authority.

101-9.102 Objective.

101-9.103 Definitions.

Subpart 101-9.2—Program Implementation

101-9.201 Agency responsibilities.

101-9.202 Operational cost control functions at a facility level.

Subpart 101-9.3—Reporting Requirements

101-9.301 Agency mail manager information.

101-9.302 Agency mail program data.

Subpart Q--National Emission Standards for Hazardous Air
Pollutants for Industrial Process Cooling Towers

[Subpart Q added at 59 FR 46350, Sept. 8, 1994]

§63.400 Applicability.

(a) The provisions of this subpart apply to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals on or after September 8, 1994 and are either major sources or are integral parts of facilities that are major sources as defined in §63.401.

(b) Table 1 of this subpart specifies the provisions of subpart A that apply and those that do not apply to owners and operators of IPCT's subject to this subpart.

§63.401 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

Chromium-based water treatment chemicals means any combination of chemical substances containing chromium used to treat water.

Commenced means, with respect to construction or reconstruction of an IPCT, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected IPCT is required to be in compliance with this subpart.

Construction means the on-site fabrication, erection, or installation of an IPCT.

Cooling tower means an open water recirculating device that uses fans or natural draft to draw or force ambient air through the device to cool warm water by direct contact.

Effective date means September 8, 1994 for this subpart.

Existing IPCT means any affected IPCT that is not a new IPCT.

Industrial process cooling tower, also written as "IPCT," means any cooling tower that is used to remove heat that is produced as an input or output of a chemical or industrial process(es), as well as any cooling tower that cools industrial processes in combination with any heating, ventilation, or air

conditioning system.

Initial startup means the initiation of recirculation water flow within the cooling tower.

Major source means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.

New IPCT means any affected IPCT the construction or reconstruction of which commenced after August 12, 1993.

Owner or operator means any person who owns, leases, operates, controls, or supervises an IPCT.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Reconstruction means the replacement of components of an affected or a previously unaffected IPCT to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new IPCT.

Responsible official means one of the following:

(1) For a corporation: a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Administrator.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).

(4) For affected sources (as defined in this part) applying for or subject to a title V permit: "responsible official" shall have the same meaning as defined in part 70 of this chapter or Federal title V regulations (42 U.S.C. 7661), whichever is applicable.

Water treatment chemicals means any combination of chemical substances used to treat water in cooling towers, including corrosion inhibitors, antiscalants, dispersants, and any other chemical substances used to treat water.

§63.402 Standard.

No owner or operator of an IPCT shall use chromium-based water treatment chemicals in any affected IPCT.

§63.403 Compliance dates.

The requirements of §63.402 of this subpart shall be applied on the following schedule:

(a) For existing IPCT's, the compliance date shall be 18 months after September 8, 1994.

(b) For new IPCT's that have an initial startup before September 8, 1994, the compliance date shall be September 8, 1994.

(c) For new IPCT's that have an initial startup on or after September 8, 1994, the compliance date shall be the date of the initial startup.

§63.404 Compliance demonstrations.

No routine monitoring, sampling, or analysis is required. In accordance with section 114 of the Act, the Administrator or delegated authority can require cooling water sample analysis of an IPCT if there is information to indicate that the IPCT is not in compliance with the requirements of §63.402 of this subpart. If cooling water sample analysis is required:

(a) The water sample analysis shall be conducted in accordance with Method 7196, Chromium, Hexavalent (Colorimetric),

contained in the Third Edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, (November 1986) and its Revision I, (December 1987), which are available for the cost of \$110.00 from the Government Printing Office, Superintendent of Documents, Washington, DC 20402, (202) 783-3238 (document number 955-001-00000-1; or Method 3500-Cr D, Colorimetric Method, contained in the 18th Edition of "Standard Methods for the Examination of Water and Wastewater" (1992), which is available from the American Public Health Association, 1015 15th Street, NW., Washington, DC 20005. These methods were approved for incorporation by reference by the Director of the Federal Register in accordance with 5 USC 552(a) and 1 CFR part 51. Copies may be inspected as a part of Docket A-91-65, located at the Air and Radiation Docket and Information Center, room M1500, EPA Central Docket Section, 401 M Street, SW., Washington, DC. Copies may be inspected at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(b) On or after 3 months after the compliance date, a cooling water sample residual hexavalent chromium concentration in excess of 0.5 parts per million by weight shall indicate a violation of §63.402.

§63.405 Notification requirements.

(a) Initial notification.

(1) In accordance with §63.9(b) of subpart A, owners or operators of all affected IPCT's that have an initial startup before September 8, 1994 shall notify the Administrator in writing. The notification, which shall be submitted not later than 12 months after September 8, 1994, shall provide the following information:

(i) The name and address of the IPCT owner or operator;

(ii) The address (i.e., physical location) of the affected IPCT;

(iii) A statement that the notification is being submitted as required by this subpart; and

(iv) A description of the type of water treatment program used in the affected IPCT, including the chemical name of each corrosion inhibitor ingredient used; the average concentration of those corrosion inhibitor ingredients maintained in the cooling water; and the material safety data sheet for each water treatment chemical or chemical compound used in the IPCT.

(2) In accordance with §63.9(b) of subpart A, owners or operators of all affected IPCT's that have an initial startup on or after September 8, 1994 shall notify the Administrator in

writing that the source is subject to the relevant standard no later than 12 months after initial startup. The notification shall provide all the information required in paragraphs (a)(1)(i) through (a)(1)(iv) of this section.

(b) Notification of compliance status.

(1) In accordance with §63.9(h) of subpart A, owners or operators of affected IPCT's shall submit to the Administrator a notification of compliance status within 60 days of the date on which the IPCT is brought into compliance with §63.402 of this subpart and not later than 18 months after September 8, 1994.

(2) The notification of compliance status must:

(i) Be signed by a responsible official who also certifies the accuracy of the report;

(ii) Certify that source has complied with §63.402 of this subpart; and

(iii) Include the information required in paragraph (a)(1)(iv) of this section.

(iv) Include the following statement: "I certify that no chromium-based water treatment chemicals have been introduced since (the initial compliance date) into any IPCT located within the facility for any purpose."

§63.406 Recordkeeping and reporting requirements.

To demonstrate continuing compliance with §63.402 of this subpart, the owner or operator of each affected IPCT shall maintain copies of the initial notification and the notification of compliance status as required by §63.405 of this subpart for a period of at least 5 years onsite.

TABLE 1 TO SUBPART Q--GENERAL PROVISIONS APPLICABILITY TO SUBPART Q--

Reference	Applies to Subpart Q	Comment
63.1.....	Yes.	
63.2.....	Yes.	
63.3.....	No.	
63.4.....	Yes.	
63.5.....	No.	
63.6 (a), (b), (c), and (j).....	Yes.	

63.6 (d), (e), (f), (g), (h), and (i).....	No.	
63.7.....	No.	
63.8.....	No.	
63.9 (a), (b)(1), (b)(3), (c), (h)(1), (h)(3), (h)(6), and (j).	Yes.	
63.9 (b)(2), (b)(4), (b)(5), notifications (b)(6), (d), (e), (f), (g), compliance status (h)(2), (h)(4), (h)(5). 63.405(a) and respectively, of are not	No.....	Requirements for initial and notifications of are specified in § § 63.405(b), subpart Q; other provisions of subpart A relevant to IPCT's. Section 63.406 requires retention of 5 years.
63.10 (a), (b)(1), an onsite record (b)(2)(xii), (b)(2)(xiv), (b)(3), (d), and (f).	Yes.....	
63.10 (b)(2) (i) to (xi), (c), and (e).....	No.	
63.11.....	No.	
63.12 to 63.15.....	Yes.	

4. Part 63 is amended by adding a new subpart R to read as follows:

Subpart R--National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)

Sec.

- 63.420 Applicability.
- 63.421 Definitions.
- 63.422 Standards: Loading racks.
- 63.423 Standards: Storage vessels.
- 63.424 Standards: Equipment leaks.
- 63.425 Test methods and procedures.
- 63.426 Alternative means of emission limitation.
- 63.427 Continuous monitoring.
- 63.428 Reporting and recordkeeping.
- 63.429 Delegation of authority.
- §63.420 Applicability.

(a) The affected source to which the provisions of this subpart apply is each bulk gasoline terminal, except those bulk gasoline terminals:

(1) For which the owner or operator has documented and recorded to the Administrator's satisfaction that the result, E_T , of the following equation is less than 1, and complies with requirements in paragraphs (c), (d), (e), and (f) of this section:

$$E_T = CF [0.59 (T_F) (1 - CE) + 0.17 (T_E) + 0.08 (T_{ES}) + 0.038 (T_I) + 8.5 \times 10^{-6} (C) + KQ]$$

where:

- E_T = emissions screening factor for bulk gasoline terminals;
- CF = 0.161 for bulk gasoline terminals that do not handle any reformulated or oxygenated gasoline containing methyl tert-butyl ether (MTBE), OR
- CF = 1.0 for bulk gasoline terminals that handle reformulated or oxygenated gasoline containing MTBE;
- CE = federally enforceable control efficiency of the vapor processing system used to control emissions from fixed-roof gasoline storage vessels [value

should be added in decimal form (percent divided by 100)];

- T_F = total number of fixed-roof gasoline storage vessels without an internal floating roof;
- T_E = total number of external floating roof gasoline storage vessels with only primary seals;
- T_{ES} = total number of external floating roof gasoline storage vessels with primary and secondary seals;
- T_I = total number of fixed-roof gasoline storage vessels with an internal floating roof;
- C = number of valves, pumps, connectors, loading arm valves, and open-ended lines in gasoline service;
- Q = federally enforceable gasoline throughput limit or gasoline throughput limit in compliance with paragraphs (c), (d), and (f) of this section (liters/day);
- K = 4.52×10^{-6} for bulk gasoline terminals with uncontrolled loading racks (no vapor collection and processing systems), OR
- K = $(4.5 \times 10^{-9})(EF + L)$ for bulk gasoline terminals with controlled loading racks (loading racks that have vapor collection and processing systems installed on the emission stream);
- EF = federally enforceable emission standard for the vapor processor outlet emissions (mg of total organic compounds per liter of gasoline loaded);
- L = 13 mg/l for gasoline cargo tanks meeting the requirement to satisfy the test criteria for a vapor-tight gasoline tank truck in §60.501 of this chapter, OR
- L = 304 mg/l for gasoline cargo tanks not meeting the requirement to satisfy the test criteria for a vapor-tight gasoline tank truck in §60.501 of this chapter; or

(2) For which the owner or operator has documented and recorded to the Administrator's satisfaction that the facility is not a major source, or is not located within a contiguous area and under common control of a facility that

is a major source, as defined in §63.2 of subpart A of this part.

(b) The affected source to which the provisions of this subpart apply is each pipeline breakout station, except those pipeline breakout stations:

(1) For which the owner or operator has documented and recorded to the Administrator's satisfaction that the result, E_p , of the following equation is less than 1, and complies with requirements in paragraphs (c), (d), (e), and (f) of this section:

$$E_p = CF [6.7 (T_F) (1 - CE) + 0.21 (T_E) + 0.093 (T_{ES}) + 0.1 (T_I) + 5.31 \times 10^{-6} (C)]$$

where:

E_p = emissions screening factor for pipeline breakout stations, and

the definitions for CF, T_F , CE, T_E , T_{ES} , T_I , and C are the same as provided in paragraph (a)(1) of this section; or

(2) For which the owner or operator has documented and recorded to the Administrator's satisfaction that the facility is not a major source, or is not located within a contiguous area and under common control of a facility that is a major source, as defined in §63.2 of subpart A of this part.

(c) A facility for which the results, E_r or E_p , of the calculation in paragraph (a)(1) or (b)(1) of this section has been documented and is less than 1.0 but greater than or equal to 0.50, is exempt from the requirements of this subpart, except that the owner or operator shall:

(1) Operate the facility such that none of the facility parameters used to calculate results under paragraph (a)(1) or (b)(1) of this section, and approved by the Administrator, is exceeded in any rolling 30-day period; and

(2) Maintain records and provide reports in accordance with the provisions of §63.428(i).

(d) A facility for which the results, E_r or E_p , of the calculation in paragraph (a)(1) or (b)(1) of this section has been documented and is less than 0.50, is exempt from the requirements of this subpart, except that the owner or operator shall:

(1) Operate the facility such that none of the facility parameters used to calculate results under paragraph (a)(1)

or (b)(1) of this section is exceeded in any rolling 30-day period; and

(2) Maintain records and provide reports in accordance with the provisions of §63.428(j).

(e) The provisions of paragraphs (a)(1) and (b)(1) of this section shall not be used to determine applicability to bulk gasoline terminals or pipeline breakout stations that are either:

(1) Located within a contiguous area and under common control with another bulk gasoline terminal or pipeline breakout station, or

(2) Located within a contiguous area and under common control with other sources not specified in paragraphs (a)(1) or (b)(1) of this section, that emit or have the potential to emit a hazardous air pollutant.

(f) Upon request by the Administrator, the owner or operator of a bulk gasoline terminal or pipeline breakout station subject to the provisions of any paragraphs in this section shall demonstrate compliance with those paragraphs.

(g) Each owner or operator of a bulk gasoline terminal or pipeline breakout station subject to the provisions of this subpart that is also subject to applicable provisions of 40 CFR 60, subpart Kb or XX of this chapter shall comply only with the provisions in each subpart that contain the most stringent control requirements for that facility.

(h) Each owner or operator of an affected source bulk gasoline terminal or pipeline breakout station is subject to the provisions of 40 CFR 63, subpart A -- General Provisions, as indicated in Table 1.

§63.421 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act; in subparts A, K, Ka, Kb, and XX of part 60 of this chapter; or in subpart A of this part. All terms defined in both subpart A of part 60 of this chapter and subpart A of this part shall have the meaning given in subpart A of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Controlled loading rack, for the purposes of §63.420, means a loading rack equipped with vapor collection and processing systems that reduce displaced vapor emissions to no more than 80 milligrams of total organic compounds per

liter of gasoline loaded, as measured using the test methods and procedures in §60.503(a) through (c) of this chapter.

Equipment means each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in the gasoline liquid transfer and vapor collection systems. This definition also includes the entire vapor processing system except the exhaust port(s) or stack(s).

Gasoline cargo tank means a delivery tank truck or railcar which is loading gasoline or which has loaded gasoline on the immediately previous load.

In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.

Operating parameter value means a value for an operating or emission parameter of the vapor processing system (e.g., temperature) which, if maintained continuously by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with the applicable emission standard. The operating parameter value is determined using the procedures outlined in §63.425(b).

Oxygenated gasoline means the same as defined in 40 CFR 80.2(rr).

Pipeline breakout station means a facility along a pipeline containing storage vessels used to relieve surges or receive and store gasoline from the pipeline for reinjection and continued transportation by pipeline or to other facilities.

Reformulated gasoline means the same as defined in 40 CFR 80.2(ee).

Uncontrolled loading rack means a loading rack used to load gasoline cargo tanks that is not a controlled loading rack.

Vapor-tight gasoline cargo tank means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in §63.425(e), and which is subject at all times to the test requirements in §63.425(f), (g), and (h).

Volatile organic liquid (VOL) means, for the purposes of this subpart, gasoline.

§63.422 Standards: Loading racks.

(a) Each owner or operator of loading racks at a bulk gasoline terminal subject to the provisions of this subpart

shall comply with the requirements in §60.502 of this chapter except for paragraphs (b), (c), and (j) of that section. For purposes of this section, the term "affected facility" used in §60.502 of this chapter means the loading racks that load gasoline cargo tanks at the bulk gasoline terminals subject to the provisions of this subpart.

(b) Emissions to the atmosphere from the vapor collection and processing systems due to the loading of gasoline cargo tanks shall not exceed 10 milligrams of total organic compounds per liter of gasoline loaded. Each owner or operator shall comply as expeditiously as practicable, but no later than _____ [insert date 3 years after date of publication in the Federal Register] at existing facilities and upon startup for new facilities.

(c) Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall comply with §60.502(e) of this chapter as follows:

(1) For the purposes of this section, the term "tank truck" as used in §60.502(e) means "cargo tank."

(2) §60.502(e)(5) is changed to read: The terminal owner or operator shall take steps assuring that the nonvapor-tight gasoline cargo tank will not be reloaded at the facility until vapor tightness documentation for that gasoline cargo tank is obtained which documents that:

(i) The gasoline cargo tank meets the applicable test requirements in §63.425(e);

(ii) For each gasoline cargo tank failing the test in §63.425(f) or (g) at the facility, the cargo tank either:

(A) Before repair work is performed on the cargo tank, meets the test requirements in §63.425(g) or (h), or

(B) After repair work is performed on the cargo tank before or during the tests in §63.425(g) or (h), subsequently passes the annual certification test described in §63.425(e).

§63.423 Standards: Storage vessels.

(a) Each owner or operator of a bulk gasoline terminal or pipeline breakout station subject to the provisions of this subpart shall equip each gasoline storage vessel with a design capacity greater than or equal to 75 m³ according to the requirements in §60.112b(a)(1) through (4) of this chapter, except for the requirements in §60.112b(a)(1)(iv) through (ix) and §60.112b(a)(2)(ii).

(b) Each owner or operator shall equip each gasoline external floating roof storage vessel with a design capacity greater than or equal to 75 m³ according to the requirements in §60.112b(a)(2)(ii) of this chapter if such storage vessel does not currently meet the requirements in paragraph (a) of this section.

(c) Each gasoline storage vessel at existing bulk gasoline terminals and pipeline breakout stations shall be in compliance with the requirements in paragraphs (a) and (b) as expeditiously as practicable, but no later than _____ [insert date 3 years after date of publication in the Federal Register]. At new bulk gasoline terminals and pipeline breakout stations, compliance shall be achieved upon startup.

§63.424 Standards: Equipment leaks.

(a) Each owner or operator of a bulk gasoline terminal or pipeline breakout station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. Each piece of equipment shall be inspected during the loading of a gasoline cargo tank.

(b) A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.

(c) Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as provided in paragraph (d) of this section.

(d) Delay of repair of leaking equipment will be allowed upon a demonstration to the Administrator that repair within 15 days is not feasible. The owner or operator shall provide the reason(s) a delay is needed and the date by which each repair is expected to be completed.

(e) Initial compliance with the requirements in paragraphs (a) through (d) of this section shall be achieved by existing sources as expeditiously as practicable, but no

later than _____ [insert date 1 year after date of publication in the Federal Register]. For new sources, initial compliance shall be achieved upon startup.

(f) As an alternative to compliance with the provisions in paragraphs (a) through (d) of this section, owners or operators may implement an instrument leak monitoring program that has been demonstrated to the Administrator as at least equivalent.

(g) Owners and operators shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- (1) Minimize gasoline spills;
- (2) Clean up spills as expeditiously as practicable;
- (3) Cover all open gasoline containers with a gasketed seal when not in use;
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

§63.425 Test methods and procedures.

(a) Each owner or operator subject to the emission standard in §63.422(b) or §60.112b(a)(3)(ii) of this chapter shall conduct a performance test on the vapor processing system according to the test methods and procedures in §60.503, except a reading of 500 ppm shall be used to determine the level of leaks to be repaired under §60.503(b). If a flare is used to control emissions, and emissions from this device cannot be measured using these methods and procedures, the provisions of §63.11(b) shall apply.

(b) For each performance test conducted under paragraph (a) of this section, the owner or operator shall determine a monitored operating parameter value for the vapor processing system using the following procedure:

- (1) During the performance test, continuously record the operating parameter under §63.427(a);
- (2) Determine an operating parameter value based on the parameter data monitored during the performance test, supplemented by engineering assessments and the manufacturer's recommendations; and
- (3) Provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency and averaging time, including data and

calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard in §63.422(b) or §60.112b(a)(3)(ii) of this chapter.

(c) For performance tests performed after the initial test, the owner or operator shall document the reasons for any change in the operating parameter value since the previous performance test.

(d) The owner or operator of each gasoline storage vessel subject to the provisions of §63.423 shall comply with §60.113b of this chapter. If a closed vent system and control device are used, as specified in §60.112b(a)(3), to comply with the requirements in §63.423, the owner or operator shall also comply with the requirements in paragraph (b) of this section.

(e) Annual certification test. The annual certification test for gasoline cargo tanks shall consist of the following test methods and procedures:

(1) Method 27, appendix A, 40 CFR 60. Conduct the test using a time period (t) for the pressure and vacuum tests of 5 minutes. The initial pressure (P_i) for the pressure test shall be 460 mm H₂O (18 in. H₂O), gauge. The initial vacuum (V_i) for the vacuum test shall be 150 mm H₂O (6 in. H₂O), gauge. The maximum allowable pressure and vacuum changes (Δp , Δv) are as shown in the second column of Table 2.

TABLE 2.--ALLOWABLE CARGO TANK TEST PRESSURE OR VACUUM CHANGE

Cargo Tank or Compartment Capacity, liters (gal)	Annual Certification-Allowable Pressure or Vacuum Change (Δp , Δv) in 5 Minutes, mm H ₂ O (in. H ₂ O)	Allowable Pressure Change (Δp) in 5 Minutes at Any Time, mm H ₂ O (in. H ₂ O)
9,464 or more (2,500 or more)	25 (1.0)	64 (2.5)
9,463 to 5,678 (2,499 to 1,500)	38 (1.5)	76 (3.0)
5,679 to 3,785 (1,499 to 1,000)	51 (2.0)	89 (3.5)
3,782 or less (999 or less)	64 (2.5)	102 (4.0)

(2) Pressure test of the cargo tank's internal vapor valve as follows:

(i) After completing the tests under paragraph (e)(1) of this section, use the procedures in Method 27 to repressurize the tank to 460 mm H₂O (18 in. H₂O), gauge. Close the tank's internal vapor valve(s), thereby isolating the vapor return line and manifold from the tank.

(ii) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After 5 minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable 5-minute pressure increase is 130 mm H₂O (5 in. H₂O).

(f) Leak detection test. The leak detection test shall be performed using Method 21, appendix A, 40 CFR 60, except omit section 4.3.2 of Method 21. A vapor-tight gasoline cargo tank shall have no leaks at any time when tested according to the procedures in this paragraph.

(1) The leak definition shall be 21,000 ppm as propane. Use propane to calibrate the instrument, setting the span at the leak definition. The response time to 90 percent of the final stable reading shall be less than 8 seconds for the detector with the sampling line and probe attached.

(2) In addition to the procedures in Method 21, include the following procedures:

(i) Perform the test on each compartment during loading of that compartment or while the compartment is still under pressure.

(ii) To eliminate a positive instrument drift, the dwell time for each leak detection shall not exceed two times the instrument response time. Purge the instrument with ambient air between each leak detection. The duration of the purge shall be in excess of two instrument response times.

(iii) Attempt to block the wind from the area being monitored. Record the highest detector reading and location for each leak.

(g) Nitrogen pressure decay field test. For those cargo tanks with manifolded product lines, this test procedure shall be conducted on each compartment.

(1) Record the cargo tank capacity. Upon completion of the loading operation, record the total volume loaded. Seal the cargo tank vapor collection system at the vapor coupler. The sealing apparatus shall have a pressure tap. Open the internal vapor valve(s) of the cargo tank and record the initial headspace pressure. Reduce or increase, as necessary, the initial headspace pressure to 460 mm H₂O (18.0 in. H₂O), gauge by releasing pressure or by adding commercial grade nitrogen gas from a high pressure cylinder capable of maintaining a pressure of 2,000 psig.

(i) The cylinder shall be equipped with a compatible two-stage regulator with a relief valve and a flow control metering valve. The flow rate of the nitrogen shall be no less than 2 cfm. The maximum allowable time to pressurize cargo tanks with headspace volumes of 1,000 gallons or less to the appropriate pressure is 4 minutes. For cargo tanks with a headspace of greater than 1,000 gallons, use as a maximum allowable time to pressurize 4 minutes or the result from the equation below, whichever is greater.

$$T = V_h \times 0.004$$

where:

T = maximum allowable time to pressurize the cargo tank, min;

V_h = cargo tank headspace volume during testing, gal.

(2) It is recommended that after the cargo tank headspace pressure reaches approximately 460 mm H₂O (18 in. H₂O), gauge, a fine adjust valve be used to adjust the headspace pressure to 460 mm H₂O (18.0 in. H₂O), gauge for the next 30 ± 5 seconds.

(3) Reseal the cargo tank vapor collection system and record the headspace pressure after 1 minute. The measured headspace pressure after 1 minute shall be greater than the minimum allowable final headspace pressure (P_F) as calculated from the following equation:

$$P_F = \left(\frac{N}{18.0} \right)^{\frac{V_s}{5 \times V_h}}$$

where:

P_F = minimum allowable final headspace pressure, in. H₂O, gauge;

V_s = total cargo tank shell capacity, gal;

V_h = cargo tank headspace volume after loading, gal;

18.0 = initial pressure at start of test, in. H₂O, gauge;

N = 5-minute continuous performance standard at any time from the third column of Table 2, in. H₂O.

(4) Conduct the internal vapor valve portion of this test by repressurizing the cargo tank headspace with nitrogen to 460 mm H₂O (18 in. H₂O), gauge. Close the internal vapor valve(s), wait for 30 ± 5 seconds, then relieve the pressure downstream of the vapor valve in the vapor collection system to atmospheric pressure. Wait 15 seconds, then reseal the vapor collection system. Measure and record the pressure every minute for 5 minutes. Within 5 seconds of the pressure measurement at the end of 5 minutes, open the vapor valve and record the headspace pressure as the "final pressure."

(5) If the decrease in pressure in the vapor collection system is less than at least one of the interval pressure change values in Table 3, or if the final pressure is equal to or greater than 20 percent of the 1-minute final headspace pressure determined in the test in paragraph (3),

then the cargo tank is considered to be a vapor-tight gasoline cargo tank.

TABLE 3.--PRESSURE CHANGE FOR INTERNAL VAPOR VALVE TEST

Time Interval	Interval Pressure Change, mm H ₂ O (in. H ₂ O)
After 1 minute	28 (1.1)
After 2 minutes	56 (2.2)
After 3 minutes	84 (3.3)
After 4 minutes	112 (4.4)
After 5 minutes	140 (5.5)

(h) Continuous performance pressure decay test. The continuous performance pressure decay test shall be performed using Method 27, appendix A, 40 CFR 60. Conduct only the positive pressure test using a time period (t) of 5 minutes. The initial pressure (P_i) shall be 460 mm H₂O (18 in. H₂O), gauge. The maximum allowable 5-minute pressure change (Δp) which shall be met at any time is shown in the third column of Table 2.

§63.426 Alternative means of emission limitation.

(a) For determining the acceptability of alternative means of emission limitation for storage vessels under §63.423, the provisions of §60.114b of this chapter apply.

§63.427 Continuous monitoring.

(a) Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall install, calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a continuous monitoring system (CMS) as specified in paragraph (a)(1), (a)(2), (a)(3), or (a)(4) of this section, except as allowed in paragraph (a)(5) of this section.

(1) Where a carbon adsorption system is used, a continuous emission monitoring system (CEMS) capable of measuring organic compound concentration shall be installed in the exhaust air stream.

(2) Where a refrigeration condenser system is used, a continuous parameter monitoring system (CPMS) capable of measuring temperature shall be installed immediately downstream from the outlet to the condenser section.

Alternatively, a CEMS capable of measuring organic compound concentration may be installed in the exhaust air stream.

(3) Where a thermal oxidation system is used, a CPMS capable of measuring temperature shall be installed in the firebox or in the ductwork immediately downstream from the firebox in a position before any substantial heat exchange occurs.

(4) Where a flare is used, a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, shall be installed in proximity to the pilot light to indicate the presence of a flame.

(5) Monitoring an alternative operating parameter or a parameter of a vapor processing system other than those listed in this paragraph will be allowed upon demonstrating to the Administrator's satisfaction that the alternative parameter demonstrates continuous compliance with the emission standard in §63.422(b) or §60.112b(a)(3)(ii) of this chapter.

(b) Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall operate the vapor processing system in a manner not to exceed the operating parameter value for the parameter described in paragraphs (a)(1) and (a)(2) of this section, or to go below the operating parameter value for the parameter described in paragraph (a)(3) of this section, and established using the procedures in §63.425(b). In cases where an alternative parameter pursuant to paragraph (a)(5) of this section is approved, each owner or operator shall operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the alternative operating parameter value. Operation of the vapor processing system in a manner exceeding or going below the operating parameter value, as specified above, shall constitute a violation of the emission standard in §63.422(b).

(c) Each owner or operator of gasoline storage vessels subject to the provisions of §63.423 shall comply with the monitoring requirements in §60.116b of this chapter, except records shall be kept for at least 5 years. If a closed vent system and control device are used, as specified in §60.112b(a)(3), to comply with the requirements in §63.423, the owner or operator shall also comply with the requirements in paragraph (a) of this section.

§63.428 Reporting and recordkeeping.

(a) The initial notifications required for existing facilities under §63.9(b)(2) shall be submitted not later than 1 year after a facility becomes subject to the provisions of this subpart.

(b) Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall keep records of the test results for each gasoline cargo tank loading at the facility as follows:

(1) Annual certification testing performed under §63.425(e); and

(2) Continuous performance testing performed at any time at that facility under §63.425(f), (g), and (h).

(3) The documentation file shall be kept up-to-date for each gasoline cargo tank loading at the facility. The documentation for each test shall include, as a minimum, the following information:

(i) Name of test:

Annual Certification Test--Method 27 [§63.425(e)(1)],
Annual Certification Test--Internal Vapor Valve [§63.425(e)(2)],

Leak Detection Test [§63.425(f)],

Nitrogen Pressure Decay Field Test [§63.425(g)], or

Continuous Performance Pressure Decay Test [§63.425(h)].

(ii) Cargo tank owner's name and address.

(iii) Cargo tank identification number.

(iv) Test location and date.

(v) Tester name and signature.

(vi) Witnessing inspector, if any: Name, signature, and affiliation.

(vii) Vapor tightness repair: nature of repair work and when performed in relation to vapor tightness testing.

(viii) Test results: pressure or vacuum change, mm of water; time period of test; number of leaks found with instrument and leak definition.

(c) Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall:

(1) Keep an up-to-date, readily accessible record of the continuous monitoring data required under §63.427(a). This record shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data

only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record.

(2) Record and report simultaneously with the notification of compliance status required under §63.9(h):

(i) All data and calculations, engineering assessments, and manufacturer's recommendations used in determining the operating parameter value under §63.425(b); and

(ii) The following information when using a flare under provisions of §63.11(b) to comply with §63.422(b):

(A) Flare design (i.e., steam-assisted, air-assisted, or non-assisted); and

(B) All visible emissions readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required under §63.425(a).

(3) If an owner or operator requests approval to use a vapor processing system or monitor an operating parameter other than those specified in §63.427(a), the owner or operator shall submit a description of planned reporting and recordkeeping procedures. The Administrator will specify appropriate reporting and recordkeeping requirements as part of the review of the permit application.

(d) Each owner or operator of storage vessels subject to the provisions of this subpart shall keep records and furnish reports as specified in §60.115b of this chapter, except records shall be kept for at least 5 years.

(e) Each owner or operator complying with the provisions of §63.424(a) through (d) shall record the following information in the log book for each leak that is detected:

(1) The equipment type and identification number,

(2) The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell),

(3) The date the leak was detected and the date of each attempt to repair the leak,

(4) Repair methods applied in each attempt to repair the leak,

(5) "Repair delayed" and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak,

(6) The expected date of successful repair of the leak if the leak is not repaired within 15 days, and

(7) The date of successful repair of the leak.

(f) Each owner or operator subject to the provisions of §63.424 shall report to the Administrator a description of the types, identification numbers, and locations of all equipment in gasoline service. For facilities electing to implement an instrument program under §63.424(f), the report shall contain a full description of the program.

(1) In the case of an existing source or a new source that has an initial startup date before the effective date, the report shall be submitted with the initial notifications required under paragraph (a) of this section, unless an extension of compliance is granted under §63.6(i). If an extension of compliance is granted, the report shall be submitted on a date scheduled by the Administrator.

(2) In the case of new sources that did not have an initial startup date before the effective date, the report shall be submitted with the application for approval of construction, as described in §63.5(d).

(g) Each owner or operator of a bulk gasoline terminal or pipeline breakout station subject to the provisions of this subpart shall include in a semiannual report to the Administrator the following information:

(1) Each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility,

(2) Periodic reports required under paragraph (d) of this section, and

(3) The number of equipment leaks not repaired within 5 days after detection.

(h) Each owner or operator of a bulk gasoline terminal or pipeline breakout station subject to the provisions of this subpart shall include in the excess emissions report to the Administrator required under §63.10(e)(3) the following information:

(1) Each exceedance or failure to maintain, as appropriate, the monitored operating parameter value determined under §63.425(b). The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred, and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing systems or the CMS.

(2) Each instance of a nonvapor-tight gasoline cargo tank loading at the facility in which the owner or operator failed to take steps to assure that such cargo tank would

not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained.

(3) Each reloading of a nonvapor-tight gasoline cargo tank at the facility before vapor tightness documentation for that cargo tank is obtained by the facility in accordance with §63.422(c)(2).

(4) For each occurrence of an equipment leak for which no repair attempt was made within 5 days or for which repair was not completed within 15 days after detection:

- (i) The date on which the leak was detected,
- (ii) The date of each attempt to repair the leak,
- (iii) The reasons for the delay of repair, and
- (iv) The date of successful repair.

(i) Each owner or operator of a facility meeting the criteria in §63.420(c) shall:

(1) Document and report to the Administrator not later than _____ [insert date 1 year after publication in the Federal Register] for existing facilities, within 30 days for existing facilities subject to §63.420(c) after _____ [insert date 1 year after publication in the Federal Register], or at startup for new facilities the methods, procedures, and assumptions supporting the calculations for determining criteria in §63.420(c);

(2) Maintain records to document that the facility parameters established under §63.420(c) have not been exceeded; and

(3) Report annually to the Administrator that the facility parameters established under §63.420(c) have not been exceeded.

(4) At any time following the notification required under subparagraph (1) of this paragraph and approval by the Administrator of the facility parameters, and prior to any of the parameters being exceeded, the owner or operator may submit a report to request modification of any facility parameter to the Administrator for approval. Each such request shall document any expected HAP emission change resulting from the change in parameter.

All reports and notifications under this paragraph will be available for public inspection.

(j) Each owner or operator of a facility meeting the criteria in §63.420(d) shall:

(1) Document and report to the Administrator not later than _____ [insert date 1 year after publication in the

Federal Register] for existing facilities, within 30 days for existing facilities subject to §63.420(d) after _____ [insert date 1 year after publication in the Federal Register], or at startup for new facilities the use of the emission screening equations in §63.420(a)(1) or (b)(1) and the calculated value of E_p or E_p ;

(2) Maintain a record of the calculations in §63.420(a)(1) or (b)(1), including methods, procedures, and assumptions supporting the calculations for determining criteria in §63.420(d); and

(3) At any time following the notification required under subparagraph (1) of this paragraph, and prior to any of the parameters being exceeded, the owner or operator may notify the Administrator of modifications to the facility parameters. Each such notification shall document any expected HAP emission change resulting from the change in parameter.

All reports and notifications under this paragraph will be available for public inspection.

§63.429 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(1) of the Act, the authority contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) The authority conferred in §63.426 and §63.427(a)(5) will not be delegated to any State.

TABLE 1 TO SUBPART R--GENERAL PROVISIONS APPLICABILITY TO SUBPART R

Reference	Applies to Subpart R	Comment
63.1(a)(1)	Yes	
63.1(a)(2)	Yes	
63.1(a)(3)	Yes	
63.1(a)(4)	Yes	
63.1(a)(5)	No	Section reserved
63.1(a)(6)(8)	Yes	

Reference	Applies to Subpart R	Comment
63.1(a)(9)	No	Section reserved
63.1(a)(10)	Yes	
63.1(a)(11)	Yes	
63.1(a)(12) - (a)(14)	Yes	
63.1(b)(1)	No	Subpart R specifies applicability in §63.420
63.1(b)(2)	Yes	
63.1(b)(3)	No	Subpart R specifies reporting and recordkeeping for some large area sources in §63.428
63.1(c)(1)	Yes	
63.1(c)(2)	Yes	Some small sources are not subject to subpart R
63.1(c)(3)	No	Section reserved
63.1(c)(4)	Yes	
63.1(c)(5)	Yes	
63.1(d)	No	Section reserved
63.1(e)	Yes	
63.2	Yes	Additional definitions in §63.421
63.3(a)-(c)	Yes	
63.4(a)(1) - (a)(3)	Yes	
63.4(a)(4)	No	Section reserved
63.4(a)(5)	Yes	
63.4(b)	Yes	
63.4(c)	Yes	
63.5(a)(1)	Yes	
63.5(a)(2)	Yes	
63.5(b)(1)	Yes	
63.5(b)(2)	No	Section reserved

Reference	Applies to Subpart R	Comment
63.5(b)(3)	Yes	
63.5(b)(4)	Yes	
63.5(b)(5)	Yes	
63.5(b)(6)	Yes	
63.5(c)	No	Section reserved
63.5(d)(1)	Yes	
63.5(d)(2)	Yes	
63.5(d)(3)	Yes	
63.5(d)(4)	Yes	
63.5(e)	Yes	
63.5(f)(1)	Yes	
63.5(f)(2)	Yes	
63.6(a)	Yes	
63.6(b)(1)	Yes	
63.6(b)(2)	Yes	
63.6(b)(3)	Yes	
63.6(b)(4)	Yes	
63.6(b)(5)	Yes	
63.6(b)(6)	No	Section reserved
63.6(b)(7)	Yes	
63.6(c)(1)	No	Subpart R specifies the compliance date
63.6(c)(2)	Yes	
63.6(c)(3) - (c)(4)	No	Sections reserved
63.6(c)(5)	Yes	
63.6(d)	No	Section reserved
63.6(e)	Yes	
63.6(f)(1)	Yes	
63.6(f)(2)	Yes	
63.6(f)(3)	Yes	

Reference	Applies to Subpart R	Comment
63.6(g)	Yes	
63.6(h)	No	Subpart R does not require COMS
63.6(i) (1) - (i) (14)	Yes	
63.6(i) (15)	No	Section reserved
63.6(i) (16)	Yes	
63.6(j)	Yes	
63.7(a) (1)	Yes	
63.7(a) (2)	Yes	
63.7(a) (3)	Yes	
63.7(b)	Yes	
63.7(c)	Yes	
63.7(d)	Yes	
63.7(e) (1)	Yes	
63.7(e) (2)	Yes	
63.7(e) (3)	Yes	
63.7(e) (4)	Yes	
63.7(f)	Yes	
63.7(g)	Yes	
63.7(h)	Yes	
63.8(a) (1)	Yes	
63.8(a) (2)	Yes	
63.8(a) (3)	No	Section reserved
63.8(a) (4)	Yes	
63.8(b) (1)	Yes	
63.8(b) (2)	Yes	
63.8(b) (3)	Yes	
63.8(c) (1)	Yes	
63.8(c) (2)	Yes	
63.8(c) (3)	Yes	

Reference	Applies to Subpart R	Comment
63.8(c)(4)	Yes	
63.8(c)(5)	No	Subpart R does not require COMS
63.8(c)(6) - (c)(8)	Yes	
63.8(d)	Yes	
63.8(e)	Yes	
63.8(f)(1) - (f)(5)	Yes	
63.8(f)(6)	Yes	
63.8(g)	Yes	
63.9(a)	Yes	
63.9(b)(1)	Yes	
63.9(b)(2)	No	§63.428(a) specifies 1-year initial notification requirement
63.9(b)(3)	Yes	
63.9(b)(4)	Yes	
63.9(b)(5)	Yes	
63.9(c)	Yes	
63.9(d)	Yes	
63.9(e)	Yes	
63.9(f)	Yes	
63.9(g)	Yes	
63.9(h)(1) - (h)(3)	Yes	
63.9(h)(4)	No	Section reserved
63.9(h)(5) - (h)(6)	Yes	
63.9(i)	Yes	
63.9(j)	Yes	
63.10(a)	Yes	
63.10(b)(1)	Yes	

TABLE 3. GENERAL PROVISIONS APPLICABILITY TO
SUBPARTS F, G, AND H (CONCLUDED)

Reference	Applies to Subpart R	Comment
63.10 (b) (2)	Yes	
63.10 (b) (3)	Yes	
63.10 (c) (1)	Yes	
63.10 (c) (2) - (c) (4)	No	Sections reserved
63.10 (c) (5) - (c) (8)	Yes	
63.10 (c) (9)	No	Section reserved
63.10 (c) (5) - (c) (8)	Yes	
63.10 (d) (1)	Yes	
63.10 (d) (2)	Yes	
63.10 (d) (3)	Yes	
63.10 (d) (4)	Yes	
63.10 (d) (5)	Yes	
63.10 (e)	Yes	
63.10 (f)	Yes	
63.11 (a) - (b)	Yes	
63.12 (a) - (c)	Yes	
63.13 (a) - (c)	Yes	
63.14 (a) - (b)	Yes	
63.15 (a) - (b)	Yes	

PART 63-[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 et. seq.

2. Part 63 is amended by adding subpart W consisting of §§ 63.520 through 63.528 to read as follows:

Subpart W - National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production

Sec.

63.520 Applicability and designation of sources.

63.521 Compliance schedule.

63.522 Definitions.

63.523 Standards for basic liquid resins manufacturers.

63.524 Standards for wet strength resins manufacturers.

63.525 Compliance and performance testing.

63.526 Monitoring requirements.

63.527 Recordkeeping requirements.

63.528 Reporting requirements.

Subpart W

§ 63.520 Applicability and designation of sources.

The provisions of this subpart apply to all existing, new, and reconstructed manufacturers of basic liquid epoxy resins (BLR) and manufacturers of wet strength resins (WSR) that are located at a plant site that is a major source, as defined in section 112(a) of the Clean Air Act. Research

and development facilities, as defined below in § 63.522, are exempt from the provisions of this subpart. The affected source is also defined in § 63.522. If a change occurs to an existing source that does not constitute reconstruction then the additions have to meet the existing source requirements of the MACT standards. Any reconstruction of an existing source, or construction of a new source, must meet the new source standard. Affected sources are also subject to certain requirements of subpart A of this part, as specified in Table 1 of this subpart.

§ 63.521 Compliance schedule.

(a) Owners or operators of existing affected BLR and WSR sources shall comply with the applicable provisions of this subpart within 3 years of the promulgation date.

(b) New and reconstructed sources subject to this subpart shall be in compliance with the applicable provisions of this subpart upon startup.

§ 63.522 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

Administrator means the Administrator of the U. S. Environmental Protection Agency, or any official designee of the Administrator.

Affected source means all HAP emission points within a facility that are related to the production of BLR or WSR,

including process vents, storage tanks, wastewater systems, and equipment leaks.

Basic liquid epoxy resins (BLR) means resins made by reacting epichlorohydrin and bisphenol A to form diglycidyl ether of bisphenol-A (DGEBA).

Batch emission episode means a discrete venting episode that may be associated with a single unit operation. For example, a displacement of vapor resulting from the charging of a vessel with HAP will result in a discrete emission episode that will last through the duration of the charge and will have an average flow rate equal to the rate of the charge. If the vessel is then heated, there will also be another discrete emission episode resulting from the expulsion of expanded vessel vapor space. Both emission episodes may occur in the same vessel or unit operation. There are possibly other emission episodes that may occur from the vessel or other process equipment, depending on process operations.

Batch process refers to a discontinuous process involving the bulk movement of material through sequential manufacturing steps. Mass, temperature, concentration, and other properties of a system vary with time. Addition of raw material and withdrawal of product do not typically occur simultaneously in a batch process.

Closed-vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that

transport gas or vapor from an emission point to a control device or back into the process.

Continuous process means a process where the inputs and outputs flow continuously throughout the duration of the process. Continuous processes are typically steady-state.

Drain system means the system used to convey wastewater streams from a process unit, product storage tank, or feed storage tank to a waste management unit. The term includes all process drains and junction boxes, together with their associated sewer lines and other junction boxes, manholes, sumps, and lift stations, down to the receiving waste management unit. A segregated stormwater sewer system, which is a drain and collection system designed and operated for the sole purpose of collecting rainfall-runoff at a facility, and which is segregated from all other drain systems, is excluded from this definition.

Equipment leaks means emissions of hazardous air pollutants from a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, or instrumentation system in organic hazardous air pollutant service.

Process vent means a point of emission from a unit operation. Typical process vents include condenser vents, vacuum pumps, steam ejectors, and atmospheric vents from reactors and other process vessels.

Production-based emission rate means a ratio of the amount of HAP emitted to the amount of BLR or WSR produced.

Research and development facility means laboratory operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and is not engaged in the manufacture of products for commercial sale, except in a de minimis manner.

Storage tank means a tank or other vessel that is used to store liquids that contain one or more HAP compounds.

Unit operation means those processing steps that occur within distinct equipment that are used, among other things, to prepare reactants, facilitate reactions, separate and purify products, and recycle materials. There may be several emission episodes within a single unit operation.

Waste management unit means any component, piece of equipment, structure, or transport mechanism used in storing, treating, or disposing of wastewater streams, or conveying wastewater between storage, treatment, or disposal operations.

Wastewater means aqueous liquid waste streams exiting equipment at an affected source.

Wastewater system means a system made up of a drain system and one or more waste management units.

Wet strength resins (WSR) means polyamide/epichlorohydrin condensates which are used to increase the tensile strength of paper products.

§ 63.523 Standards for basic liquid resins manufacturers.

(a) Owners or operators of existing affected BLR sources shall operate sources such that the rate of emissions of hazardous air pollutants from all process vents, storage tanks, and wastewater systems combined shall not exceed 130 pounds per 1 million pounds of BLR produced.

(b) Owners or operators of new or reconstructed affected BLR sources shall reduce uncontrolled emissions from the sum of uncontrolled process vents, storage tanks, and wastewater systems by 98 percent, or limit the total emissions from these emission points to 5,000 pounds per year.

(1) For process vents, uncontrolled emissions are defined as gaseous emission streams past the last recovery device.

(2) For storage tanks, uncontrolled emissions are defined as emissions calculated according to the methodology specified in § 63.150(g)(3).

(3) For wastewater systems, uncontrolled emissions are the total amount of HAP discharged to the drain system.

(c) Owners or operators of existing, new, or reconstructed affected BLR sources shall comply with the requirements of subpart H of this part to control emissions from equipment leaks.

§ 63.524 Standards for wet strength resins manufacturers.

(a) Owners or operators of existing affected WSR sources shall either:

(1) Limit the total emissions of hazardous air pollutants from all process vents, storage tanks, and wastewater systems to 10 pounds per 1 million pounds of wet strength resins produced; or

(2) Comply with the requirements of subpart H of this part to control emissions from equipment leaks.

(b) Owners or operators of new or reconstructed affected WSR sources shall either:

(1) Limit the total emissions of hazardous air pollutants from all process vents, storage tanks, and wastewater systems to 7 pounds per 1 million pounds of wet strength resins produced; or

(2) Comply with the requirements of subpart H of this part to control emissions from equipment leaks.

§ 63.525 Compliance and performance testing.

(a) The owner or operator of any existing affected BLR source shall, in order to demonstrate initial compliance with the applicable emission limit, determine the emission rate from all process vent, storage tank, and wastewater system emission points using the methods described below. Compliance tests shall be performed under normal operating conditions.

(1) The owner or operator shall use the EPA Test Methods from 40 CFR part 60, appendix A, listed in paragraphs (a)(1)(i) through (iii) of this section, to determine emissions from process vents. Testing of process vents on equipment operating as part of a continuous process

will consist of conducting three 1-hour runs. Gas stream volumetric flow rates shall be measured every 15 minutes during each 1-hour run. Organic HAP or TOC concentration shall be determined from samples collected in an integrated sample over the duration of each 1-hour test run, or from grab samples collected simultaneously with the flow rate measurements (every 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate. If the flow of gaseous emissions is intermittent, determination of emissions from process vents shall be performed according to the methods specified in paragraph (e) of this section. For process vents with continuous gas streams, the emission rate used to determine compliance shall be the average emission rate of the 3 test runs. For process vents with intermittent emission streams, the calculated emission rate or the emission rate from a single test run may be used to determine compliance.

(i) Method 1 or 1A of 40 CFR Part 60, appendix A, as appropriate, shall be used for selection of the sampling sites if the flow measuring device is a pitot tube. A traverse shall be conducted before and after each 1-hour sampling period. No traverse is necessary when using Method 2A or 2D to determine flow rate.

(ii) Method 2, 2A, 2C or 2D of 40 CFR part 60, appendix A, as appropriate, shall be used for the determination of gas stream volumetric flow rate. If

Method 2 or 2C is used, the velocity measurements shall be made at a single point, in conjunction with the traverse, to establish an average velocity across the stack.

(iii) Method 25A and/or Methods 18 and 25A of 40 CFR Part 60, appendix A, as appropriate, shall be used to determine the concentration of HAP in the streams.

(iv) Initial determination of de minimis status for process vents may be made by engineering assessment, as specified in § 63.526(a)(1)(iv).

(2) Emissions from wastewater treatment systems shall be determined in accordance with the methods described in 40 CFR Part 63, appendix C.

(3) Emissions from storage tanks shall be calculated in accordance with the methods specified in § 63.150(g)(3).

(b) The owner or operator of any existing affected BLR source shall determine a production-based emission rate for each emission point by dividing the emission rate of each emission point by the BLR production rate of the source. The production rate shall be based on normal operations.

(1) The production-based emission rate for process vents shall be calculated by dividing the average emission rate the average production rate.

(2) The production-based emission rate for storage tanks shall be calculated by dividing annual emissions for each storage tank emission point by the production rate for a one-year period. The production rate shall be calculated using the same data used to calculate the production-based

emission rate in paragraph (b)(1) of this section, converted to an annual rate.

(3) The production-based emission rate for wastewater systems shall be calculated by dividing annual emissions for each wastewater system emission point by the production rate for one-year period. The production rate shall be calculated using the same data used to calculate the production-based emission rate in paragraph (b)(1) of this section, converted to an annual rate.

(c) The owner or operator of an existing affected BLR source shall calculate the total emissions per product produced by summing the production-based emissions for all process vent, storage tank, and wastewater system emission points according to the following equation:

$$E = \Sigma PV + \Sigma ST + \Sigma WW$$

where:

E = emissions, pounds (lb) HAP per million (MM) lb product;

PV = process vent emissions, lb HAP/MM lb product;

ST = storage tank emissions, lb HAP/MM lb product; and

WW = wastewater system emissions, lb HAP/MM lb product.

The source is in compliance with the standard for process vents, storage tanks, and wastewater systems if the sum of the equation is less than the applicable emission limit from § 63.523(a).

(d) The owner or operator of any new or reconstructed affected BLR source shall demonstrate compliance using the methods described in this section.

(1) Any owner or operator who elects to comply with § 63.523(b) by achieving 98 percent control of emissions from process vents, storage tanks, and wastewater systems shall demonstrate compliance according to the requirements of paragraphs (d)(1)(i) through (iv) of this section.

(i) The owner or operator shall perform testing as specified in paragraph (a)(1) of this section to determine controlled and uncontrolled emissions from process vents. Sampling points for determining uncontrolled emissions shall be located based on the definition of uncontrolled process vents in § 63.523(b)(1).

(ii) The owner or operator shall calculate controlled and uncontrolled emissions from storage tanks in accordance with the methods specified in § 63.150(g)(3).

(iii) The owner or operator shall determine controlled and uncontrolled emissions from wastewater systems using the methodology of 40 CFR part 63, appendix C. Uncontrolled emission calculations shall be consistent with the definition of uncontrolled wastewater system emissions in § 63.523(b)(3).

(iv) The owner or operator shall calculate the percent reduction in emissions from process vents, storage tanks, and wastewater systems combined. The affected source is in

compliance if the emission reduction is greater than or equal to 98 percent.

(2) Any owner or operator who elects to comply with § 63.523(b) by limiting HAP emissions from process vents, storage tanks, and wastewater systems to 5,000 pounds per year or less shall demonstrate compliance according to the requirements of paragraphs (d)(2)(i) and (ii) of this section.

(i) Emissions from process vents, storage tanks, and wastewater systems shall be determined according to paragraphs (a)(1) through (3) of this section. Emissions shall be converted to annual emissions. Annual emission calculations shall reflect production levels representative of normal operating conditions.

(ii) The owner or operator shall calculate total emissions from all process vent, storage tank, and wastewater system emission points. The affected source is in compliance with the standard if total emissions are less than or equal to 5,000 lb/yr.

(e) The owner or operator of any existing, new, or reconstructed WSR source that chooses to comply with the emission limit for process vents, storage tanks, and wastewater systems shall demonstrate initial compliance by determining emissions for all process vent, storage tank, and wastewater systems emission points using the methods described in this section.

(1) Emissions of HAP reactor process vents shall be calculated for each batch emission episode according to the methodologies described in paragraph (a)(1) of this section.

(i) Emissions from vapor displacement due to transfer of material into or out of the reactor shall be calculated according to the following equation:

$$E = \frac{(y_i) (V) (P_T) (MW)}{(R) (T)}$$

where:

E = mass emission rate;

y_i = saturated mole fraction of HAP in the vapor phase;

V = volume of gas displaced from the vessel;

R = ideal gas law constant;

T = temperature of the vessel vapor space; absolute;

P_T = pressure of the vessel vapor space; and

MW = molecular weight of the HAP.

(ii) Emissions from reactor purging shall be calculated using the methodology described in paragraph (e)(1)(i) of this section, except that for purge flow rates greater than 100 standard cubic feet per minute (scfm), the mole fraction of HAP will be assumed to be 25 percent of the saturated value.

(iii) Emissions caused by heating of the reactor vessel shall be calculated according to the following methodology:

$$E = \frac{\frac{\sum (P_i)_{T1}}{Pa_1} - \frac{\sum (P_i)_{T2}}{Pa_2}}{2} \times \Delta \eta \times MW_{HAP}$$

where:

E = mass of HAP vapor displaced from the vessel
being heated up;

$(P_i)_{Tn}$ = partial pressure of each HAP in the vessel
headspace at initial ($n=1$) and final ($n=2$)
temperature;

Pa_1 = initial gas pressure in the vessel;

Pa_2 = final gas pressure; and

MW_{HAP} = the average molecular weight of HAP present in
the vessel.

The moles of gas displaced is represented by:

$$\Delta \eta = \frac{V}{R} \left[\left(\frac{Pa_1}{T_1} \right) - \left(\frac{Pa_2}{T_2} \right) \right]$$

where:

$\Delta \eta$ = number of lb-moles of gas displaced;

V = volume of free space in the vessel;

R = ideal gas law constant;

Pa_1 = initial gas pressure in the vessel;

Pa_2 = final gas pressure;

T_1 = initial temperature of vessel; and

T_2 = final temperature of vessel.

The initial pressure of the noncondensable gas in the vessel shall be calculated according to the following equation:

$$Pa_1 = P_{atm} - \sum (P_{ic})_{T1}$$

where:

Pa_1 = initial partial pressure of gas in the vessel headspace;

P_{atm} = atmospheric pressure; and

$(P_{ic})_{T1}$ = initial partial pressure of each condensable volatile organic compound (including HAP) in the vessel headspace, at the initial temperature (T_1).

The average molecular weight of HAP in the displaced gas shall be calculated as follows:

$$MW_{HAP} = \frac{\sum_{i=1}^n (\text{mass of HAP})_i}{\sum_{i=1}^n \frac{(\text{mass of HAP})_i}{(\text{HAP molecular weight})_i}}$$

where n is the number of different HAP compounds in the emission stream.

(2) Emissions of HAP from process vents may be measured directly. The EPA Test Methods listed in paragraph (e)(2)(i) through (iii) of this section, from 40 CFR Part 60, appendix A, shall be used to demonstrate compliance with the requirements of § 63.524 by direct measurement. Testing shall be performed for every batch emission episode of the unit operation. Gas stream volumetric flow rates shall be

measured at 15-minute intervals, or at least once during each batch emission episode. Organic HAP or TOC concentration shall be determined from samples collected in an integrated sample over the duration of each episode, or from grab samples collected simultaneously with the flow rate measurements (every 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate. Test conditions shall represent the normal operating conditions under which the data used to calculate the production rate are taken.

(i) Method 1 or 1A of 40 CFR Part 60, appendix A, as appropriate, shall be used for selection of the sampling sites if the flow measuring device is a pitot tube. A traverse shall be conducted before and after each sampling period. No traverse is necessary when using Method 2A or 2D.

(ii) Method 2, 2A, 2C or 2D of 40 CFR part 60, appendix A, as appropriate, shall be used for the determination of gas stream volumetric flow rate. If Method 2 or 2C is used, the velocity measurements shall be made at a single point than can be used, in conjunction with the traverse, to establish an average velocity across the stack.

(iii) Method 25A and/or Methods 18 and 25A of 40 CFR Part 60, appendix A, as appropriate, shall be used to determine the concentration of HAP in the streams.

(iv) The owner or operator may choose to perform tests only during those periods of the episode in which the emission rate for the entire episode can be determined, or when the emissions are greater than the average emission rate of the episode. The owner or operator who chooses either of these options must develop an emission profile for the entire batch emission episode, based on either process knowledge or test data collected, to demonstrate that test periods are representative. Examples of information that could constitute process knowledge include calculations based on material balances, and process stoichiometry. Previous test results may be used provided the results are still relevant to the current process vent stream conditions.

(v) For batch emission episodes of duration greater than 8 hours, the owner or operator is required to perform a maximum of 8 hours of testing. The test period must include the period of time in which the emission rate is predicted by the emission profile to be greater than average emission rate for the batch emission episode.

(f) The owner or operator of any affected WSR source that chooses to comply with the emissions limit for process vents, storage tanks, and wastewater systems shall calculate emissions from storage tanks in accordance with the methods specified in § 63.150(g)(3).

(g) The owner or operator of any affected WSR source that chooses to comply with the emission limit for process

vents, storage tanks, and wastewater systems shall calculate emissions from wastewater treatment systems (if applicable) in accordance with the methods described in 40 CFR Part 63, appendix C.

(h) The owner or operator of any affected WSR source that chooses to comply with the emission limit for process vents, storage tanks, and wastewater systems shall calculate the average amount of WSR product manufactured per batch, using data from performance tests or from emission calculations, as applicable, to determine the average WSR production per-batch production data for an annual period representing normal operating conditions.

(1) The owner or operator shall calculate an average emission rate per batch as the average of the results from the performance tests or calculations. The production-based emission rate shall be calculated by dividing the emissions per batch by the average production per batch.

(2) Compliance shall be determined according to the methodology described in paragraph (c) of this section. The source is in compliance with the standard for process vents, storage tanks, and wastewater systems if the sum of the equation in paragraph (c) of this section is less than the applicable emission limit from § 63.524.

(i) The owner or operator of any affected BLR source or any affected WSR source that chooses to comply with the requirements of subpart H of this part must demonstrate the

ability of its specific program to meet the compliance requirements therein to achieve initial compliance.

§ 63.526 Monitoring requirements.

(a) The owner or operator of any existing, new, or reconstructed affected BLR source shall provide evidence of continued compliance with the standard. During the initial compliance demonstration, maximum or minimum operating parameters, as appropriate, shall be established for processes and control devices that will indicate the source is in compliance. If the operating parameter to be established is a maximum, the value of the parameter shall be the average of the maximum values from each of the three test runs. If the operating parameter to be established is a minimum, the value of the parameter shall be the average of the minimum values from each of the three test runs. Parameter values for process vents with intermittent emission streams shall be determined as specified in paragraph (b)(1) of this section. The owner or operator shall operate processes and control devices within these parameters to ensure continued compliance with the standard. A de minimis level is specified in paragraph (a)(1) of this section. Monitoring parameters are specified for various process vent control scenarios in paragraphs (a)(2) through (6) of this section.

(1) For affected BLR sources, uncontrolled emission points emitting less than one pound per year of HAP are not subject to the monitoring requirements of paragraphs (a)(2)

through (6) of this section. The owner or operator shall use the methods specified in § 63.525(a), as applicable, or as specified in paragraph (a)(1)(i) of this section, to demonstrate which emission points satisfy the de minimis criteria, to the satisfaction of the Administrator.

(i) For the purpose of determining de minimis status for emission points, engineering assessment may be used to determine process vent stream flow rate and/or concentration for the representative operating conditions expected to yield the highest flow rate and concentration. Engineering assessment includes, but is not limited to, the following:

(A) Previous test results provided the tests are representative of current operating practices at the process unit.

(B) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.

(C) Maximum flow rate, HAP emission rate, concentration, or other relevant parameter specified or implied within a permit limit applicable to the process vent.

(D) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(1) Use of material balances based on process stoichiometry to estimate maximum organic HAP concentrations,

(2) Estimation of maximum flow rate based on physical equipment design such as pump or blower capacities,

(3) Estimation of HAP concentrations based on saturation conditions.

(ii) All data, assumptions, and procedures used in the engineering assessment shall be documented in accordance with § 63.527(c).

(2) For affected sources using water scrubbers, the owner or operator shall establish a minimum scrubber water flow rate as a site-specific operating parameter which must be measured and recorded every 15 minutes. The affected source will be considered to be out of compliance if the scrubber water flow rate, averaged over any continuous 24-hour period, is below the minimum value established during the initial compliance demonstration.

(3) For affected sources using condensers, the owner or operator shall establish the maximum condenser outlet gas temperature as a site-specific operating parameter which must be measured and recorded every 15 minutes. The affected source will be considered to be out of compliance if the condenser outlet gas temperature, averaged over any continuous 24-hour period, is greater than the maximum value established during the initial compliance demonstration.

(4) For affected sources using carbon adsorbers or having uncontrolled process vents, the owner or operator

shall establish a maximum outlet HAP concentration as the site-specific operating parameter which must be measured and recorded every 15 minutes. The affected source will be considered to be out of compliance if the outlet HAP concentration, averaged over any continuous 24-hour period, is greater than the maximum value established during the initial compliance demonstration.

(5) For affected sources using flares, the presence of the pilot flame shall be monitored every 15 minutes. The affected source will be considered to be out of compliance upon loss of pilot flame.

(6) Wastewater system parameters to be monitored are the parameters specified under 40 CFR 414, subpart E. The affected source will be considered to be out of compliance with Subpart W if it is found to be out of compliance with 40 CFR 414, subpart E.

(b) The owner or operator of any existing, new, or reconstructed affected WSR source that chooses to comply with the emission limit for process vents, storage tanks, and wastewater systems shall provide evidence of continued compliance with the standard. As part of the initial compliance demonstrations for batch process vents, test data or compliance calculations shall be used to establish a maximum or minimum level of a relevant operating parameter for each unit operation. The parameter value for each unit operation shall represent the worst case value of the operating parameter from all episodes in the unit operation.

The owner or operator shall operate processes and control devices within these parameters to ensure continued compliance with the standard.

(1) For batch process vents, the level shall be established in accordance with paragraphs (b)(1)(i) through (iv) of this section if compliance testing is performed.

(i) If testing is used to demonstrate initial compliance, the appropriate parameter shall be monitored during all batch emission episodes in the unit operation.

(ii) An average monitored parameter value shall be determined for each of the batch emission episodes in the unit operation.

(iii) If the level to be established for the unit operation is a maximum operating parameter, the level shall be defined as the minimum of the average parameter values determined in paragraph (b)(1)(ii) of this section.

(iv) If the level to be established for the unit operation is a minimum operating parameter, the level shall be defined as the maximum of the average parameter values determined in paragraph (b)(1)(ii) of this section.

(2) Affected sources with condensers on process vents shall establish the maximum condenser outlet gas temperature as a site-specific operating parameter, which must be measured every 15 minutes, or at least once for batch emission episodes less than 15 minutes in duration. The affected source will be considered to be out of compliance if the maximum condenser outlet gas temperature, averaged

over the duration of the batch emission episode or unit operation, is greater than the value established during the initial compliance demonstration.

(3) For affected sources using water scrubbers, the owner or operator shall establish a minimum scrubber water flow rate as a site-specific operating parameter which must be measured and recorded every 15 minutes, or at least once for batch emission episodes less than 15 minutes in duration. The affected source will be considered to be out of compliance if the scrubber water flow rate, averaged over the duration of the batch emission episode or unit operation, is below the minimum flow rate established during the initial compliance demonstration.

(4) For affected sources using carbon adsorbers or having uncontrolled process vents, the owner or operator shall establish a maximum outlet HAP concentration as the site-specific operating parameter which must be measured and recorded every 15 minutes, or at least once for batch emission episodes of duration shorter than 15 minutes. The affected source will be considered to be out of compliance if the outlet HAP concentration, averaged over the duration of the batch emission episode or unit operation, is greater than the value established during the initial compliance demonstration.

(5) For affected sources using flares, the presence of the pilot flame shall be monitored every 15 minutes, or at

least once for batch emission episodes less than 15 minutes in duration. The affected source will be considered to be out of compliance upon loss of pilot flame.

(6) Wastewater system parameters to be monitored are the parameters specified by 40 CFR Part 414, subpart E. The affected source will be considered to be out of compliance with subpart W if it is found to be out of compliance with 40 CFR Part 414, subpart E.

(c) Periods of time when monitoring measurements exceed the parameter values do not constitute a violation if they occur during a startup, shutdown, or malfunction, and the facility follows its startup, shutdown, and malfunction plan.

(d) The owner or operator of any affected WSR source that chooses to comply with the requirements of subpart H of this part shall meet the monitoring requirements of subpart H of this part.

§ 63.527 Recordkeeping requirements.

(a) The owner or operator of any affected BLR source shall keep records of daily average values of equipment operating parameters specified to be monitored under § 63.526(a) or specified by the Administrator. Records shall be kept in accordance with the requirements of applicable paragraphs of § 63.10 of subpart A of this part, as specified in the General Provisions applicability table of this subpart. The owner or operator shall keep records up-to-date and readily accessible.

(1) A daily (24-hour) average shall be calculated as the average of all values for a monitored parameter recorded during the operating day. The average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per operating day if operation is not continuous.

(2) The operating day shall be the period defined in the operating permit or the Notification of Compliance Status in § 63.9(h) of subpart A of this part. It may be from midnight to midnight or another continuous 24-hour period.

(3) In the event of an excursion, the owner or operator must keep records of each 15-minute reading during the period in which the excursion occurred.

(b) The owner or operator of any affected WSR source that elects to comply with the emission limit for process vents, storage tanks, and wastewater systems shall keep records of values of equipment operating parameters specified to be monitored under § 63.526(b) of this subpart or specified by the Administrator. The records that shall be kept are the average values of operating parameters, determined for the duration of each unit operation. Records shall be kept in accordance with the requirements of applicable paragraphs of § 63.10 of subpart A of this part, as specified in the General Provisions applicability table in § 63.520. The owner or operator shall keep records up-to-date and readily accessible. In the event of an excursion, the owner or

operator must keep records of each 15-minute reading for the entire unit operation in which the excursion occurred.

(c) The owner or operator of any affected BLR source, as well the owner or operator of any affected WSR source that chooses to comply with the emission limit for process vents, storage tanks, and wastewater systems, who demonstrates that certain process vents are below the de minimis cutoff for continuous monitoring specified in § 63.526(a)(1)(i), shall maintain up-to-date, readily accessible records of the following information to document that a HAP emission rate of less than one pound per year is maintained:

(1) The information used to determine de minimis status for each de minimis process vent, as specified § 63.526(a)(1)(i);

(2) Any process changes as defined in § 63.115(e) of subpart G of this part that increase the HAP emission rate;

(3) Any recalculation or measurement of the HAP emission rate pursuant to § 63.115(e) of subpart G of this part; and

(4) Whether or not the HAP emission rate increases to one pound per year or greater as a result of the process change.

(d) The owner or operator of any affected BLR source, as well as the owner or operator of any affected WSR source who elects to implement the leak detection and repair program specified in subpart H of this part, shall implement

the recordkeeping requirements outlined therein. All records shall be retained for a period of 5 years, in accordance with the requirements of 40 CFR 63.10(b)(1).

(e) Any excursion from the required monitoring parameter, unless otherwise excused, shall be considered a violation of the emission standard.

§ 63.528 Reporting requirements.

(a) The owner or operator of any affected BLR source, as well as the owner or operator of any affected WSR source that elects to comply with the emission limit for process vents, storage tanks, and wastewater systems, shall comply with the reporting requirements of applicable paragraphs of § 63.10 of subpart A of this part, as specified in the General Provisions applicability table in § 63.520. The owner or operator shall also submit to the Administrator, as part of the quarterly excess emissions and continuous monitoring system performance report and summary report required by § 63.10(e)(3) of subpart A of this part, the following recorded information.

(1) Reports of monitoring data, including 15-minute monitoring values as well as daily average values or per-unit operation average values, as applicable, of monitored parameters for all operating days or unit operations when the average values were outside the ranges established in the Notification of Compliance Status or operating permit.

(2) Reports of the duration of periods when monitoring data is not collected for each excursion caused by

insufficient monitoring data. An excursion means any of the three cases listed in paragraphs (a)(2)(i) or (a)(2)(ii) of this section. For a control device where multiple parameters are monitored, if one or more of the parameters meets the excursion criteria in paragraphs (a)(2)(i) or (a)(2)(ii), this is considered a single excursion for the control device.

(i) When the period of control device operation is 4 hours or greater in an operating day and monitoring data are insufficient to constitute a valid hour of data, as defined in paragraph (a)(2)(iii) of this section, for at least 75 percent of the operating hours.

(ii) When the period of control device operation is less than 4 hours in an operating day and more than one of the hours during the period of operation does not constitute a valid hour of data due to insufficient monitoring data.

(iii) Monitoring data are insufficient to constitute a valid hour of data, as used in paragraphs (a)(2)(i) and (a)(2)(ii) of this section, if measured values are unavailable for any of the 15-minute periods within the hour.

(3) Whenever a process change, as defined in § 63.115(e) of subpart G of this part, is made that causes a the emission rate from a de minimis emission point to become a process vent with an emission rate of one pound per year or greater, the owner or operator shall submit a report within 180 calendar days after the process change. The

report may be submitted as part of the next summary report required under § 63.10(e)(3) of subpart A of this part. The report shall include:

- (i) A description of the process change, and
- (ii) The results of the recalculation of the emission rate.

(b) The owner or operator of any affected BLR source, as well as the owner or operator of any affected WSR source who elects to implement the leak detection and repair program specified in subpart H of this part, shall implement the reporting requirements outlined therein. Copies of all reports shall be retained as records for a period of 5 years, in accordance with the requirements of 40 CFR 63.10(b)(1).

(c) The owner or operator of any affected BLR source, as well as the owner or operator of any affected WSR source that elects to comply with the emission limit for process vents, storage tanks, and wastewater systems shall include records of wastewater system monitoring parameters in the Notification of Compliance Status and summary reports required by subpart A of this part.

TABLE 1. GENERAL PROVISIONS APPLICABILITY TO SUBPART W

Reference to Subpart W	Applies to subpart W			Comment
	BLR	WSR	WSR Alternative Standard, and BLR equipment leak standard (40 CFR Part 63, subpart H)	
§ 63.1(a)(1)	Yes	Yes	Yes	Additional terms defined in § 63.522
§ 63.1(a)(2)	Yes	Yes	Yes	
§ 63.1(a)(3)	Yes	Yes	Yes	
§ 63.1(a)(4)	Yes	Yes	Yes	subpart W specifies applicability of each paragraph in subpart A to subpart W
§ 63.1(a)(5)	N/A	N/A	N/A	Reserved
§ 63.1(a)(6)	Yes	Yes	Yes	
§ 63.1(a)(7)	Yes	Yes	Yes	
§ 63.1(a)(8)	No	No	No	Discusses State programs
§ 63.1(a)(9)	N/A	N/A	N/A	Reserved
§ 63.1(a)(10)	Yes	Yes	Yes	
§ 63.1(a)(11)	Yes	Yes	Yes	
§ 63.1(a)(12)-(14)	Yes	Yes	Yes	
§ 63.1(b)(1)	No	No	No	§ 63.521 of subpart W specifies applicability
§ 63.1(b)(2)	Yes	Yes	Yes	
§ 63.1(b)(3)	Yes	Yes	Yes	
§ 63.1(c)(1)	Yes	Yes	Yes	Subpart W specifies applicability of each paragraph in subpart A to sources subject to subpart W
§ 63.1(c)(2)	No	No	No	Area sources are not subject to subpart W
§ 63.1(c)(3)	N/A	N/A	N/A	Reserved
§ 63.1(c)(4)	Yes	Yes	Yes	
§ 63.1(c)(5)	Yes	Yes	No	Subpart H specifies applicable notification requirements
§ 63.1(d)	N/A	N/A	N/A	Reserved
§ 63.1(e)	Yes	Yes	Yes	

TABLE 1. (continued)

Reference to Subpart W	Applies to subpart W			Comment
	BLR	WSR	WSR Alternative Standard, and BLR equipment leak standard (40 CFR Part 63, subpart H)	
§ 63.2	Yes	Yes	Yes	Additional terms are defined in § 63.522 of subpart W; when overlap between subparts A and W occurs, subpart W takes precedence.
§ 63.3	Yes	Yes	No	Other units used in subpart W are defined in that subpart; units of measure are spelled out for subpart H
§ 63.4(a)(1)-(3)	Yes	Yes	Yes	
§ 63.4(a)(4)	N/A	N/A	N/A	Reserved
§ 63.4(a)(5)	Yes	Yes	Yes	
§ 63.4(b)	Yes	Yes	Yes	
§ 63.4(c)	Yes	Yes	Yes	
§ 63.5(a)	Yes	Yes	Yes	Except replace the terms "source" and "stationary source" in § 63.5(a)(1) of subpart A with "affected source"
§ 63.5(b)(1)	Yes	Yes	Yes	
§ 63.5(b)(2)	N/A	N/A	N/A	Reserved
§ 63.5(b)(3)	Yes	Yes	Yes	
§ 63.5(b)(4)	Yes	Yes	Yes	
§ 63.5(b)(5)	Yes	Yes	Yes	
§ 63.5(b)(6)	Yes	Yes	Yes	
§ 63.5(c)	N/A	N/A	N/A	Reserved
§ 63.5(d)(1)(i)	Yes	Yes	Yes	
§ 63.5(d)(1)(ii)	Yes	Yes	Yes	
§ 63.5(d)(1)(iii)	Yes	Yes	Yes	
§ 63.5(d)(2)	Yes	Yes	Yes	
§ 63.5(d)(3)-(4)	Yes	Yes	Yes	
§ 63.5(e)	Yes	Yes	Yes	
§ 63.5(f)(1)	Yes	Yes	Yes	Except replace "source" in § 63.5(f)(1) of subpart A with "affected source"

TABLE 1. (continued)

Reference to Subpart W	Applies to subpart W			Comment
	BLR	WSR	WSR Alternative Standard, and BLR equipment leak standard (40 CFR Part 63, subpart H)	
§ 63.5(f)(2)	Yes	Yes	Yes	
§ 63.6(a)	Yes	Yes	Yes	
§ 63.6(b)(1)-(2)	No	No	No	Subpart W specifies compliance dates
§ 63.6(b)(3)-(4)	Yes	Yes	Yes	
§ 63.6(b)(5)		Yes	No	Subpart H includes notification requirements
§ 63.6(b)(6)	N/A	N/A	N/A	Reserved
§ 63.6(b)(7)	No	Yes	No	Sources subject to subpart H must comply according to the schedule in § 63.520 of subpart W for new sources subject to subpart H
§ 63.6(c)(1)-(2)	Yes	Yes	Yes	Except replace "source" in § 63.6(c)(1)-(2) of subpart A with "affected source"
§ 63.6(c)(3)-(4)	N/A	N/A	N/A	Reserved
§ 63.6(c)(5)	Yes	Yes	Yes	
§ 63.6(d)	N/A	N/A	N/A	Reserved
§ 63.6(e)	Yes	Yes	Yes	
§ 63.6(f)(1)	Yes	Yes	Yes	
§ 63.6(f)(2)(i)-(ii)	Yes	Yes	Yes	
§ 63.6(f)(2)(iii)	Yes	Yes	Yes	
§ 63.6(f)(2)(iv)	Yes	Yes	Yes	
§ 63.6(f)(3)	Yes	Yes	Yes	
§ 63.6(g)	Yes	Yes	Yes	An alternative standard has been proposed for WSR; however, affected sources will have the opportunity to demonstrate other alternatives to the Administrator
§ 63.6(h)	No	No	No	Subpart W does not contain any opacity or visible emissions standards
§ 63.6(i)(1)	Yes	Yes	Yes	

TABLE 1. (continued)

Reference to Subpart W	Applies to subpart W			Comment
	BLR	WSR	WSR Alternative Standard, and BLR equipment leak standard (40 CFR Part 63, subpart H)	
§ 63.6(i)(2)	Yes	Yes	Yes	Except replace "source" in § 63.6(2)(i) and (ii) of subpart A with "affected source."
§ 63.6(i)(3)	Yes	Yes	Yes	
§ 63.6(i)(4)(i)	Yes	Yes	Yes	
§ 63.6(i)(4)(ii)	Yes	Yes	Yes	
§ 63.6(i)(5)-(14)	Yes	Yes	Yes	
§ 63.6(i)(15)	N/A	N/A	N/A	Reserved
§ 63.6(i)(16)	Yes	Yes	Yes	
§ 63.6(j)	Yes	Yes	Yes	
§ 63.7(a)(1)	Yes	Yes	No	Subpart H specifies required testing and compliance procedures
§ 63.7(a)(2)(i)-(vi)	Yes	Yes	No	Subpart H specifies that test results must be submitted in the Notification of Compliance Status due 150 days after the compliance date
§ 63.7(a)(2)(vii)-(viii)	N/A	N/A	N/A	Reserved
§ 63.7(a)(2)(ix)	Yes	Yes	Yes	
§ 63.7(a)(3)	Yes	Yes	Yes	
§ 63.7(b)(1)	Yes	Yes	Yes	
§ 63.7(b)(2)	Yes	Yes	Yes	
§ 63.7(c)	No	No	No	
§ 63.7(d)	Yes	Yes	Yes	Except replace "source" in § 63.7(d) of subpart A with "affected source."
§ 63.7(e)(1)	Yes	Yes	Yes	Subpart W also contains test methods specific to BLR and WSR sources.
§ 63.7(e)(2)	Yes	Yes	Yes	
§ 63.7(e)(3)	Yes	Yes	No	Subpart H specifies test methods and procedures

TABLE 1. (continued)

Reference to Subpart W	Applies to subpart W			Comment
	BLR	WSR	WSR Alternative Standard, and BLR equipment leak standard (40 CFR Part 63, subpart H)	
§ 63.7(f)	Yes	Yes	No	Subpart H specifies applicable methods and provides alternatives
§ 63.7(g)(1)	Yes	Yes	No	Subpart H specifies performance test reporting
§ 63.7(g)(2)	N/A	N/A	N/A	Reserved
§ 63.7(g)(3)	Yes	Yes	Yes	
§ 63.7(h)(1)-(2)	Yes	Yes	Yes	
§ 63.7(h)(3)(i)	Yes	Yes	Yes	
§ 63.7(h)(3)(ii)-(iii)	Yes	Yes	Yes	
§ 63.7(h)(4)-(5)	Yes	Yes	Yes	
§ 63.8(a)(1)	Yes	Yes	Yes	
§ 63.8(a)(2)	Yes	Yes	Yes	
§ 63.8(a)(3)	N/A	N/A	N/A	Reserved
§ 63.8(a)(4)	Yes	Yes	Yes	
§ 63.8(b)(1)	Yes	Yes	Yes	
§ 63.8(b)(2)	Yes	Yes	No	Subpart H specifies locations to conduct monitoring
§ 63.8(b)(3)	Yes	Yes	Yes	
§ 63.8(c)(1)(i)	Yes	Yes	Yes	
§ 63.8(c)(1)(ii)	Yes	Yes	Yes	
§ 63.8(c)(1)(iii)	Yes	Yes	Yes	
§ 63.8(c)(2)-(3)	Yes	Yes	Yes	
§ 63.8(c)(4)-(8)	No	No	No	Subpart W specifies monitoring frequencies
§ 63.8(d)	No	No	No	
§ 63.8(e)	No	No	No	
§ 63.8(f)(1)	Yes	Yes	Yes	
§ 63.8(f)(2)	Yes	Yes	Yes	
§ 63.8(f)(3)	Yes	Yes	Yes	

TABLE 1. (continued)

Reference to Subpart W	Applies to subpart W			Comment
	BLR	WSR	WSR Alternative Standard, and BLR equipment leak standard (40 CFR Part 63, subpart H)	
§ 63.8(f)(4)	Yes	Yes	Yes	
§ 63.8(f)(5)	Yes	Yes	Yes	
§ 63.8(f)(6)	Yes	Yes	No	
§ 63.8(g)	Yes	Yes	Yes	
§ 63.9(a)	Yes	Yes	Yes	
§ 63.9(b)(1)(i)-(ii)	Yes	Yes	Yes	
§ 63.9(b)(1)(iii)	Yes	Yes	Yes	
§ 63.9(b)(2)	Yes	Yes	Yes	
§ 63.9(b)(3)	Yes	Yes	Yes	
§ 63.9(b)(4)	Yes	Yes	Yes	
§ 63.9(b)(5)	Yes	Yes	Yes	
§ 63.9(c)	Yes	Yes	Yes	
§ 63.9(d)	Yes	Yes	Yes	
§ 63.9(e)	No	No	No	
§ 63.9(f)	No	No	No	
§ 63.9(g)	No	No	No	
§ 63.9(h)(1)-(3)	Yes	Yes	No	Separate Notification of Compliance Status requirements are specified for subpart H
§ 63.9(h)(4)	N/A	N/A	N/A	Reserved
§ 63.9(h)(5)-(6)	Yes	Yes	No	Subpart H specifies Notification of Compliance Status requirements
§ 63.9(i)	Yes	Yes	Yes	
§ 63.9(j)	Yes	Yes	Yes	
§ 63.10(a)	Yes	Yes	Yes	
§ 63.10(b)(1)	Yes	Yes	Yes	
§ 63.10(b)(2)	No	No	No	Subparts H and W specify recordkeeping requirements
§ 63.10(b)(3)	Yes	Yes	Yes	
§ 63.10(c)(1)-(6)	No	No	No	

TABLE 1. (continued)

Reference to Subpart W	Applies to subpart W			Comment
	BLR	WSR	WSR Alternative Standard, and BLR equipment leak standard (40 CFR Part 63, subpart H)	
§ 63.10(c)(7)-(8)	Yes	Yes	Yes	
§ 63.10(c)(9)-(15)	No	No	No	
§ 63.10(d)(1)	Yes	Yes	No	Subpart H specifies performance test reporting requirements
§ 63.10(d)(2)	Yes	Yes	No	Subpart H specifies performance test reporting requirements
§ 63.10(d)(3)	No	No	No	
§ 63.10(d)(4)	Yes	Yes	Yes	
§ 63.10(d)(5)	Yes	Yes	Yes	
§ 63.10(e)(1)-(2)	No	No	No	
§ 63.10(e)(3)	Yes	Yes	No	
§ 63.10(e)(4)	No	No	No	
§ 63.10(f)	Yes	Yes	Yes	
§ 63.11-§ 63.15	Yes	Yes	Yes	

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

2. Part 63 is amended by adding subpart EE to read as follows:

Subpart EE--National Emission Standards for Magnetic Tape Manufacturing Operations

63.701 Applicability.

63.702 Definitions.

63.703 Standards.

63.704 Compliance and monitoring requirements.

63.705 Performance test methods and procedures to determine initial compliance.

63.706 Recordkeeping requirements.

63.707 Reporting requirements.

63.708 Delegation of authority.

§ 63.701 Applicability.

(a) Except as specified in paragraph (b) of this section, the provisions of this subpart apply to:

(1) each new and existing magnetic tape manufacturing operation located at a major source of hazardous air pollutant (HAP) emissions; and

(2) a magnetic tape manufacturing operation for which the owner or operator chooses to use the provisions of § 63.703(b) and (h) to obtain a Federally enforceable limit on its potential to emit HAP.

EXPLANATORY NOTE: A reason the owner or operator would make the choice described in paragraph (a)(2) of this section is if the plant site, without this limit, would be a major source. The owner or operator could use this limit, which would establish the potential to emit from magnetic tape manufacturing operations, in conjunction with the potential to emit from the other HAP emission points at the stationary source, to be an area source. Note, however, that an owner or operator is not required to use the provisions in § 63.703(b) and (h) to determine the potential to emit HAP from magnetic tape manufacturing operations.

(b) This subpart does not apply to the following:

(1) research or laboratory facilities; and

(2) any coating operation that produces a quantity of magnetic tape that is 1 percent or less of total production (in terms of total square footage coated) from that coating operation in any 12-month period.

(c) The affected source subject to this standard is the magnetic tape manufacturing operation, as defined in § 63.702.

(d) An owner or operator of an existing affected source subject to the provisions of this subpart shall comply according to the following schedule:

(1) within 3 years after the effective date of the standard, if the owner or operator is required to install a new add-on air pollution control device to meet the requirements of § 63.703(c) or (g); or

(2) within 2 years after the effective date of the standard, if a new add-on air pollution control device is not needed to comply with § 63.703(c) or (g) of these standards.

(e) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon startup of the affected source.

(f) The provisions of this subpart apply during periods of startup and shutdown, and whenever magnetic tape manufacturing operations are taking place.

(g) Owners or operators of affected sources subject to the provisions of this subpart shall also comply with the requirements of subpart A as identified in Table 1, according to the applicability of subpart A to such sources.

(h) In any title V permit for an affected source, all research or laboratory facilities that are exempt from the requirements of this subpart shall be clearly identified.

§ 63.702 Definitions.

(a) All terms used in this subpart that are not defined below have the meaning given to them in the Clean Air Act and in subpart A of this part.

Add-on air pollution control device means equipment installed at the end of a process vent exhaust stack or stacks that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Examples are incinerators, condensers, carbon adsorbers, and biofiltration units. Transfer equipment and ductwork are not considered in and of themselves add-on air pollution control devices.

Bag splitter means a device for enclosed transfer of particulates. A bag of raw materials is placed in a hopper, the hopper is closed, and an internal mechanism slits the bag, releasing the particulates into either a closed conveyor that feeds the mix preparation equipment or into the mix preparation equipment itself.

Base substrate means the surface, such as plastic or paper, to which a coating is applied.

Capture efficiency means the fraction of all organic vapors or other pollutants generated by a process that are directed to an add-on air pollution control device.

Capture device means a hood, enclosed room, or other means of collecting HAP vapors or other pollutants into a duct that exhausts to an add-on air pollution control device.

Carbon adsorber vessel means one vessel in a series of vessels in a carbon adsorption system that contains carbon and is used to remove gaseous pollutants from a gaseous emission source.

Car seal means a seal that is placed on a device that is used either to open a closed valve or close an opened valve so that the position of the valve cannot be changed without breaking the seal.

Closed system for flushing fixed lines means a system in which the line to be flushed is disconnected from its original position and connected to two closed containers, one that contains cleaning solvent and one that is empty. Solvent is flushed from the container with cleaning solvent, through the line, and into the empty containers.

Coater or coating applicator means the apparatus used to apply a coating to a continuous base substrate.

Coating application means the process by which the coating mix is applied to the base substrate.

Coating operation means any coater, flashoff area, and drying oven located between a base substrate unwind station and a base substrate rewind station that coats a continuous base substrate.

Control device efficiency means the ratio of the emissions collected or destroyed by an add-on air pollution control device to the total emissions that are introduced to the control device, expressed as a percentage.

Day means a 24-consecutive-hour period.

Drying oven means a chamber that uses heat to bake, cure, polymerize, or dry a surface coating; if the coating contains volatile solvents, the volatile portion is evaporated in the oven.

Enclosed transfer method means a particulate HAP transfer method that uses an enclosed system to prevent particulate HAP from entering the atmosphere as dust. Equipment used for this purpose may include vacuum injection systems or other mechanical transfer systems, bag slitters, or supersacks.

Equivalent diameter means four times the area of an opening divided by its perimeter.

Flashoff area means the portion of a coating operation between the coater and the drying oven where solvent begins to evaporate from the coated base substrate.

Flushing of fixed lines means the flushing of solvent through lines that are typically fixed and are not associated with the cleaning of a tank, such as the line from the mix room to the coater.

Freeboard ratio means the vertical distance from the surface of the liquid to the top of the sink or tank (freeboard height) divided by the smaller of the length or width of the sink or tank evaporative area.

Magnetic coatings means coatings applied to base substrates to make magnetic tape. Components of magnetic coatings may include: magnetic particles, binders, dispersants, conductive pigments, lubricants, solvents, and other additives.

Magnetic particles means particles in the coating mix that have magnetic properties. Examples of magnetic particles used in magnetic tape manufacturing are: γ -oxide, doped iron oxides, chromium dioxide, barium ferrite, and metallic particles that usually consist of elemental iron, cobalt, and/or nickel.

Magnetic tape means any flexible base substrate that is covered on one or both sides with a coating containing magnetic particles and that is used for audio recording, video recording, or any type of information storage.

Magnetic tape manufacturing operation means all of the emission points within a magnetic tape manufacturing facility that are specifically associated with the manufacture of magnetic tape. These include, but are not limited to:

- (1) Solvent storage tanks;
- (2) Mix preparation equipment;
- (3) Coating operations;
- (4) Waste handling devices;
- (5) Particulate transfer operations;
- (6) Wash sinks for cleaning removable parts;
- (7) Cleaning involving the flushing of fixed lines;
- (8) Wastewater treatment systems; and
- (9) Condenser vents associated with distillation and stripping columns in the solvent recovery area, but not including the vent on a condenser that is used as the add-on air pollution control device.

Mill means the pressurized equipment that uses the dispersing action of beads, combined with the high shearing forces of the centrifugal mixing action, to disperse the aggregates of magnetic particles thoroughly without reducing particle size.

Mix preparation equipment means the vessels, except for mills, used to prepare the magnetic coating.

Natural draft opening means any opening in a room, building, or total enclosure that remains open during operation of the facility and that is not connected to a

duct in which a fan is installed. The rate and direction of the natural draft through such an opening is a consequence of the difference in pressures on either side of the wall containing the opening.

Nonregenerative carbon adsorber means a carbon adsorber vessel in which the spent carbon bed does not undergo carbon regeneration in the adsorption vessel.

Operating parameter value means a minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limitation or standard.

Overall HAP control efficiency means the total efficiency of the control system, determined by the product of the capture efficiency and the control device efficiency.

Particulate means any material, except uncombined water, that exists as liquid or solid particles such as dust, smoke, mist, or fumes at standard conditions (760 millimeters of mercury, 0 degrees celsius).

Particulate HAP transfer means the introduction of a particulate HAP into other dry ingredients or a liquid solution.

Removable parts cleaning means cleaning of parts that have been moved from their normal position to a wash tank or sink containing solvent for the purpose of cleaning.

Research or laboratory facility means any stationary source whose primary purpose is to conduct research and development to develop new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Separator means a device in the wastewater treatment system in which immiscible solvent is physically separated from the water with which it is mixed.

Solvent storage tanks means the stationary tanks that are associated with magnetic tape operations and that store virgin solvent, spent solvent, cleaning solvent, solvent at any stage of the solvent recovery process, or any volatile compound. They do not serve a process function.

Solvent recovery area means the collection of devices used to remove HAP emissions from process air, to recover the HAP, and to purify the HAP. Typically, this area contains a control device such as a carbon adsorber or condenser, the wastewater treatment system, and the distillation columns.

Solvent recovery device means, for the purposes of this subpart, an add-on air pollution control device in which HAP is captured rather than destroyed. Examples include carbon adsorption systems and condensers.

Supersack means a container of particulate from the manufacturer or supplier with attached feed tubes and that

is used to transfer particulate under the following conditions: the feed tubes are attached directly to the mix preparation equipment, the attachment interface is sealed, and all openings on the mix transfer equipment are closed to the atmosphere.

Temporary total enclosure means a total enclosure that is constructed for the sole purpose of measuring the fugitive emissions from an affected source. A temporary total enclosure must be constructed and ventilated (through stacks suitable for testing) so that it has minimal impact on the performance of the permanent capture system. A temporary total enclosure will be assumed to achieve total capture of fugitive emissions if it conforms to the requirements found in § 63.705(c)(4)(i) and if all natural draft openings are at least four duct or hood equivalent diameters away from each exhaust duct or hood. Alternatively, the owner or operator may apply to the Administrator for approval of a temporary enclosure on a case-by-case basis.

Total enclosure means a structure that is constructed around a gaseous emission source so that all gaseous pollutants emitted from the source are collected and ducted through a control device, such that 100 percent capture efficiency is achieved. There are no fugitive emissions from a total enclosure. The only openings in a total enclosure are forced makeup air and exhaust ducts and any natural draft openings such as those that allow raw materials to enter and exit the enclosure for processing. All access doors or windows are closed during routine operation of the enclosed source. Brief, occasional openings of such doors or windows to accommodate process equipment adjustments are acceptable, but if such openings are routine or if an access door remains open during the entire operation, the access door must be considered a natural draft opening. The average inward face velocity across the natural draft openings of the enclosure must be calculated including the area of such access doors. The drying oven itself may be part of the total enclosure. A permanent enclosure that meets the requirements found in § 63.705(c)(4)(i) is a total enclosure.

Utilize means the use of HAP that is delivered to mix preparation equipment for the purpose of formulating coatings, the use of any other HAP (e.g., dilution solvent) that is added at any point in the manufacturing process, and the use of any HAP for cleaning activities. Alternatively, annual HAP utilization can be determined as net usage; that is, the HAP inventory at the beginning of a 12-month period, plus the amount of HAP purchased during the 12-month period, minus the amount of HAP in inventory at the end of a 12-month period.

Vacuum injection system means a system in which a vacuum draws particulate from a storage container into a closed system that transfers particulates into the mix

preparation equipment.

Volatile organic compound (VOC) means any organic compound that participates in atmospheric photochemical reactions or that is measured by EPA Test Methods 18, 24, or 25A in appendix A of part 60 or an alternative test method as defined in § 63.2.

Volatile organic hazardous air pollutant (VOHAP) concentration means the concentration of an individually-specified organic HAP in a wastewater discharge that is measured by Method 305 of appendix A to 40 CFR part 63.

Waste handling means processing or treatment of waste (liquid or solid) that is generated as a by-product of either the magnetic tape production process or cleaning operations.

Waste handling device means equipment that is used to separate solvent from solid waste (e.g., filter dryers) or liquid waste (e.g., pot stills and thin film evaporators). The solvents are recovered by heating, condensing, and collection.

Wastewater discharge means the water phase that is discharged from the separator in a wastewater treatment system.

Wastewater treatment system means the assortment of devices in which the solvent/water mixture, generated when the carbon bed in the carbon adsorber is desorbed by steam, is treated to remove residual organics in the water.

(b) The nomenclature used in this subpart is defined when presented or has the meaning given below:

(1) A_k = the area of each natural draft opening (k) in a total enclosure, in square meters.

(2) C_{aj} = the concentration of HAP or VOC in each gas stream (j) exiting the emission control device, in parts per million by volume.

(3) C_{bi} = the concentration of HAP or VOC in each gas stream (i) entering the emission control device, in parts per million by volume.

(4) C_{di} = the concentration of HAP or VOC in each gas stream (i) entering the emission control device from the affected source, in parts per million by volume.

(5) C_{fk} = the concentration of HAP or VOC in each uncontrolled gas stream (k) emitted directly to the atmosphere from the affected source, in parts per million by volume.

(6) C_{gv} = the concentration of HAP or VOC in each uncontrolled gas stream entering each individual carbon adsorber vessel (v), in parts per million by volume. For the purposes of calculating the efficiency of the individual carbon adsorber vessel, C_{gv} may be measured in the carbon adsorption system's common inlet duct prior to the branching of individual inlet ducts to the individual carbon adsorber vessels.

(7) C_{hv} = the concentration of HAP or VOC in the gas stream exiting each individual carbon adsorber vessel (v),

in parts per million by volume.

(8) E = the control device efficiency achieved for the duration of the emission test (expressed as a fraction).

(9) F = the HAP or VOC emission capture efficiency of the HAP or VOC capture system achieved for the duration of the emission test (expressed as a fraction).

(10) FV = the average inward face velocity across all natural draft openings in a total enclosure, in meters per hour.

(11) G = the calculated mass of HAP per volume of coating solids (in kilograms per liter) contained in a batch of coating.

(12) H_v = the individual carbon adsorber vessel (v) efficiency achieved for the duration of the emission test (expressed as a fraction).

(13) H_{sys} = the efficiency of the carbon adsorption system calculated when each carbon adsorber vessel has an individual exhaust stack (expressed as a fraction).

(14) L_{si} = the volume fraction of solids in each batch of coating (i) applied as determined from the formulation records at the affected source.

(15) M_{ci} = the total mass in kilograms of each batch of coating (i) applied, or of each coating applied at an affected coating operation during a 7-day period, as appropriate, as determined from records at the affected source. This quantity shall be determined at a time and location in the process after all ingredients (including any dilution solvent) have been added to the coating, or if ingredients are added after the mass of the coating has been determined, appropriate adjustments shall be made to account for them.

(16) M_r = the total mass in kilograms of HAP or VOC recovered for a 7-day period.

(17) Q_{aj} = the volumetric flow rate of each gas stream (j) exiting the emission control device in either dry standard cubic meters per hour when EPA Method 18 in appendix A of part 60 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(18) Q_{bi} = the volumetric flow rate of each gas stream (i) entering the emission control device, in dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(19) Q_{di} = the volumetric flow rate of each gas stream (i) entering the emission control device from the affected source in either dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(20) Q_{fk} = the volumetric flow rate of each

uncontrolled gas stream (k) emitted directly to the atmosphere from the affected source in either dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(21) Q_{gv} = the volumetric flow rate of each gas stream entering each individual carbon adsorber vessel (v) in either dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration. For purposes of calculating the efficiency of the individual carbon adsorber vessel, the value of Q_{gv} can be assumed to equal the value of Q_{hv} measured for that carbon adsorber vessel.

(22) Q_{hv} = the volumetric flow rate of each gas stream exiting each individual carbon adsorber vessel (v) in either dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(23) $Q_{in\ i}$ = the volumetric flow rate of each gas stream (i) entering the total enclosure through a forced makeup air duct in standard cubic meters per hour (wet basis).

(24) $Q_{out\ j}$ = the volumetric flow rate of each gas stream (j) exiting the total enclosure through an exhaust duct or hood in standard cubic meters per hour (wet basis).

(25) $\bar{R}$ = the overall HAP or VOC emission reduction achieved for the duration of the emission test (expressed as a percentage).

(26) RS_i = the total mass in kilograms of HAP or VOC retained in the coated substrate after oven drying for a given magnetic tape product.

(27) V_{ci} = the total volume in liters of each batch of coating (i) applied as determined from records at the affected source.

(28) W_{oi} = the weight fraction of HAP or VOC in each batch of coating (i) applied, or of each coating applied at an affected coating operation during a 7-day period, as appropriate, as determined by EPA Method 24 or formulation data. This value shall be determined at a time and location in the process after all ingredients (including any dilution solvent) have been added to the coating, or if ingredients are added after the weight fraction of HAP or VOC in the coating has been determined, appropriate adjustments shall be made to account for them.

§ 63.703 Standards.

(a) Each owner or operator of any affected source that is subject to the requirements of this subpart shall comply with the requirements of this subpart on and after the compliance dates specified in § 63.701.

(b) (1) The owner or operator subject to § 63.701(a) (2)

shall determine limits on the amount of HAP utilized (see definition) in the magnetic tape manufacturing operation as the values for the potential to emit HAP from the magnetic tape manufacturing operation.

(2) The limits on the amount of HAP utilized in the magnetic tape manufacturing operations shall be determined in the following manner.

(i) The potential to emit each HAP from each emission point at the stationary source, other than those from magnetic tape manufacturing operations, shall be calculated and converted to the units of Mg/yr (or tons/yr).

(ii) The limits on the HAP utilized in the magnetic tape manufacturing operation shall be determined as the values that, when summed with the values in paragraph (b)(2)(i) of this section, are less than 9.1 Mg/yr (10 tons/yr) for each individual HAP and 22.7 Mg/yr (25 tons/yr) for the combination of HAP.

(3) The limits on the HAP utilized determined in paragraph (b)(2) of this section shall be in terms of Mg/yr (or tons/yr), calculated monthly on a rolling 12-month average. The owner or operator shall not exceed these limits.

(4) An owner or operator subject to paragraph (b) of this section shall meet the requirements in paragraph (h) of this section.

(5) A magnetic tape manufacturing operation that is subject to paragraph (b) of this section and is located at an area source is not subject to paragraphs (c) through (g) of this section.

(c) Except as provided by § 63.703(b), each owner or operator of an affected source subject to this subpart shall limit gaseous HAP emitted from each solvent storage tank, piece of mix preparation equipment, coating operation, waste handling device, and condenser vent in solvent recovery as specified in paragraphs (c)(1) through (c)(5) of this section:

(1) Except as otherwise allowed in paragraphs (c)(2), (3), (4), and (5) of this section, each owner or operator shall limit gaseous HAP emitted from each solvent storage tank, piece of mix preparation equipment, coating operation, waste handling device, and condenser vent in solvent recovery by an overall HAP control efficiency of at least 95 percent.

(2) An owner or operator that uses an incinerator to control emission points listed in paragraph (c)(1) of this section may choose to meet the overall HAP control efficiency requirement of paragraph (c)(1) of this section, or may operate the incinerator such that an outlet HAP concentration of no greater than 20 parts per million by volume (ppmv) by compound on a dry basis is achieved, as long as the efficiency of the capture system is 100 percent.

(3) An owner or operator may choose to meet the requirements of paragraph (c)(1) or (2) of this section by

venting the room, building, or enclosure in which the HAP emission point is located to an add-on air pollution control device, as long as the required overall HAP control efficiency of this method is sufficient to meet the requirements of paragraph (c)(1) or (2) of this section.

(4) In lieu of controlling HAP emissions from each solvent storage tank to the level required by paragraph (c)(1) of this section, an owner or operator of an affected source may:

(i) control HAP emissions from all coating operations by an overall HAP control efficiency of at least 97 percent in lieu of controlling 10 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(ii) control HAP emissions from all coating operations by an overall HAP control efficiency of at least 98 percent in lieu of controlling 15 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(iii) control HAP emissions from all coating operations by an overall HAP control efficiency of at least 99 percent in lieu of controlling 20 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity.

(iv) Owners or operators choosing to meet the requirements of paragraphs (c)(4)(i), (ii), or (iii) of this section are also subject to the reporting requirement of § 63.707(k).

(5) In lieu of controlling HAP emissions from a coating operation to the level required by paragraph (c)(1) of this section, owners or operators may use magnetic coatings that contain no greater than 0.18 kilograms of HAP per liter of coating solids for that coating operation. For the requirements of this paragraph, §§ 63.6(e)(3), 63.6(f)(1) and (2), 63.8(b)(2) and (3), 63.8(c), 63.8(d), 63.8(e), 63.8(g), 63.9(e) and (g), 63.10(c), 63.10(d)(2), (3), and (5), 63.10(e)(1) and (2), and 63.11 of subpart A do not apply.

(d) Particulate transfer operations. Except as stipulated by § 63.703(b), each owner or operator of an affected source subject to this subpart shall:

(1) use an enclosed transfer method to perform particulate HAP transfer; or

(2) direct emissions from particulate HAP transfer through a hood or enclosure to a baghouse or fabric filter that exhibits no visible emissions while controlling HAP emissions from particulate HAP transfer.

(e) Wash sinks for cleaning removable parts.

(1) Except as stipulated by § 63.703(b), each owner or operator of an affected source subject to this subpart shall limit gaseous HAP emissions from each wash sink containing HAP:

(i) so that the overall HAP control efficiency is no less than 88 percent; or

(ii) by maintaining a minimum freeboard ratio of 75 percent in the wash sink at all times when the sink

contains HAP.

(2) Owners or operators may meet the requirements of paragraph (e)(1)(i) of this section by venting the room, building, or enclosure in which the sink is located, as long as the overall HAP control efficiency of this method is demonstrated to be at least 88 percent using the test methods in § 63.705(e).

(3) Wash sinks subject to the control provisions of subpart T of this part are not subject to paragraph (e)(1) or (e)(2) of this section.

(f) Equipment for flushing fixed lines.

(1) Except as stipulated by § 63.703(b), each owner or operator of an affected source subject to this subpart shall limit gaseous HAP emissions from each affected set of equipment for flushing fixed lines:

(i) so that the overall HAP control efficiency is at least 95 percent; or

(ii) by using a closed system for flushing fixed lines.

(2) Owners or operators may meet the requirements of paragraph (f)(1)(i) of this section by venting the room, building, or enclosure in which the fixed lines are located, as long as the overall HAP control efficiency of this method is demonstrated to be at least 95 percent using the test methods in § 63.705(f).

(g) Wastewater treatment systems.

(1) Except as stipulated by § 63.703(b), each owner or operator of an affected source subject to this subpart shall:

(i) treat the wastewater discharge to remove each HAP from magnetic tape manufacturing operations that is present in the wastewater discharge by at least the fraction removed (F_R) specified in Table 9 of 40 CFR part 63, subpart G; or

(ii) treat (other than by dilution) the HAP from magnetic tape manufacturing operations that are present in the wastewater discharge such that the exit concentration is less than 50 ppmw of total VOHAP.

(2) The treatment method used to meet the requirements of paragraph (g)(1) of this section shall not transfer emissions from the water to the atmosphere in an uncontrolled manner.

(h)(1) Magnetic tape manufacturing operations that are subject to § 63.703(b) and are not at major sources are not subject to §§ 63.6(e), 63.6(f), 63.6(g), 63.6(i)(4), 63.7, 63.8, 63.9(c) through (h), 63.10(b)(2), 63.10(c), 63.10(d)(2) through (5), 63.10(e), and 63.11 of subpart A.

(2) Magnetic tape manufacturing operations subject to § 63.703(b) shall fulfill the recordkeeping requirements of § 63.706(e) and the reporting requirements of § 63.707(b), (c), and (j).

(3) An owner or operator of a magnetic tape manufacturing operation subject to § 63.703(b) who chooses to no longer be subject to § 63.703(b) shall notify the

Administrator or delegated State of such change. If by no longer being subject to § 63.703(b), the source at which the magnetic tape manufacturing operation is located would become a major source, the owner or operator shall meet the following requirements, starting from the date of such notification:

(i) comply with paragraphs (c) through (g) of this section, and other provisions of this subpart within the timeframe specified in § 63.6(c)(5); and

(ii) comply with the HAP utilization limits in § 63.703(b) until the requirements of paragraph (h)(3)(i) of this section are met.

(i) For any solvent storage tank, piece of mix preparation equipment, waste handling device, condenser vent in solvent recovery, wash sink for cleaning removable parts, and set of equipment for flushing of fixed lines, the owner or operator may, instead of meeting the requirements of paragraphs (c)(1), (e)(1)(i), or (f)(1)(i) of this section, vent the gaseous HAP emissions to an add-on air pollution control device other than an incinerator that, in conjunction with capture equipment or ductwork, is designed to achieve an overall HAP control efficiency of at least 95 percent for the emissions from the coating operation, and achieve an alternate outlet concentration limit when coating operations are not occurring, as determined in § 63.704(b)(11)(ii).

(j) The requirements of this subpart do not preclude the use of pressure relief valves and vacuum relief valves for safety purposes.

§ 63.704 Compliance and monitoring requirements.

(a) For owners or operators of an affected source that are using add-on air pollution control equipment or a steam stripper to comply with § 63.703, paragraph (b) of this section identifies the operating parameter to be monitored to demonstrate continuous compliance. For all owners or operators subject to § 63.703, except § 63.703(b) and (h), regardless of the type of control technique used, paragraph (c) of this section identifies the procedures that must be followed to demonstrate continuous compliance with § 63.703.

(b) Establishing a limit under § 63.703(i) and operating parameter values. The owner or operator of an affected source subject to § 63.703 except § 63.703(b) and (h), shall establish the operating parameter value to be monitored for compliance as required by paragraph (c) of this section, in accordance with paragraphs (b)(1) through (b)(11) of this section. An owner or operator subject to § 63.703(i) shall establish a limit as required in paragraph (b)(11)(ii) of this section.

(1) Except as allowed by paragraphs (b)(2), (3), (4), (5), or (9) of this section, for each add-on air pollution control device used to control solvent HAP emissions, the owner or operator shall fulfill the requirements of

paragraph (b)(1)(i) or (ii) of this section.

(i) The owner or operator shall establish as a site-specific operating parameter the outlet total HAP or VOC concentration that demonstrates compliance with § 63.703(c)(1), (c)(2), (c)(4), (e)(1)(i), (f)(1)(i), or (i) as appropriate; or

(ii) The owner or operator shall establish as the site-specific operating parameter the control device efficiency that demonstrates compliance with § 63.703(c)(1), (c)(4), (e)(1)(i), and (f)(1)(i).

(iii) When a nonregenerative carbon adsorber is used to comply with § 63.703(c)(1), the site-specific operating parameter value may be established as part of the design evaluation used to demonstrate initial compliance (§ 63.705(c)(6)). Otherwise, the site-specific operating parameter value shall be established during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), (3), or (4).

(2) For each condenser used as the add-on air pollution control device to comply with § 63.703(c), (e)(1)(i), (f)(1)(i) or (i), in lieu of meeting the requirements of § 63.704(b)(1), during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), or (4), the owner or operator may establish as a site-specific operating parameter the maximum temperature of the condenser vapor exhaust stream and shall set the operating parameter value that demonstrates compliance with § 63.703(c), (e)(1)(i), (f)(1)(i) or (i) as appropriate;

(3) For each thermal incinerator, in lieu of meeting the requirements of § 63.704(b)(1), during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), or (4), the owner or operator may establish as a site-specific operating parameter the minimum combustion temperature and set the operating parameter value that demonstrates compliance with § 63.703(c), (e)(1)(i), or (f)(1)(i), as appropriate.

(4) For each catalytic incinerator, in lieu of meeting the requirements of § 63.704(b)(1), during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), or (4), the owner or operator may establish as site-specific operating parameters the minimum gas temperature upstream of the catalyst bed and the minimum gas temperature difference across the catalyst bed, and set the operating parameter values that demonstrate compliance with § 63.703(c), (e)(1)(i), or (f)(1)(i), as appropriate.

(5) For each nonregenerative carbon adsorber, in lieu of meeting the requirements of § 63.704(b)(1), the owner or operator may establish as the site-specific operating parameter the carbon replacement time interval, as determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system. The carbon replacement time interval

shall be established either as part of the design evaluation to demonstrate initial compliance (§ 63.705(c)(6)), or during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), (3), or (4).

(6) Each owner or operator venting solvent HAP emissions from a source through a room, enclosure, or hood, to a control device to comply with § 63.703(c), (e)(1)(i), (f)(1)(i), or (i) shall:

(i) Submit to the Administrator with the compliance status report required by § 63.9(h) of the General Provisions a plan that:

(A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained;

(B) Discusses why this parameter is appropriate for demonstrating ongoing compliance; and

(C) Identifies the specific monitoring procedures;

(ii) Set the operating parameter value, or range of values, that demonstrate compliance with § 63.703(c), (e)(1)(i), (f)(1)(i), or (i), as appropriate; and

(iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

(7) For each baghouse or fabric filter used to control particulate HAP emissions in accordance with § 63.703(d)(2), the owner or operator shall establish as the site-specific operating parameter the minimum ventilation air flow rate through the inlet duct to the baghouse or fabric filter that ensures that particulate HAP are being captured and delivered to the control device. The minimum ventilation air flow rate is to be supported by the engineering calculations that are considered part of the initial performance test, as required by § 63.705(g)(2).

(8) Owners or operators subject to § 63.704(b)(1), (2), (3), (4), (5), (6), or (7) shall calculate the site-specific operating parameter value, or range of values, as the arithmetic average of the maximum and/or minimum operating parameter values, as appropriate, that demonstrate compliance with § 63.703(c), (d), (e), (f) or (i) during the multiple test runs required by § 63.705(b)(2) and (b)(1), or during the multiple runs of other tests conducted as allowed by paragraph § 63.704(b)(11).

(9) For each solvent recovery device used to comply with § 63.703(c), in lieu of meeting the requirements of paragraph (b)(1) of this section, the results of the material balance calculation conducted in accordance with § 63.705(c)(1) may serve as the site-specific operating parameter that demonstrates compliance with § 63.703(c).

(10) Owners or operators complying with the provisions of § 63.703(g) shall establish the site-specific operating parameter according to paragraph (b)(10)(i) or (ii) of this section.

(i) Owners or operators using a steam stripper shall

establish the steam-to-feed ratio as the site-specific operating parameter, except as allowed in paragraph (b)(10)(ii) of this section, according to the following criteria:

(A) The minimum operating parameter value shall correspond to at least the fraction removed specified in § 63.703(g)(1)(i) and be submitted to the permitting authority for approval with the design specifications required by § 63.705(h)(1); or

(B) The minimum operating parameter value shall be that value that corresponds to a total VOHAP outlet concentration in the wastewater of less than 50 ppmw as determined through tests conducted in accordance with § 63.705(b)(9) and (h)(2); or

(C) The minimum operating parameter value shall be the value that corresponds to at least the fraction removed specified in § 63.705(g)(1)(i), as demonstrated through tests conducted in accordance with § 63.705(b)(9) and (h)(3).

(ii) Owners or operators complying with § 63.703(g) through the use of a steam stripper or any other control technique may establish as a site-specific operating parameter the outlet total VOHAP concentration according to the following criteria:

(A) The minimum operating parameter value shall correspond to at least the fraction removed specified in § 63.703(g)(1)(i) and be submitted to the permitting authority for approval with the design specifications required by § 63.705(h)(1); or

(B) The minimum operating parameter value shall be a total VOHAP outlet concentration in the wastewater of less than 50 ppmw, as required by § 63.703(g)(1)(ii), and as determined through tests conducted in accordance with § 63.705(b)(9) and (h)(2); or

(C) The minimum operating parameter value shall be the value that corresponds to at least the fraction removed specified in § 63.705(g)(1)(i), as demonstrated through tests conducted in accordance with § 63.705(b)(9) and (h)(3).

(11) Compliance provisions for nonrepresentative operating conditions.

(i) The owner or operator of an affected source may conduct multiple performance tests to establish the operating parameter value, or range of values, that demonstrates compliance with the standards in § 63.703 during various operating conditions.

(ii) To establish an alternate outlet concentration limit as provided in § 63.703(i), the owner or operator, when the coating operation is not occurring, shall conduct a performance test using the methods in § 63.705 for determining initial compliance with § 63.703(c)(1), (e)(1)(i) or (f)(1)(i), or shall collect data from continuous emission monitors used to determine continuous

compliance as specified in § 63.704(b) and (c). During the period in which this limit is being established, the control device shall be operated in accordance with good air pollution control practices and in the same manner as it was operated to achieve the emission limitation for coating operations. Owners or operators choosing to establish such an alternative shall also comply with paragraphs (b)(11)(ii)(A) and (B) of this section.

(A) The owner or operator shall submit the alternate outlet HAP concentration limit within 180 days after the compliance demonstration required by § 63.7 of subpart A, to the Administrator, as required by § 63.707(k)(1).

(B) The Administrator will approve or disapprove the limit proposed in accordance with paragraph (b)(11)(ii)(A) of this section within 60 days of receipt of the report required by § 63.707(k)(1), and any other supplemental information requested by the Administrator to support the alternate limit.

(c) Continuous compliance monitoring. Following the date on which the initial compliance demonstration is completed, continuous compliance with the standards shall be demonstrated as outlined in paragraphs (c), (d), (e), or (f) of this section.

(1)(i) Each owner or operator of an affected source subject to § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) of this subpart shall monitor the applicable parameters specified in paragraphs (c)(3), (4), (5), (6), (7), or (9) of this section depending on the type of control technique used, and shall monitor the parameters specified in paragraph (c)(10) of this section.

(ii) Each owner or operator of an affected source subject to § 63.703(c)(5) of this subpart shall demonstrate continuous compliance as required by paragraph (c)(8) of this section.

(iii) Each owner or operator of an affected source subject to § 63.703(d)(2) of this subpart shall demonstrate continuous compliance as required by paragraph (e) of this section.

(iv) Each owner or operator of an affected source subject to § 63.703(g) of this subpart shall demonstrate continuous compliance as required by paragraph (d) of this section.

(2) Compliance monitoring shall be subject to the following provisions.

(i) Except as allowed by paragraph (c)(3)(i)(C) of this section, all continuous emission monitors shall comply with performance specification (PS) 8 or 9 in 40 CFR part 60, appendix B, as appropriate depending on whether volatile organic compound (VOC) or HAP concentration is being measured. The requirements in appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the

gaseous emission stream being controlled.

(ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to the manufacturer's specifications. The thermocouple calibration shall be verified or replaced every 3 months. The replacement shall be done either if the owner or operator chooses not to calibrate the thermocouple, or if the thermocouple cannot be properly calibrated.

(iii) If the effluent from multiple emission points are combined prior to being channeled to a common control device, the owner or operator is required only to monitor the common control device, not each emission point.

(3) Owners or operators complying with § 63.703(c), (e)(1)(i), (f)(1)(i), or (i) through the use of a control device and establishing a site-specific operating parameter in accordance with § 63.704(b)(1) shall fulfill the requirements of paragraphs (c)(3)(i) of this section and paragraph (c)(3)(ii), (iii), (iv), or (v) of this section, as appropriate.

(i) The owner or operator shall install, calibrate, operate, and maintain a continuous emission monitor.

(A) The continuous emission monitor shall be used to measure continuously the total HAP or VOC concentration at both the inlet and the outlet whenever HAP from magnetic tape manufacturing operations are vented to the control device, if continuous compliance is demonstrated through a percent efficiency calculation [§ 63.704(b)(1)(ii)]; or

(B) The continuous emission monitor shall be used to measure continuously the total outlet HAP or VOC concentration whenever HAP from magnetic tape manufacturing operations are vented to the control device, if the provisions of § 63.704(b)(1)(i) are being used to determine continuous compliance.

(C) For owners or operators using a nonregenerative carbon adsorber, in lieu of using continuous emission monitors as specified in paragraph (c)(3)(i)(A) or (B) of this section, the owner or operator may use a portable monitoring device to monitor total HAP or VOC concentration at the inlet and outlet, or outlet of the carbon adsorber, as appropriate.

(1) The monitoring device shall be calibrated, operated, and maintained in accordance with the manufacturer's specifications.

(2) The monitoring device shall meet the requirements of part 60, appendix A, method 21, sections 2, 3, 4.1, 4.2, and 4.4. For the purposes of paragraph (c)(3)(i)(C) of this section, the words "leak definition" in method 21 shall be the outlet concentration determined in accordance with § 63.704(b)(1). The calibration gas shall either be representative of the compounds to be measured or shall be methane, and shall be at a concentration associated with 125 percent of the expected organic compound concentration level for the carbon adsorber outlet vent.

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

(ii) If complying with § 63.703(c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) through the use of a carbon adsorption system with a common exhaust stack for all of the carbon vessels, the owner or operator shall not operate the control device at an average control efficiency less than that required by § 63.703(c)(1), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i) or at an average outlet concentration exceeding the site-specific operating parameter value or that required by § 63.703(i), for three consecutive adsorption cycles. Operation in this manner shall constitute a violation of § 63.703(c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i).

(iii) If complying with § 63.703(c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) through the use of a carbon adsorption system with individual exhaust stacks for each of the multiple carbon adsorber vessels, the owner or operator shall not operate any carbon adsorber vessel at an average control efficiency less than that required by § 63.703(c)(1), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i), or at an average outlet concentration exceeding the site-specific operating parameter value or that required by § 63.703(i), as calculated daily using a 3-day rolling average. Operation in this manner shall constitute a violation of § 63.703(c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i).

(iv) If complying with § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) through the use of any control device other than a carbon adsorber, the owner or operator shall not operate the control device at an average control efficiency less than that required by § 63.703(c)(1), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i), or at an average outlet concentration exceeding the site-specific operating parameter value or that required by § 63.703(c)(2) or (i), as calculated for any 3-hour period. Operation in this manner shall constitute a violation of § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i).

(v) If complying with § 63.703(c)(1) through the use of a nonregenerative carbon adsorber, in lieu of the requirements of paragraphs (c)(3)(ii) or (iii) of this section, the owner or operator may:

(A) monitor the VOC or HAP concentration of the adsorber exhaust daily or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater; operation of the control device at a HAP or VOC concentration greater than that determined in accordance with § 63.704(b)(1)(iii) shall constitute a

violation of § 63.703(c)(1), (e)(1)(i), or (f)(1)(i); or

(B) replace the carbon in the carbon adsorber system with fresh carbon at a regular predetermined time interval as determined in accordance with § 63.704(b)(5); failure to replace the carbon at this predetermined time interval shall constitute a violation of § 63.703(c)(1), (e)(1)(i), or (f)(1)(i).

(4) Owners or operators complying with § 63.703(c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) through the use of a condenser as the add-on air pollution control device, and demonstrating compliance in accordance with § 63.704(b)(2), shall install, calibrate, operate, and maintain a thermocouple to measure continuously the temperature of the condenser vapor exhaust stream whenever HAP from magnetic tape manufacturing operations are vented to the control device. Operation of the control device at an average vapor exhaust temperature greater than the site-specific operating parameter value or values established in accordance with § 63.704(b)(2) for any 3-hour period shall constitute a violation of § 63.703(c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i) or (i).

(5) Owners or operators complying with § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i) through the use of a thermal incinerator and demonstrating compliance in accordance with § 63.704(b)(3) shall install, calibrate, operate, and maintain a thermocouple to measure continuously the combustion temperature whenever HAP from magnetic tape manufacturing operations are vented to the control device. Operation of the control device at an average combustion temperature less than the operating parameter value or values established in accordance with § 63.704(b)(3) for any 3-hour period shall constitute a violation of § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i).

(6) Owners or operators complying with § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i) through the use of a catalytic incinerator and demonstrating compliance in accordance with § 63.704(b)(4) shall install, calibrate, operate, and maintain a thermocouple to measure continuously the gas temperature both upstream and downstream of the catalyst bed whenever HAP from magnetic tape manufacturing operations are vented to the control device. Operation of the control device at an average upstream gas temperature, or at an average gas temperature difference across the catalyst bed, less than the operating parameter values established in accordance with § 63.704(b)(4) for any 3-hour period shall constitute a violation of § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i).

(7) Owners or operators complying with § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) by capturing emissions through a room, enclosure, or hood shall install, calibrate, operate, and maintain the instrumentation necessary to measure continuously the site-

specific operating parameter established in accordance with § 63.704(b)(6) whenever HAP from magnetic tape manufacturing operations are vented through the capture device. Operation of the capture device at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with § 63.704(b)(6) for any 3-hour period shall constitute a violation of § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i).

(8) The owner or operator of an affected source complying with § 63.703(c)(5) shall demonstrate continuous compliance by using a coating that has a HAP content of no greater than 0.18 kilograms of HAP per liter of coating solids, as measured in accordance with § 63.705(c)(5), and by maintaining and reporting the records required by §§ 63.706(f) and 63.707(e) and (i)(2).

(9) For owners or operators complying with § 63.703(c)(1), (c)(3), or (c)(4) through the use of a solvent recovery device and demonstrating initial compliance in accordance with the provisions of § 63.705(c)(1), continuous compliance shall be demonstrated using procedures in § 63.705(c)(1) and through the recordkeeping and reporting requirements of §§ 63.706(d), 63.707(d), and 63.707(i)(5). The provisions of § 63.8(b)(2) and (3), (c), (d), (e), (f), and (g)(1), and (2) of subpart A do not apply.

(10) The owner or operator of an affected emission point using a vent system that contains bypass lines (not including equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes) that could potentially divert a vent stream away from the control device used to comply with § 63.703(c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) shall:

(i) Install, calibrate, maintain, and operate a flow indicator that provides a record of vent stream flow at least once every 15 minutes; records shall be generated as specified in § 63.706(c)(1); and the flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or

(ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line; or

(iii) Ensure that any bypass line valve is in the closed position through continuous monitoring of valve position; the monitoring system shall be inspected at least once every month to ensure that it is functioning properly; or

(iv) Use an automatic shutdown system in which any

HAP-emitting operations are ceased when flow from these operations is diverted away from the control device to any bypass line; the automatic system shall be inspected at least once every month to ensure that it is functioning properly.

(d) Owners or operators complying with § 63.703(g) shall demonstrate continuous compliance in accordance with paragraph (d)(1) or (d)(2) of this section.

(1) An owner or operator that established the steam-to-feed ratio as the site-specific operating parameter in accordance with § 63.704(b)(10)(i) shall continuously measure the steam-to-feed ratio whenever HAP-containing wastewater from magnetic tape manufacturing operations is being fed to the steam stripper. Operation of the steam stripper at a steam-to-feed ratio less than the operating parameter value or values established in accordance with § 63.704(b)(10)(i) for any 3-hour period shall constitute a violation of § 63.703(g).

(2) An owner or operator that established the total outlet VOHAP concentration of the wastewater discharge as the site-specific operating parameter in accordance with § 63.704(b)(10)(ii) shall measure the total VOHAP concentration of the wastewater discharge once per month. Operation of the control device at an outlet VOHAP concentration greater than the operating parameter value or values established in accordance with § 63.704(b)(10)(ii) for any month shall constitute a violation of § 63.703(g).

(e) Owners or operators complying with § 63.703(d)(2) of this subpart through the use of a baghouse or fabric filter shall perform visible emission testing each day that particulate HAP transfer occurs, using the procedures in § 63.705(b)(10). Owners or operators shall also install, calibrate, and operate the instrumentation necessary to continuously monitor the ventilation air flow rate in the inlet duct to the baghouse or fabric filter whenever particulate HAP transfer occurs. The occurrence of visible emissions shall constitute a violation of § 63.703(d)(2), and the operation of the baghouse or fabric filter at a flow rate less than the value or values established in accordance with § 63.704(b)(7) for any 3-hour period shall constitute a violation of § 63.703(d)(2).

(f) An owner or operator who uses an air pollution control device not listed in § 63.704 to comply with § 63.703(c), (e)(1)(i), (f)(1)(i), or (i), or a device other than a steam stripper to comply with § 63.703(g) shall submit to the Administrator a description of the device, test data verifying the performance of the device, and appropriate site-specific operating parameters that will be monitored to demonstrate continuous compliance with the standard. The monitoring plan submitted by an owner or operator in accordance with this paragraph is subject to approval by the Administrator.

§ 63.705 Performance test methods and procedures to determine initial compliance.

(a) Except as specified in § 63.705(a)(1) through (3), to determine initial compliance with the emission limits under § 63.703(c), (d)(2), (e)(1), (f)(1), and (g), the owner or operator shall conduct an initial performance demonstration as required under § 63.7 using the procedures and test methods listed in § 63.7 and § 63.705. If multiple emission points are vented to one common control device to meet the requirements of § 63.703(c), (d)(2), (e)(1), and (f)(1), only one performance test is required to demonstrate initial compliance for that group of emission points. This section also contains initial compliance demonstration procedures (other than testing) for owners or operators subject to § 63.703(c), (d)(1), (e)(1)(ii), (f)(1)(ii), and (g).

(1) A control device (not enclosure) used to comply with § 63.703(c), (e), or (f) does not need to be tested if each of the following criteria are met:

- (i) it is used to control gaseous HAP emissions from an existing affected source;
- (ii) it is operating prior to March 11, 1994;
- (iii) it is equipped with continuous emission monitors for determining inlet and outlet total HAP or VOC concentration, such that a percent efficiency can be calculated; and

- (iv) the continuous emission monitors are used to demonstrate continuous compliance in accordance with § 63.704(c)(3)(i).

(2) The owner or operator is not required to conduct an initial performance test if the requirements of § 63.7(e)(2)(iv) or § 63.7(h) are met.

(3) An owner or operator is not required to conduct an initial performance test for a capture device when:

- (i) the room, enclosure, or vent was previously tested to demonstrate compliance with subpart SSS of part 60; and
- (ii) sufficient data were gathered during the test to establish operating parameter values in accordance with § 63.704(b)(6)(i), (ii), and (iii).

(b) When an initial compliance demonstration is required by this subpart, the procedures in paragraphs (b)(1) through (b)(10) of this section shall be used in determining initial compliance with the provisions of this subpart.

(1) EPA Method 24 of appendix A of part 60 is used to determine the VOC content in coatings. If it is demonstrated to the satisfaction of the Administrator that plant coating formulation data are equivalent to EPA Method 24 results, formulation data may be used. In the event of any inconsistency between an EPA Method 24 test and an affected source's formulation data, the EPA Method 24 test will govern. For EPA Method 24, the coating sample must be a 1-liter sample taken into a 1-liter container at a

location and time such that the sample will be representative of the coating applied to the base substrate (i.e., the sample shall include any dilution solvent or other VOC added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOC added after the sample is taken must be measured and accounted for in the calculations that use EPA Method 24 results.

(2) Formulation data is used to determine the HAP content of coatings.

(3) Either EPA Method 18 or EPA Method 25A of appendix A of part 60, as appropriate to the conditions at the site, shall be used to determine HAP or VOC concentration of air exhaust streams as required by § 63.705(c). The owner or operator shall submit notice of the intended test method to the Administrator for approval along with the notification of the performance test required under § 63.7(b). Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in paragraphs (b)(3)(i) and (ii) of this section, the test shall consist of three separate runs, each lasting a minimum of 30 minutes.

(i) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to § 63.705(c)(2) or (4), the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels.

(ii) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to § 63.705(c)(3) or (4), each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

(4) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses.

(5) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates.

(6) EPA Method 3 of appendix A of part 60 is used for gas analysis.

(7) EPA Method 4 of appendix A of part 60 is used for stack gas moisture.

(8) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

(9) Wastewater analysis shall be conducted in accordance with paragraph (b)(9)(i) or (b)(9)(ii) of this

section.

(i) Use Method 305 of 40 CFR part 63, appendix A and the equations in paragraphs (b)(9)(i)(A) and (B) of this section to determine the total VOHAP concentration of a wastewater stream.

(A) The following equation shall be used to calculate the VOHAP concentration of an individually speciated HAP.

$$C_i \cdot \left(C_c \cdot \frac{MW}{24.055} \cdot \frac{P_i}{760} \cdot \frac{293}{T_i} \cdot t \cdot L \cdot 10^3 \right) / M_s$$

where:

- C_i = VOHAP concentration of the individually-speciated organic HAP in the wastewater, parts per million by weight.
 - C_c = Concentration of the organic HAP (i) in the gas stream, as measured by Method 305 of appendix A of this part, parts per million by volume on a dry basis.
 - M_s = Mass of sample, from Method 305 of appendix A of this part, milligrams.
 - MW = Molecular weight of the organic HAP (i), grams per gram-mole.
 - 24.055 = Ideal gas molar volume at 293° Kelvin and 760 millimeters of mercury, liters per gram-mole.
 - P_i = Barometric pressure at the time of sample analysis, millimeters mercury absolute.
 - 760 = Reference or standard pressure, millimeters mercury absolute.
 - 293 = Reference or standard temperature, °Kelvin.
 - T_i = Sample gas temperature at the time of sample analysis, °Kelvin.
 - t = Actual purge time, from Method 305 of appendix A of this part, minutes.
 - L = Actual purge rate, from Method 305 of appendix A of this part, liters per minute.
 - 10^3 = Conversion factor, milligrams per gram.
- (B) Total VOHAP concentration (stream) can be determined by summing the VOHAP concentrations of all individually speciated organic HAP in the wastewater.

$$C_{\text{stream}} = \sum_{i=1}^n C_i$$

where:

- C_{stream} = Total VOHAP concentration of wastewater stream.
 - n = Number of individual organic HAP (i) in the wastewater stream.
 - C_i = VOHAP concentration of individual organic HAP (i) calculated according to the procedures in paragraph (b)(9)(i)(A) of this section.
- (ii) Use a test method or results from a test method that measures organic HAP concentrations in the wastewater, and that has been validated according to section 5.1 or 5.3 of Method 301 of appendix A of this part. The specific requirement of Method 305 of appendix A of this part to collect the sample into polyethylene glycol would not be applicable.

(A) If measuring the total VOHAP concentration of the exit stream in accordance with §§ 63.703(g)(1)(ii) and 63.705(h)(2), the concentrations of the individual organic HAP measured in the water shall be corrected to their concentrations had they been measured by Method 305 of appendix A of this part. This is done by multiplying each concentration by the compound-specific fraction measured factor (F_M) listed in table 34 of 40 CFR part 63, subpart G.

(B) If measuring the total HAP concentration of an inlet and outlet wastewater stream to demonstrate compliance with § 63.703(g)(1)(i) and following the procedures of § 63.705(h)(3), the concentrations of the individual organic HAP measured in the water do not need to be corrected.

(10) EPA Method 22 of appendix A of part 60 is used to determine visible emissions. Visible emissions testing shall be conducted for a minimum of 6 minutes during a time when particulate HAP transfer, as defined in this subpart, is occurring.

(c) Initial compliance demonstrations. Except as stipulated in § 63.705(a), each owner or operator subject to the requirements of § 63.703(c) must demonstrate initial compliance with the requirements of this subpart by following the procedures of paragraphs (c)(1), (2), (3), (4), (5), or (6) and paragraph (d) of this section, as applicable. Each owner or operator subject to § 63.703(d), (e), (f), and (g) must demonstrate initial compliance with the requirements of this subpart by following the procedures of paragraphs (e), (f), (g), and (h) of this section, as appropriate.

(1) To demonstrate initial and continuous compliance with § 63.703(c)(1), (c)(3), or (c)(4) when emissions from only the affected coating operations are controlled by a dedicated solvent recovery device, each owner or operator of the affected coating operation may perform a liquid-liquid HAP or VOC material balance over rolling 7-day periods in lieu of demonstrating compliance through the methods in paragraphs (c)(2), (c)(3), or (c)(4) of this section. Results of the material balances calculation performed to demonstrate initial compliance shall be submitted to the Administrator with the notification of compliance status required by § 63.9(h) and § 63.707(d). When demonstrating compliance by this procedure, § 63.7(e)(3) of subpart A does not apply. The amount of liquid HAP or VOC applied and recovered shall be determined as discussed in paragraph (c)(1)(iii) of this section. The overall HAP or VOC emission reduction (R) is calculated using equation 1:

$$R = \frac{M_r}{\sum_{i=1}^n [W_{oi} M_{ci} - RS_i]} \times 100 \quad (\text{Eq. 1})$$

(i) The value of RS_i is zero unless the owner or

operator submits the following information to the Administrator for approval of a measured RS_1 value that is greater than zero:

- (A) measurement techniques; and
- (B) documentation that the measured value of RS_1 exceeds zero.

(ii) The measurement techniques of paragraph (c)(1)(i)(A) of this section shall be submitted to the Administrator for approval with the notification of performance test required under § 63.7(b).

(iii) Each owner or operator demonstrating compliance by the test method described in paragraph (c)(1) of this section shall:

- (A) measure the amount of coating applied at the coater;
- (B) determine the VOC or HAP content of all coating applied using the test method specified in § 63.705(b)(1) or (2);

(C) install, calibrate, maintain, and operate, according to the manufacturer's specifications, a device that indicates the amount of HAP or VOC recovered by the solvent recovery device over rolling 7-day periods; the device shall be certified by the manufacturer to be accurate to within ± 2.0 percent, and this certification shall be kept on record;

- (D) measure the amount of HAP or VOC recovered; and
- (E) calculate the overall HAP or VOC emission reduction (R) for rolling 7-day periods using Equation 1.

(iv) Compliance is demonstrated if the value of R is equal to or greater than the overall HAP control efficiency required by § 63.703(c)(1), (c)(3), or (c)(4).

(2) To demonstrate initial compliance with § 63.703(c)(1), (c)(2), (c)(3), or (c)(4) when affected HAP emission points are controlled by an emission control device other than a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel, each owner or operator of an affected source shall perform a gaseous emission test using the following procedures.

(i) Construct the overall HAP emission reduction system so that all volumetric flow rates and total HAP or VOC emissions can be accurately determined by the applicable test methods and procedures specified in § 63.705(b)(3) through (8).

(ii) Determine capture efficiency from the HAP emission points by capturing, venting, and measuring all HAP emissions from the HAP emission points. During a performance test, the owner or operator of affected HAP emission points located in an area with other gaseous emission sources not affected by this subpart shall isolate the affected HAP emission points from all other gaseous emission points by one of the following methods:

- (A) build a temporary total enclosure (see § 63.702) around the affected HAP emission point(s); or

(B) shut down all gaseous emission points not affected by this subpart and continue to exhaust fugitive emissions from the affected HAP emission points through any building ventilation system and other room exhausts such as drying ovens. All ventilation air must be vented through stacks suitable for testing.

(iii) Operate the emission control device with all affected HAP emission points connected and operating.

(iv) Determine the efficiency (E) of the control device using equation 2:

$$E = \frac{\sum_{i=1}^n Q_{bi} C_{bi} - \sum_{j=1}^p Q_{aj} C_{aj}}{\sum_{i=1}^n Q_{bi} C_{bi}} \quad (\text{Eq. 2})$$

(v) Determine the efficiency (F) of the capture system using equation 3:

$$F = \frac{\sum_{i=1}^n Q_{di} C_{di}}{\sum_{i=1}^n Q_{di} C_{di} + \sum_{k=1}^p Q_{fk} C_{fk}} \quad (\text{Eq. 3})$$

(vi) For each HAP emission point subject to § 63.703, compliance is demonstrated if either of the following conditions are met:

(A) the product of (E)x(F) is equal to or greater than the overall HAP control efficiency required by § 63.703(c)(1), (c)(3), or (c)(4); or

(B) when the owner or operator is subject to § 63.703(c)(2), the value of F is equal to 1 and the value of C_{aj} at the outlet of the incinerator is demonstrated to be no greater than 20 ppmv by compound, on a dry basis.

(3) To demonstrate compliance with § 63.703(c)(1), (c)(3), or (c)(4) when affected HAP emission points are controlled by a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel, each owner or operator of an affected source shall perform a gaseous emission test using the following procedures:

(i) Construct the overall HAP emission reduction system so that each volumetric flow rate and the total HAP emissions can be accurately determined by the applicable test methods and procedures specified in § 63.705(b)(3) through (8);

(ii) Assure that all HAP emissions from the affected HAP emission point(s) are segregated from gaseous emission points not affected by this subpart and that the emissions can be captured for measurement, as described in § 63.705(c)(2)(ii)(A) and (B);

(iii) Operate the emission control device with all

affected HAP emission points connected and operating;

(iv) Determine the efficiency (H_v) of each individual carbon adsorber vessel (v) using equation 4:

$$H_v = \frac{Q_{gv} C_{gv} - Q_{hv} C_{hv}}{Q_{gv} C_{gv}} \quad (\text{Eq. 4})$$

(v) Determine the efficiency of the carbon adsorption system (H_{sys}) by computing the average efficiency of the individual carbon adsorber vessels as weighted by the volumetric flow rate (Q_{hv}) of each individual carbon adsorber vessel (v) using equation 5:

$$H_{sys} = \frac{\sum_{v=1}^n H_v Q_{hv}}{\sum_{v=1}^n Q_{hv}} \quad (\text{Eq. 5})$$

(vi) Determine the efficiency (F) of the capture system using equation (3).

(vii) For each HAP emission point subject to § 63.703(c), compliance is demonstrated if the product of (H_{sys}) x (F) is equal to or greater than the overall HAP control efficiency required by § 63.703(c)(1), (c)(3), or (c)(4).

(4) An alternative method of demonstrating compliance with § 63.703(c)(1) through (c)(4) is the installation of a total enclosure around the affected HAP emission point(s) and the ventilation of all HAP emissions from the total enclosure to a control device with the efficiency or outlet concentration specified in paragraph (c)(4)(iii) of this section. If this method is selected, the compliance test methods described in paragraphs (c)(1), (c)(2), and (c)(3) of this section are not required. Instead, each owner or operator of an affected source shall:

(i) Demonstrate that a total enclosure is installed. An enclosure that meets the requirements in paragraphs (c)(4)(i)(A) through (D) of this section shall be considered a total enclosure. The owner or operator of an enclosure that does not meet these requirements may apply to the Administrator for approval of the enclosure as a total enclosure on a case-by-case basis. The enclosure shall be considered a total enclosure if it is demonstrated to the satisfaction of the Administrator that all HAP emissions from the affected HAP emission point(s) are contained and vented to the control device. The requirements for automatic approval are as follows:

(A) total area of all natural draft openings shall not exceed 5 percent of the total surface area of the total enclosure's walls, floor, and ceiling;

(B) all sources of emissions within the enclosure shall be a minimum of four equivalent diameters away from each natural draft opening;

(C) average inward face velocity (FV) across all natural draft openings shall be a minimum of 3,600 meters per hour as determined by the following procedures:

(1) all forced makeup air ducts and all exhaust ducts are constructed so that the volumetric flow rate in each can be accurately determined by the test methods and procedures specified in § 63.705(b)(4) and (5); volumetric flow rates shall be calculated without the adjustment normally made for moisture content; and

(2) determine FV by equation 6:

$$FV = \frac{\sum_{j=1}^n Q_{out\ j} - \sum_{i=1}^p Q_{in\ i}}{\sum_{k=1}^q A_k} \quad (Eq. 6)$$

(D) the air passing through all natural draft openings shall flow into the enclosure continuously. If FV is less than or equal to 9,000 meters per hour, the continuous inward flow of air shall be verified by continuous observation using smoke tubes, streamers, tracer gases, or other means approved by the Administrator over the period that the volumetric flow rate tests required to determine FV are carried out. If FV is greater than 9,000 meters per hour, the direction of airflow through the natural draft openings shall be presumed to be inward at all times without verification.

(ii) Determine the control device efficiency using equation (2) or equations (4) and (5), as applicable, and the test methods and procedures specified in § 63.705(b)(3) through (8).

(iii) Be in compliance if either of the following criteria are met:

(A) the installation of a total enclosure is demonstrated and the value of E determined from equation (2) (or the value of H_{sys} determined from equations (4) and (5), as applicable) is equal to or greater than the overall HAP control efficiency required by § 63.703(c)(1), (c)(3), or (c)(4); or

(B) when the owner or operator is subject to § 63.703(c)(2), the installation of a total enclosure is demonstrated and the value of C_{aj} at the outlet of the incinerator is demonstrated to be no greater than 20 ppmv by compound, on a dry basis.

(5) To demonstrate initial and continuous compliance with § 63.703(c)(5), each owner or operator of an affected source shall determine the mass of HAP contained in the coating per volume of coating solids applied for each batch of coating applied, according to the procedures of

paragraphs (c)(5)(i) through (iii) of this section. If a batch of coating is identical to a previous batch of coating applied, the original calculations can be used to demonstrate the compliance of subsequent identical batches. The calculation of the HAP content of the coating used to demonstrate initial compliance with § 63.703(c)(5) shall be submitted to the Administrator with the notification of compliance status required by § 63.9(h) and § 63.707(e). When demonstrating compliance by this procedure, § 63.7(e)(3) of subpart A does not apply.

(i) Determine the weight fraction of HAP in each coating applied using formulation data as specified in § 63.705(b)(2);

(ii) Determine the volume of coating solids in each coating applied from the facility records; and

(iii) Compute the mass of HAP per volume of coating solids by equation 7:

$$G = \frac{W_{oi} M_{ci}}{L_{si} V_{ci}} \quad \text{(Eq. 7)}$$

(iv) The owner or operator of an affected source is in compliance with § 63.703(c)(5) if the value of G is less than or equal to 0.18 kilograms of HAP per liter of coating solids applied.

(6) When nonregenerative carbon adsorbers are used to comply with § 63.703(c)(1), the owner or operator may conduct a design evaluation to demonstrate initial compliance in lieu of following the compliance test procedures of paragraphs (c)(1), (2), (3), or (4) of this section. The design evaluation shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature, and shall establish the design exhaust vent stream organic compound concentration level, capacity of the carbon bed, type and working capacity of activated carbon used for the carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and the emission point operating schedule.

(d)(1) To demonstrate initial compliance with § 63.703(c) when hard piping or ductwork is used to direct HAP emissions from a HAP source to the control device, each owner or operator shall demonstrate upon inspection that the criteria of paragraph (d)(1)(i) and paragraph (d)(1)(ii) or (iii) are met.

(i) The equipment must be vented to a control device.

(ii) The control device efficiency (E or H_{sys} , as applicable) determined using equation (2) or equations (4) and (5), respectively, and the test methods and procedures specified in § 63.705(b)(3) through (8), must be equal to or greater than the overall HAP control efficiency required by § 63.703(c)(1), (c)(3), or (c)(4), or the outlet

concentration must be no greater than 20 ppmv by compound, on a dry basis, as required by § 63.703(c)(2).

(iii) When a nonregenerative carbon adsorber is used, the ductwork from the affected emission point(s) must be vented to the control device and the carbon adsorber must be demonstrated, through the procedures of § 63.705(c)(1), (2), (3), (4), or (6) to meet the requirements of § 63.703(c)(1).

(2) To demonstrate initial compliance with provisions for mix preparation equipment, owners or operators shall, in addition to paragraph (d)(1) of this section, ensure that covers are closed at all times except when adding ingredients, withdrawing samples, transferring the contents, or making visual inspection when such activities cannot be carried out with the cover in place. Such activities shall be carried out through ports of the minimum practical size.

(e) To demonstrate initial compliance with § 63.703(e), the owner or operator of a wash sink subject to the provisions of this standard shall:

(1) If complying with § 63.703(e)(1)(ii), maintain at least the required minimum freeboard ratio at all times; or

(2) If complying with § 63.703(e)(1)(i), the owner or operator of an existing wash sink that vents emissions from the wash sink to a control device prior to March 11, 1994 must demonstrate that the control device is at least 95-percent efficient in accordance with § 63.705(c)(2), (3), (4), or (6); or

(3) If complying with § 63.703(e)(1)(i), each owner or operator that vents emissions from the wash sink, through a capture device, and to a control device starting on or after March 11, 1994, must demonstrate that the overall HAP control efficiency is at least 88 percent using the test methods and procedures in § 63.705(c)(2), (3), (4), or (6).

(f) To demonstrate initial compliance with § 63.703(f), the owner or operator shall:

(1) If complying with § 63.703(f)(1)(ii), install and use a closed system for flushing fixed lines; or

(2) If complying with § 63.703(f)(1)(i), each owner or operator that vents emissions from the flushing operation, through a capture device, and to a control device must demonstrate that the overall HAP control efficiency is at least 95 percent using the test methods and procedures in § 63.705(c)(2), (3), (4), or (6).

(g) To demonstrate initial compliance with § 63.703(d), the owner or operator shall:

(1) If complying with § 63.703(d)(1), install an enclosed transfer device for conveying particulate HAP, and use this device, following manufacturer's specifications or other written procedures developed for the device; or

(2) If complying with § 63.703(d)(2):

(i) test the baghouse or fabric filter to demonstrate that there are no visible emissions using the test method in § 63.705(b)(10); and

(ii) provide engineering calculations in accordance

with § 63.707(h) of this subpart with the performance test results required by § 63.7(g)(1) and § 63.9(h) of subpart A, to demonstrate that the ventilation rate from the particulate transfer activity to the control device is sufficient for capturing the particulate HAP.

(h) To demonstrate initial compliance with § 63.703(g), the owner or operator of an affected source shall follow the compliance procedures of either paragraph (h)(1), paragraph (h)(2), or paragraph (h)(3) of this section.

(1) The owner or operator shall submit to the permitting authority with the notification of compliance status required by § 63.9(h) and § 63.707(f) the design specifications demonstrating that the control technique meets the required efficiency for each HAP compound. For steam strippers, these specifications shall include at a minimum: feed rate, steam rate, number of theoretical trays, number of actual trays, feed composition, bottoms composition, overheads composition, and inlet feed temperature.

(2) The owner or operator shall demonstrate the compliance of a treatment process with the parts per million by weight (ppmw) wastewater stream concentration limits specified in § 63.703(g)(1)(ii) by measuring the concentration of total VOHAP at the outlet of the treatment process using the method specified in § 63.705(b)(9)(i) or (ii). A minimum of three representative samples of the wastewater stream exiting the treatment process, which are representative of normal flow and concentration conditions, shall be collected and analyzed. Wastewater samples shall be collected using the sampling procedures specified in Method 25D of appendix A of part 60. Where feasible, samples shall be taken from an enclosed pipe prior to the wastewater being exposed to the atmosphere. When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner that minimizes exposure of the sample to the atmosphere and loss of organic HAP prior to analysis.

(3) The owner or operator shall demonstrate the compliance of a treatment process with the HAP fraction removed requirement specified in § 63.703(g)(1)(i) by measuring the concentration of each HAP at the inlet and outlet of the treatment process using the method specified in § 63.705(b)(9)(i) or (ii) and the procedures of paragraphs (h)(3)(i) through (iii) of this section.

(i) The same test method shall be used to analyze the wastewater samples from both the inlet and outlet of the treatment process.

(ii) The HAP mass flow rate of each individually speciated HAP compound entering the treatment process (E_b) and exiting the treatment process (E_a) shall be determined by computing the product of the flow rate of the wastewater stream entering or exiting the treatment process, and the

HAP concentration of each individual HAP compound of the entering or exiting wastewater streams, respectively.

(A) The flow rate of the entering and exiting wastewater streams shall be determined using inlet and outlet flow meters, respectively.

(B) The average HAP concentration of each individual HAP of the entering and exiting wastewater streams shall be determined according to the procedures specified in either paragraph (b)(9)(i)(A) or (b)(9)(ii)(B) of this section. If measuring the VOHAP concentration of an individual HAP in accordance with § 63.705(b)(9)(i)(A), the concentrations of the individual organic VOHAP measured in the water shall be corrected to a HAP concentration by dividing each VOHAP concentration by the compound-specific fraction measured factor (F_M) listed in table 34 of 40 CFR part 63, subpart G.

(C) Three grab samples of the entering wastewater stream shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs.

(D) Three grab samples of the exiting wastewater stream shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs conducted over the same 3-hour period at which the total HAP mass flow rate entering the treatment process is determined.

(E) The HAP mass flow rates of each individual HAP compound entering and exiting the treatment process are calculated as follows:

$$E_b = \frac{K}{n \times 10^6} \left(\sum_{p=1}^n V_{bp} C_{bp} \right)$$

$$E_a = \frac{K}{n \times 10^6} \left(\sum_{p=1}^n V_{ap} C_{ap} \right)$$

where:

E_b = HAP mass flow rate of an individually speciated HAP compound entering the treatment process, kilograms per hour.

E_a = HAP mass flow rate of an individually speciated HAP compound exiting the treatment process, kilograms per hour.

K = Density of the wastewater stream, kilograms per cubic meter.

V_{bp} = Average volumetric flow rate of wastewater entering the treatment process during each run p , cubic meters per hour.

V_{ap} = Average volumetric flow rate of wastewater exiting

the treatment process during each run p, cubic meters per hour.

C_{bp} = Average HAP concentration of an individually speciated HAP in the wastewater stream entering the treatment process during each run p, parts per million by weight.

C_{ap} = Average HAP concentration of an individually speciated HAP in the wastewater stream exiting the treatment process during each run p, parts per million by weight.

n = Number of runs.

(iii) The fraction removed across the treatment process for each individually speciated HAP compound shall be calculated as follows:

$$F_R = \frac{E_b - E_a}{E_b}$$

where:

F_R = Fraction removed for an individually speciated HAP compound of the treatment process.

E_b = HAP mass flow rate of an individually speciated HAP compound entering the treatment process, kilograms per hour.

E_a = HAP mass flow rate of an individually speciated HAP compound exiting the treatment process, kilograms per hour.

(i) Startups and shutdowns are normal operation for this source category. Emissions from these activities are to be included when determining if the standards specified in § 63.703 are being attained.

(j) An owner or operator who uses compliance techniques other than those specified in this subpart shall submit a description of those compliance procedures, subject to the Administrator's approval, in accordance with § 63.7(f) of subpart A.

§ 63.706 Recordkeeping requirements.

(a) Except as stipulated in § 63.703(b), (c)(5), and (h), the owner or operator of a magnetic tape manufacturing operation subject to this subpart shall fulfill all applicable recordkeeping requirements in § 63.10 of subpart A, as outlined in Table 1.

(b) The owner or operator of an affected source subject to this subpart that is also subject to the requirements of § 63.703(e)(1)(ii) (a minimum freeboard ratio of 75 percent), shall record whether or not the minimum freeboard ratio has been achieved every time that HAP solvent is added to the wash sink. A measurement of the actual ratio is not necessary for each record as long as the owner or operator has a reliable method for making the required determination. For example, the record may be made by comparing the HAP solvent level to a permanent mark on

the sink that corresponds to a 75 percent freeboard ratio. A HAP solvent level in the sink higher than the mark would indicate the minimum ratio has not been achieved.

(c) The owner or operator of an affected source subject to this subpart that is subject to the requirements of § 63.704(c)(10) shall:

(1) If complying with § 63.704(c)(10)(i), maintain hourly records of whether the flow indicator was operating and whether flow was detected at any time during the hour, as well as records of the times and durations of all periods when the vent stream is diverted from the control device or the monitor is not operating;

(2) If complying with § 63.704(c)(10)(ii), (iii), or (iv), maintain a record of monthly inspections, and the records of the times and durations of all periods when:

(i) flow was diverted through any bypass line such that the seal mechanism was broken;

(ii) the key for a lock-and-key type lock had been checked out;

(iii) the valve position on any bypass line changed to the open position; or

(iv) the diversion of flow through any bypass line caused a shutdown of HAP-emitting operations.

(d) The owner or operator of an affected source that is complying with § 63.703(c) by performing a material balance in accordance with § 63.705(c)(1) shall:

(1) Maintain a record of each 7-day rolling average calculation; and

(2) Maintain a record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered.

(e) The owner or operator of a magnetic tape manufacturing operation subject to the provisions of § 63.703(b) and (h) shall maintain records of the calculations used to determine the limits on the amount of HAP utilized as specified in § 63.703(b)(2), and of the HAP utilized in each month and the sum over each 12-month period.

(f) The owner or operator of an affected source subject to the provisions of § 63.703(c)(5) shall keep records of the HAP content of each batch of coating applied as calculated according to § 63.705(c)(5), and records of the formulation data that support the calculations. When a batch of coating applied is identical to a previous batch applied, only one set of records is required to be kept.

(g) The owner or operator of an affected source that is complying with § 63.703(c)(1) through the use of a nonregenerative carbon adsorber and demonstrating initial compliance in accordance with § 63.705(c)(6) shall maintain records to support the outlet VOC or HAP concentration value or the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.

(h) In accordance with § 63.10(b)(1) of subpart A, the

owner or operator of an affected source subject to the provisions of this subpart shall retain all records required by this subpart and subpart A for at least 5 years following their collection.

§ 63.707 Reporting requirements.

(a) Except as stipulated in § 63.703(b), (c)(5), and (h), the owner or operator of a magnetic tape manufacturing operation subject to this subpart shall fulfill all applicable reporting requirements in § 63.7 through § 63.10, as outlined in Table 1. These reports shall be submitted to the Administrator or delegated State.

(b) The owner or operator of an existing magnetic tape manufacturing operation subject to § 63.703(b) and (h) shall include the values of the limits on the amount of HAP utilized as determined in § 63.703(b)(2), along with supporting calculations, in the initial notification report required by § 63.9(b).

(c) The owner or operator of a new magnetic tape manufacturing operation subject to § 63.703(h) shall include the values of the limits on the amount of HAP utilized as determined in § 63.703(b)(2), along with supporting calculations, and the amount of HAP expected to be utilized during the first consecutive 12-month period of operation in the initial notification report required by § 63.9(b).

(d) The owner or operator subject to § 63.703(c) and following the compliance provisions of § 63.705(c)(1) (material balance calculation) shall include with the notification of compliance status required by § 63.9(h) the results of the initial material balance calculation.

(e) The owner or operator subject to § 63.703(c)(5) and following the compliance provisions of § 63.705(c)(5) (low-HAP coating) shall include with the notification of compliance status required by § 63.9(h) the results of the initial low-HAP coating demonstration.

(f) The owner or operator subject to the provisions of § 63.703(g) and demonstrating compliance in accordance with § 63.705(h)(1) shall submit to the permitting authority with the notification of compliance status required by § 63.9(h) the design specifications demonstrating that the control technique meets the required efficiency. For steam strippers, these specifications shall include at a minimum: feed rate, steam rate, number of theoretical trays, number of actual trays, feed composition, bottoms composition, overheads composition, and inlet feed temperature.

(g) The owner or operator of an affected source that is complying with § 63.703(c)(1) through the use of a nonregenerative carbon adsorber and demonstrating initial compliance in accordance with § 63.705(c)(6) shall submit to the permitting authority with the notification of compliance status required by § 63.9(h) the design evaluation.

(h) The owner or operator of an affected source that is complying with § 63.703(d) through the use of a baghouse or fabric filter and demonstrating initial compliance in

accordance with § 63.705(g)(2) shall submit to the permitting authority with the notification of compliance status required by § 63.9(h) the engineering calculations that support the minimum ventilation rate needed to capture HAP particulates for delivery to the control device.

(i) Excess emissions and continuous monitoring system performance report and summary reports shall be submitted as required by § 63.10(e).

(1) The owner or operator of an affected source subject to § 63.704 shall include deviations of monitored values from the operating parameter values required by § 63.704(c) in the reports. In the case of exceedances, the report must also contain a description and timing of the steps taken to address the cause of the exceedance.

(2) The owner or operator of an affected source subject to § 63.703(c)(5) shall report the HAP content of each batch of coating applied as the monitored operating parameter value in the reports.

(3) The owner or operator of an affected source subject to § 63.703(e)(1)(ii) and maintaining a minimum freeboard ratio of 75 percent shall report violations of the standard (freeboard ratio is less than 75 percent) in the reports.

(4) The owner or operator of an affected source subject to § 63.704(c)(10) of this subpart shall include records of any time period and duration of time that flow was diverted from the control device, as well as the results of monthly inspections required by § 63.704(c)(10)(ii), (iii), and (iv) in the reports.

(5) The owner or operator of an affected source complying with § 63.703(c) by performing a material balance calculation in accordance with § 63.705(c)(1) shall report any exceedances of the standard, as demonstrated through the calculation, in the reports.

(j) The owner or operator of a magnetic tape manufacturing operation subject to the provisions of § 63.703(h) shall report the amount of HAP utilized in each 12-month period in an annual report to the Administrator according to the following schedule:

(1) For existing sources, the first report shall cover the 12-month period prior to the source's compliance date and shall be submitted to the Administrator no later than 30 days after the compliance date; and

(2) For new sources, the first report shall include the quantity of HAP that is expected to be utilized during the first 12 months of operation and shall be submitted to the Administrator no later than 30 days after the compliance date;

(3) Annual reports shall be submitted to the Administrator no later than 30 days after the last 12-month period included in the report; and

(4) A report shall also be submitted no later than 30 days after monthly records required to be maintained by

§ 63.706(e) indicate that any limit on the amount of HAP utilized has been exceeded. The report shall indicate the amount by which the limit has been exceeded.

(k) The owner or operator establishing an alternate HAP outlet concentration limit in accordance with §§ 63.703(i) and 63.704(b)(11)(ii) shall:

(1) to support the proposed limit, submit the following within 180 days following completion of the performance test required by § 63.7:

(i) the performance test or CEM data collected to establish the limit;

(ii) records of when coating operations were down;

(iii) the rationale for the alternate proposed limit; and

(iv) a statement signed by a responsible official of the company that the control device was operated in accordance with good air pollution control practices and in the same manner it was operated to achieve compliance with the emission limitation for coating operations; and

(2) in the excess emissions and continuous monitoring system performance report and summary report required by § 63.10(e)(3), include parameter or CEM data to demonstrate compliance or noncompliance with the alternate outlet HAP concentration established in accordance with §§ 63.703(i) and 63.704(b)(11)(ii) once the limit is approved.

§ 63.708 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under § 111(b) of the Clean Air Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

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

TABLE 1. APPLICABILITY OF GENERAL PROVISIONS TO SUBPART EE

Reference	Applies to Subpart EE	Comment
63.1(a)(1)	Yes	Additional terms defined in § 63.702(a); when overlap between subparts A and EE occurs, subpart EE takes precedence.
63.1(a)(2)-(14)	Yes	
63.1(b)(1)-(3)	Yes	
63.1(c)(1)	Yes	Subpart EE specifies the applicability of each paragraph in subpart A to sources subject to subpart EE.
63.1(c)(2)	No	The applicability of §§ 63.701(a)(2) and 63.703(b) and (h) to a source does not in and of itself make a source subject to part 70.
63.1(c)(4)-(5)	Yes	
63.1(e)	Yes	
63.2	Yes	Additional terms defined in 63.702(a); when overlap between subparts A and EE occurs, subpart EE takes precedence.
63.3	Yes	Units specific to subpart EE are defined in subpart EE.
63.4(a)(1)-(3)	Yes	
63.4(a)(5)	Yes	
63.4(b)	Yes	
63.4(c)	Yes	
63.5(a)	Yes	
63.5(b)(1)	Yes	
63.5(b)(3)-(6)	Yes	
63.5(d)	Yes	
63.5(e)	Yes	
63.5(f)	Yes	
63.6(a)	Yes	
63.6(b)(1)-(5)	Yes	
63.6(b)(7)	Yes	
63.6(c)(1)-(2)	Yes	
63.6(c)(5)	Yes	
63.6(e)(1)-(2)	Yes	
63.6(e)(3)	Yes	Owners or operators of affected sources subject to subpart EE do not need to address startups and shutdowns because the emission limitations apply during these times.
63.6(f)(1)	No	§ 63.701(f) of subpart EE specifies when the standards apply.
63.6(f)(2)(i)-(ii)	Yes	
63.6(f)(2)(iii)	Yes	§ 63.705(a)(3) of subpart EE includes additional circumstances under which previous capture device demonstrations are acceptable to show compliance.
63.6(f)(2)(iv)-(v)	Yes	

TABLE 1. (continued)

Reference	Applies to Subpart EE	Comment
63.6(f)(3)	Yes	
63.6(g)	Yes	
63.6(h)(1)	No	§ 63.701(f) of subpart EE specifies when the standards apply.
63.6(h)(2)(i)	Yes	
63.6(h)(2)(iii)	Yes	
63.6(h)(4)	Yes	This requirement applies only for the visible emission test required under § 63.705(g)(2).
63.6(h)(5)(i)-(iii)	Yes	
63.6(h)(5)(v)	No	
63.6(h)(6)	Yes	
63.6(h)(7)	No	
63.6(h)(8)	Yes	
63.6(h)(9)	No	
63.6(i)(1)-(14)	Yes	§ 63.703(c)(4) of subpart EE shall not be considered emissions averaging for the purposes of § 63.6(i)(4)(i)(B).
63.6(i)(16)	Yes	
63.6(j)	Yes	
63.7(a)(1)	Yes	
63.7(a)(2)(i)-(vi)	Yes	
63.7(a)(2)(ix)	Yes	
63.7(a)(3)	Yes	
63.7(b)	Yes	
63.7(c)	Yes	
63.7(d)	Yes	
63.7(e)	Yes	63.7(e) establishes the minimum performance test requirements. This section does not preclude owners or operators from conducting multiple test runs under alternate operating conditions to establish an appropriate range of compliance operating parameter values in accordance with § 63.704(b)(11)(i) of subpart EE. Also as required in § 63.701(f) of subpart EE, the emissions standards apply during startup and shutdown.
63.7(f)	Yes	
63.7(g)(1)	Yes	
63.7(g)(3)	Yes	
63.7(h)	Yes	
63.8(a)(1)-(2)	Yes	
63.8(a)(4)	Yes	
63.8(b)(1)	Yes	

TABLE 1. (continued)

Reference	Applies to Subpart EE	Comment
63.8(b)(2)	No	§ 63.704 of subpart EE specifies monitoring locations; when multiple emission points are tied to one central control device, the monitors are located at the central control device.
63.8(b)(3)	Yes	
63.8(c)(1)-(3)	Yes	
63.8(c)(4)	Yes	Provisions related to COMS, however, do not apply.
63.8(c)(5)	No	
63.8(c)(6)-(8)	Yes	
63.8(d)	Yes	
63.8(e)	Yes	
63.8(f)(1)-(6)	Yes	
63.8(g)(1)-(5)	Yes	
63.9(a)	Yes	
63.9(b)	Yes	
63.9(c)	Yes	
63.9(d)	Yes	
63.9(e)	Yes	
63.9(f)	Yes	
63.9(g)(1)	Yes	
63.9(g)(2)	No	
63.9(g)(3)	Yes	
63.9(h)(1)-(3)	Yes	
63.9(h)(5)-(6)	Yes	
63.9(i)	Yes	
63.9(j)	Yes	
63.10(a)	Yes	
63.10(b)(1)	Yes	
63.10(b)(2)	Yes	Except information on startup and shutdown periods is not necessary because the standards apply during these time periods.
63.10(b)(3)	Yes	
63.10(c)(1)	Yes	
63.10(c)(5)-(8)	Yes	Except information on startup and shutdown periods is not necessary because the standards apply during these times.
63.10(c)(10)-(15)	Yes	Except information on startup and shutdown periods is not necessary because the standards apply during these times.
63.10(d)(1)-(2)	Yes	
63.10(d)(3)	Yes	This requirement applies only for the visible emissions test required under § 63.705(g)(2). The results of visible emissions tests under § 63.704(e) shall be reported as required in § 63.10(e)(3).

TABLE 1. (continued)

Reference	Applies to Subpart EE	Comment
63.10(d)(4)	Yes	
63.10(d)(5)	Yes	Except information on startup and shutdown periods is not necessary because the standards apply during these times.
63.10(e)(1)	Yes	
63.10(e)(2)(i)	Yes	
63.10(e)(2)(ii)	No	
63.10(e)(3)(i)-(v)	Yes	
63.10(e)(3)(vi)-(viii)	Yes	Except emissions/CMS performance during startup and shutdown do not need to be specified because the standards apply during startup and shutdown.
63.10(e)(4)	No	
63.10(f)	Yes	
63.11-63.15	Yes	