December 2020

MEMORANDUM

TO: Docket ID: EPA-HQ-OAR-2020-0532

FROM: Nathan Topham, Environmental Engineer, U.S. EPA

SUBJECT: Proposed Regulatory Edits for 40 CFR Part 63 Subpart YY: Cyanide Chemicals Manufacturing NESHAP Residual Risk and Technology Review Proposal

This memorandum provides the proposed regulation edits associated with a proposed action titled, *"National Emission Standards for Hazardous Air Pollutants: Cyanide Chemicals Manufacturing Residual Risk and Technology Review."*

Attachment 1 to this memorandum presents the specific amendatory language proposed to revise the above-referenced subparts of the Code of Federal Regulations (CFR). Attachment 2 to this memorandum, for the convenience of interested parties, presents the subject subparts of the CFR (as of December 1, 2020) including proposed regulation edits shown in redline/strikeout format.

Attachment 1: Proposed amendatory language.
Attachment 2: Regulatory text with proposed edits in redline/strikeout.

Attachment 1:
Proposed amendatory language.

For the reasons set out in the preamble, 40 CFR part 63 is amended as follows:

PART 63 – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

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

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

Subpart YY—National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards

2. Section 63.1102 is amended by revising paragraph (a) introductory text and adding paragraph (d) to read as follows:

§63.1102 Compliance schedule.

(a) *General requirements.* Affected sources, as defined in §63.1103(a)(1)(i) for acetyl resins production, §63.1103(b)(1)(i) for acrylic and modacrylic fiber production, §63.1103(c)(1)(i) for hydrogen fluoride production, §63.1103(d)(1)(i) for polycarbonate production, §63.1103(e)(1)(i) for ethylene production, §63.1103(f)(1)(i) for carbon black production, §63.1103(g)(1)(i) for cyanide chemicals manufacturing, or §63.1103(h)(1)(i) for spandex production shall comply with the appropriate provisions of this subpart and the subparts referenced by this subpart YY according to the schedule in paragraph (a)(1) or (2) of this section, as appropriate, except as provided in paragraph (b) of this section. Affected sources in ethylene production also must comply according to paragraph (c) of this section. Affected sources in cyanide chemicals manufacturing also must comply according to paragraph (d) of this section. Proposal and effective dates are specified in Table 1 to this section.

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(d) *Cyanide chemicals manufacturing*. (1) If applicable, all cyanide chemicals manufacturing affected sources that commenced construction or reconstruction on or before [INSERT DATE OF

PUBLICATION OF THE PROPOSED RULE IN THE **FEDERAL REGISTER**], must be in compliance with the requirements listed in paragraphs (d)(1)(i) and (ii) of this section upon initial startup or [DATE ONE YEAR AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**], whichever is later. If applicable, all cyanide chemicals manufacturing affected sources that commenced construction or reconstruction after [DATE OF PUBLICATION OF THE PROPOSED RULE IN THE **FEDERAL REGISTER**], must be in compliance with the requirements listed in paragraphs (d)(1)(i) and (ii) of this section upon initial startup, or [DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**], whichever is later.

(i) Requirements specified in Table 9 to §63.1103(g), table entry (f)(1)(ii), for new cyanide chemicals manufacturing process units that generate process wastewater.

(ii) Requirements specified in Table 9 to §63.1103(g), table entry (g), for existing cyanide chemicals manufacturing process units that generate process wastewater.

(2) All cyanide chemicals manufacturing affected sources that commenced construction or reconstruction on or before [INSERT DATE OF PUBLICATION OF THE PROPOSED RULE IN THE **FEDERAL REGISTER**], must be in compliance with the requirements listed in paragraphs (d)(2)(i) through (iii) of this section upon initial startup or [DATE 180 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**], whichever is later. All cyanide chemicals manufacturing affected sources that commenced construction or reconstruction after [DATE OF PUBLICATION OF THE PROPOSED RULE IN THE **FEDERAL REGISTER**], must be in compliance with the requirements listed in paragraphs (d)(2)(i) through (iii) of this section upon initial startup, or [DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**], whichever is later.

(i) The exceptions specified in §63.1103(g)(6) related to 40 part 63, subparts SS, TT and UU startup, shutdown, and malfunction requirements.

(ii) The compliance requirements specified in §63.1108(a)(4)(i), (b)(1)(ii), (b)(2), and (b)(4)(ii)(B).

(iii) The electronic reporting requirements specified in §63.1110(a)(10).

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3. Section 63.1103 is amended by:

a. Revising paragraphs (g)(1)(ii) and (g)(3);

b. Revising entries (f)(1)(i) and adding (f)(1)(ii) in Table 9 to §63.1103(g);

c. Redesignating entry (g), (h) and (i) to (h), (i) and (j) in Table 9 to §63.1103(g);

d. Adding entry (g) in Table 9 to §63.1103(g);

e. Revising redesignated entry (j)(1) in Table 9 to §63.1103(g); and

f. Adding paragraph (g)(6).

The additions, revisions and table entry redesignations read as follows:

§63.1103 Source category-specific applicability, definitions, and requirements.

* * * * *

(g) * * *

(1) * * *

(ii) *Compliance schedule*. The compliance schedule for the affected source, as defined in paragraph (g)(1)(i) of this section, is specified in §63.1102.

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(3) *Requirements.* Table 9 to this section specifies the cyanide chemicals manufacturing standards applicable to existing and new sources. Applicability assessment procedures and methods are specified in §63.1104. An owner or operator of an affected source is not required to perform applicability tests or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Before [DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], minimization of emissions from startup, shutdown, and malfunctions must be addressed in the startup, shutdown, and malfunction plan required by §63.1111; the plan must also establish reporting and recordkeeping of such events. A startup, shutdown, and malfunction plan is not required on and after [DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**] and the requirements specified in § 63.1111 no longer apply; however, for historical compliance purposes, a copy of the plan must be retained and available on-site for five years after [DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**]. Procedures for approval of alternative means of emission limitations are specified in §63.1113.

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TABLE 9 TO §63.1103(g)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A CYANIDE CHEMICALS MANUFACTURING EXISTING OR NEW AFFECTED SOURCE?

If you own or operate . . .	**And if . . .**	**Then you must . . .**
* *	* * *	* *

(f) A new cyanide chemicals manufacturing process unit that generates process wastewater	(1) The process wastewater is from HCN purification, ammonia purification, or flare blowdown	(i) Achieve a combined removal and control of HAP from wastewater of 93 weight-percent; and (ii) Beginning no later than the compliance dates specified in §63.1102(d), waste management units upstream of an open or closed biological treatment process shall meet the requirements of §63.133 through §63.137 of subpart G of this part, as applicable.
(g) An existing cyanide chemicals manufacturing process unit that generates process wastewater	(1) The process wastewater is from HCN purification, ammonia purification, or flare blowdown; and (2) the total annual average concentration of Table 9 of 40 CFR part 63, subpart G compounds (Table 9 compounds) and cyanide compounds are greater or equal to 10,000 ppmw at any flow rate, or the total annual average concentration of Table 9 compounds and cyanide compounds are greater or equal to 1,000 ppmw, and the	(i) Beginning no later than the compliance dates specified in §63.1102(d), comply with the requirements of §63.138(a)(1).

	annual average flow rate is greater or equal to 10 liters per minute, according to the procedures in §63.144(a)	
(h) A cyanide chemicals manufacturing process unit that generates maintenance wastewater	(1) The maintenance wastewater contains hydrogen cyanide or acetonitrile	(i) Comply with the requirements of §63.1106(b).
(i) An item of equipment listed in §63.1106(c)(1) that transports or contains wastewater liquid streams from a cyanide chemicals manufacturing process unit	(1) The item of equipment meets the criteria specified in §63.1106(c)(1) through (3) and either (c)(4)(i) or (ii)	(i) Comply with the requirements in Table 35 of subpart G of this part.
(j) Equipment, as defined under §63.1101	(1) The equipment contains or contacts hydrogen cyanide and operates equal to or greater than 300 hours per year	(i) Comply with either subpart TT or UU of this part, and paragraph (g)(5) of this section, with the exception that open-ended lines that contain or contact hydrogen cyanide are exempt from any requirements to install a cap, plug, blind flange, or second valve to be capped.

(6) *Startup, shutdown, and malfunction referenced provisions.* Beginning no later than the compliance dates specified in §63.1102(d), the referenced provisions specified in paragraphs (g)(6)(i) through (xxiii) of this section do not apply when demonstrating compliance with paragraph (g)(3) of this section.

(i) The second/last sentence of §63.983(a)(5) (requirements for pressure relief devices in a transfer rack's closed vent system requirements) of subpart SS: "Pressure relief devices needed for safety purposes are not subject to this paragraph."

(ii) The phrase "except during periods of start-up, shutdown and malfunction as specified in the referencing subpart" in §63.984(a) of subpart SS (equipment and operating requirements for fuel gas systems and processes requirements).

(iii) The phrase "except during periods of start-up, shutdown and malfunction as specified in the referencing subpart" in §63.985(a) of subpart SS (non-flare control device equipment and operating requirements).

(iv) The phrase "other than start-ups, shutdowns, or malfunctions" in §63.994(c)(1)(ii)(D) of subpart SS (halogen scrubber and other halogen reduction device monitoring requirements).

(v) Section 63.996(c)(2)(ii) of subpart SS (operation and maintenance of continuous parameter monitoring systems)" "(ii) If under the referencing subpart, an owner or operator has developed a start-up, shutdown, and malfunction plan, the plan is followed, and the CPMS is repaired immediately, this action shall be recorded as specified in §63.998(c)(1)(ii)(E)."

(vi) The last sentence of §63.997(e)(1)(i) (performance test procedures) of subpart SS (general procedures for continuous unit operations): "Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test."

(vii) Section 63.998(b)(2)(iii) (excluded data) of subpart SS: “(iii) Startups, shutdowns, and malfunctions, if the owner or operator operates the source during such periods in accordance with § 63.1111(a) and maintains the records specified in paragraph (d)(3) of this section.

(viii) The phrase “other than periods of startups, shutdowns, and malfunctions” from §63.998(b)(5)(i)(A) (alternative recordkeeping) of subpart SS.

(ix) The phrase “other than a start-up, shutdown, or malfunction” from §63.998(b)(5)(i)(B)(3) (alternate recordkeeping) of subpart SS.

(x) The phrase “other than periods of startups, shutdowns, and malfunctions” from §63.998(b)(5)(i)(C) (alternate recordkeeping) of subpart SS.

(xi) The phrase “other than a start-up, shutdown, or malfunction” from §63.998(b)(5)(ii)(C) (alternate recordkeeping) of subpart SS.

(xii) The phrase “except as provided in paragraphs (b)(6)(i)(A) and (B) of this section” from §63.998(b)(6)(i) (alternative recordkeeping) of subpart SS.

(xiii) The second sentence of §63.998(b)(6)(ii) (alternative recordkeeping) of subpart SS. “If a source has developed a startup, shutdown and malfunction plan, and a monitored parameter is outside its established range or monitoring data are not collected during periods of startup, shutdown, or malfunction (and the source is operated during such periods in accordance with §63.1111(a)) or during periods of nonoperation of the process unit or portion thereof (resulting in cessation of the emissions to which monitoring applies), then the excursion is not a violation and, in cases where continuous monitoring is required, the excursion does not count as the excused excursion for determining compliance.”

(xiv) Section 63.998(c)(1)(ii)(D) through (G) (non-flare control and recovery device regulated source monitoring records) of subpart SS.

(xv) Section 63.998(d)(3) (regulated source and control equipment start-up, shutdown and malfunction records) of subpart SS.

(xvi) The phrase “may be included as part of the startup, shutdown, and malfunction plan, as required by the referencing subpart for the source, or” from §63.1005(e)(4)(i) (leak repair records written procedures) of subpart.

(xvii) The phrase “(except periods of startup, shutdown, or malfunction)” from §63.1007(e)(1)(ii)(A) (dual mechanical seal system special provisions for pumps) of subpart TT.

(xviii) The phrase “(except periods of startup, shutdown, or malfunction)” from §63.1009(e)(1)(i)(A) (dual mechanical seal system special provisions for agitators) of subpart TT.

(xix) The phrase “(except periods of startup, shutdown, or malfunction)” from §63.1012(b)(1) (compressor seal system standard) of subpart TT.

(xx) The phrase “may be included as part of the startup, shutdown, and malfunction plan, as required by the referencing subpart for the source, or” from §63.1024(f)(4)(i) (leak repair records written procedures) of subpart UU.

(xxi) The phrase “(except periods of startup, shutdown, or malfunction)” from §63.1026(e)(1)(ii)(A) (dual mechanical seal system special provisions for pumps) of subpart UU.

(xxii) The phrase “(except periods of startup, shutdown, or malfunction)” from §63.1028(e)(1)(i)(A) (dual mechanical seal system special provisions for agitators of subpart UU.

(xxiii) The phrase “(except periods of startup, shutdown, or malfunction)” from §63.1031(b)(1) (compressor seal system standard) of subpart UU.

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4. Section 63.1104 is amended by revising paragraph (c) to read as follows:

§63.1104 Process vents from continuous unit operations: applicability assessment procedures and methods.

* * * * *

(c) *Applicability assessment requirement.* The TOC or organic HAP concentrations, process vent volumetric flow rates, process vent heating values, process vent TOC or organic HAP emission rates, halogenated process vent determinations, process vent TRE index values, and engineering assessments for process vent control applicability assessment requirements are to be determined during maximum representative operating conditions for the process, except as provided in paragraph (d) of this section, or unless the Administrator specifies or approves alternate operating conditions. For acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, polycarbonate production affected sources, and ethylene production affected sources, operations during periods of malfunction shall not constitute representative conditions for the purpose of an applicability test. For all other affected sources, operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of an applicability test.

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5. Section 63.1108 is amended by:

a. Revising paragraphs (a) introductory text and (a)(4)(i); and

b. Revising paragraphs (b)(1)(ii), (b)(2) introductory text, and (b)(4)(ii)(B).

The revisions read as follows:

§63.1108 Compliance with standards and operation and maintenance requirements.

(a) *Requirements.* The requirements of paragraphs (a)(1), (2), and (5) of this section apply to all affected sources except acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) for

ethylene production affected sources and specified in §63.1102(d) for cyanide chemicals manufacturing affected sources. The requirements of paragraph (a)(4) of this section apply only to acrylic and modacrylic fiber production affected sources, polycarbonate production affected sources and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and specified in §63.1102(d) for cyanide chemicals manufacturing affected sources. The requirements of paragraphs (a)(3), (6), and (7) of this section apply to all affected sources.

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(4) * * *

(i) For acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and specified in §63.1102(d) for cyanide chemicals manufacturing affected sources, the emission limitations and established parameter ranges of this part shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies. Equipment leak requirements shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which the equipment leak requirements apply.

* * * * *

(b) * * *

(1) * * *

(ii) Excused excursions are not allowed for acrylic and modacrylic fiber production affected sources, polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and in §63.1102(d) for cyanide

chemicals manufacturing affected sources. For all other affected sources, including ethylene production affected sources and cyanide chemicals manufacturing affected sources prior to the compliance dates specified in §63.1102(c) and (d), an excused excursion, as described in §63.998(b)(6)(ii), is not a violation.

(2) *Parameter monitoring: Excursions.* An excursion is not a violation in cases where continuous monitoring is required and the excursion does not count toward the number of excused excursions (as described in §63.998(b)(6)(ii)), if the conditions of paragraph (b)(2)(i) or (ii) of this section are met, except that the conditions of paragraph (b)(2)(i) of this section do not apply for acrylic and modacrylic fiber production affected sources, polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and in §63.1102(d) for cyanide chemicals manufacturing affected sources. Nothing in this paragraph shall be construed to allow or excuse a monitoring parameter excursion caused by any activity that violates other applicable provisions of this subpart or a subpart referenced by this subpart.

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(4) * * *

(ii) * * *

(B) For acrylic and modacrylic fiber production affected sources, polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and in §63.1102(d) for cyanide chemicals manufacturing affected sources, performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown unless specified by the Administrator or an applicable subpart. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document

operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

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6. Section 63.1110 is amended by revising paragraphs (a) introductory text, (a)(7), (a)(10)(i) introductory text, (a)(10)(i)(C), and (a)(10)(ii) to read as follows:

§63.1110 Reporting requirements.

(a) *Required reports.* Each owner or operator of an affected source subject to this subpart shall submit the reports listed in paragraphs (a)(1) through (8) of this section, as applicable. Each owner or operator of an acrylic and modacrylic fiber production affected source or polycarbonate production affected source subject to this subpart shall also submit the reports listed in paragraph (a)(9) of this section in addition to the reports listed in paragraphs (a)(1) through (8) of this section, as applicable. Beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and no later than the compliance dates specified in §63.1102(d) for cyanide chemicals manufacturing, each owner or operator of an ethylene production affected source or cyanide chemicals manufacturing affected source subject to this subpart shall also submit the reports listed in paragraph (a)(10) of this section in addition to the reports listed in paragraphs (a)(1) through (8) of this section, as applicable.

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(7) Startup, Shutdown, and Malfunction Reports described in §63.1111 (except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, ethylene production affected sources, and polycarbonate production affected sources).

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(10) * * *

(i) Beginning no later than the compliance dates specified in §63.1102(c) and (d), within 60 days after the date of completing each performance test required by this subpart, the owner or operator must submit the results of the performance test following the procedures specified in paragraphs (a)(10)(i)(A) through (C) of this section.

* * *

(C) *CBI*. Do not use CEDRI to submit information you claim as CBI. Anything submitted ot CEDRI cannot later be claimed CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraph (a)(10)(i)(A) or (B) of this section is CBI, then the owner or operator must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via EPA's CDX as described in paragraphs (a)(10)(i)(A) and (B) of this section. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

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(ii) Beginning no later than the compliance dates specified in §63.1102(c) and (d), the owner or operator must submit all subsequent Notification of Compliance Status reports required under paragraph (a)(4) of this section in PDF format to the EPA via CEDRI, which can be accessed through EPA's CDX (https://cdx.epa.gov/). All subsequent Periodic Reports required under paragraph (a)(5) of this section must be submitted to the EPA via CEDRI using the appropriate electronic report template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri) for this subpart beginning no later than the compliance dates specified in §63.1102(c) and (d) or once the report template has been available on the CEDRI website for one year, whichever date is later. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, then submit a complete report, including information claimed to be CBI, to the EPA. Periodic Reports must be generated using the appropriate template on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, U.S. EPA Mailroom (C404-02), 4930 Old Page Road, Durham, NC 27703 to the attention of the applicable person specified in paragraphs (A) through (B) of this section. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment,

and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(A) Ethylene Production Sector Lead

(B) Cyanide Chemicals Manufacturing Sector Lead

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7. Section 63.1111 is amended by revising paragraphs (a) introductory text, (b) introductory text, and (c) introductory text to read as follows:

§63.1111 Startup, shutdown, and malfunction.

(a) *Startup, shutdown, and malfunction plan.* Before [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN **THE FEDERAL REGISTER**], the requirements of this paragraph (a) apply to all affected sources except for acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources. On and after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], the requirements of this paragraph (a) apply to all affected sources except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, and polycarbonate production affected sources. On and after July 6, 2023, the requirements of this paragraph (a) apply to all affected sources except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, ethylene production affected sources, and polycarbonate production affected sources.

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(b) *Startup, shutdown, and malfunction reporting requirements.* Before [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], the requirements of this paragraph (b) apply to all affected sources except for acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources. On and after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], the requirements of this

paragraph (b) apply to all affected sources except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, and polycarbonate production affected sources. On and after July 6, 2023, the requirements of this paragraph (b) apply to all affected sources except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, ethylene production affected sources, and polycarbonate production affected sources.

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(c) *Malfunction recordkeeping and reporting.* Before [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], the requirements of this paragraph (c) apply only to acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources. On and after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**], the requirements of this paragraph (c) apply only to acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, and polycarbonate production affected sources. On and after July 6, 2023, the requirements of this paragraph (c) apply only to acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, ethylene production affected sources, and polycarbonate production affected sources.

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Attachment 2:
Regulatory text with proposed edits in redline/strikeout.

Note: Working Draft of Track Changes to Subpart YY (National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards) for Cyanide Chemicals Manufacturing Risk and Technology Review (RTR)

Subpart YY—National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards

§63.1100 Applicability.

(a) *General.* This subpart applies to source categories and affected sources specified in §63.1103(a) through (h). The affected emission points, by source category, are summarized in table 1 of this section. This table also delineates the section and paragraph of the rule that directs an owner or operator of an affected source to source category-specific control, monitoring, recordkeeping, and reporting requirements.

TABLE 1 TO §63.1100(a)—SOURCE CATEGORY MACT[A] APPLICABILITY

Source category	Storage vessels	Process vents	Transfer racks	Equipment leaks	Wastewater streams	Other	Source category MACT requirements
Acetal Resins Production	Yes	Yes	No	Yes	Yes	No	§63.1103(a)
Acrylic and Modacrylic Fibers Production	Yes	Yes	No	Yes	Yes	Yes[b]	§63.1103(b)
Carbon Black Production	No	Yes	No	No	No	No	§63.1103(f).
Cyanide Chemicals Manufacturing	Yes	Yes	Yes	Yes	Yes	No	§63.1103(g).
Ethylene Production	Yes	Yes	Yes	Yes	Yes	Yes[c]	§63.1103(e).
Hydrogen Fluoride Production	Yes	Yes	Yes	Yes	No	No	§63.1103(c)
Polycarbonate Production	Yes	Yes	No	Yes	Yes	No	§63.1103(d)
Spandex Production	Yes	Yes	No	No	No	Yes[d]	§63.1103(h).

[a]Maximum achievable control technology.
[b]Fiber spinning lines using spinning solution or suspension containing acrylonitrile.
[c]Heat exchange systems as defined in §63.1082(b).
[d]Fiber spinning lines.

(b) *Subpart A requirements.* The following provisions of subpart A of this part (General Provisions), §§63.1 through 63.5, and §§63.12 through 63.15, apply to owners or operators of affected sources subject to this subpart. Beginning no later than the compliance dates specified in §63.1102(c), for ethylene production affected sources, §§63.7(a)(4), (c), (e)(4), and (g)(2), and 63.10(b)(2)(vi) also apply.

(c) *Research and development facilities.* The provisions of this subpart do not apply to research and development facilities, consistent with section 112(b)(7) of the Act.

(d) *Primary product determination and applicability.* The primary product of a process unit shall be determined according to the procedures specified in paragraphs (d)(1) and (2) of this section. Paragraphs (d)(3), (4), and (5) of this section discuss compliance for those process units operated as flexible operation units.

(1) If a process unit only manufactures one product, then that product shall represent the primary product of the process unit.

(2) If a process unit is designed and operated as a flexible operation unit, the primary product shall be determined as specified in paragraphs (d)(2)(i) or (ii) of this section based on the anticipated operations for the 5 years following the promulgation date for existing affected sources and for the first 5 years after initial startup for new affected sources.

(i) If the flexible operation unit will manufacture one product for the greatest percentage of operating time over the five-year period, then that product shall represent the primary product of the flexible operation unit.

(ii) If the flexible operation unit will manufacture multiple products equally based on operating time, then the product with the greatest production on a mass basis over the five-year period shall represent the primary product of the flexible operation unit.

(3) Once the primary product of a process unit has been determined to be a product produced by a source category subject to this subpart, the owner or operator of the affected source shall comply with the standards for the primary product production process unit.

(4) The determination of the primary product for a process unit, including the assessment of applicability of this subpart to process units that are designed and operated as flexible operation units, shall be reported in the Notification of Compliance Status report required by §63.1110(a)(4) when the primary product is determined to be a product produced by a source category subject to requirements under this subpart. The Notification of Compliance Status shall include the information specified in either paragraph (d)(4)(i) or (ii) of this section. If the primary product is determined to be something other than a product produced by a source

category subject to requirements under this subpart, the owner or operator shall retain information, data, and analyses used to document the basis for the determination that the primary product is not produced by a source category subject to requirements under this subpart.

(i) If the process unit manufactures only one product subject to requirements under this subpart, the identity of that product.

(ii) If the process unit is designed and operated as a flexible operation unit, the information specified in paragraphs (d)(4)(ii)(A) and (B) of this section, as appropriate.

(A) The identity of the primary product.

(B) Information concerning operating time and/or production mass for each product that was used to make the determination of the primary product under paragraph (d)(2)(i) or (ii) of this section.

(5) When a flexible operation unit that is subject to this subpart is producing a product other than a product subject to this subpart, or is producing a product subject to this subpart that is not the primary product, the owner or operator shall comply with either paragraph (d)(5) (i) or (ii) of this section for each emission point.

(i) The owner or operator shall control emissions during the production of all products in accordance with the requirements for the production of the primary product. As appropriate, the owner or operator shall demonstrate that the parameter monitoring level established for the primary product is also appropriate for those periods when products other than the primary product are being produced. Documentation of this demonstration shall be submitted in the Notification of Compliance Status report required by §63.1110(a)(4).

(ii) The owner or operator shall determine, for the production of each product, whether control is required in accordance with the applicable criteria for the primary product in §63.1103. If control is required, the owner or operator shall establish separate parameter monitoring levels, as appropriate, for the production of each product. The parameter monitoring levels developed shall be submitted in the Notification of Compliance Status report required by §63.1110(a)(4).

(e) *Storage vessel ownership determination.* To determine the process unit to which a storage vessel shall belong, the owner or operator shall sequentially follow the procedures specified in paragraphs (e)(1) through (8) of this section, stopping as soon as the determination is made.

(1) If a storage vessel is already subject to another subpart of this part on the date of promulgation for an affected source under the generic MACT, that storage vessel shall belong to the process unit subject to the other subpart.

(2) If a storage vessel is dedicated to a single process unit, the storage vessel shall belong to that process unit.

(3) If a storage vessel is shared among process units, then the storage vessel shall belong to that process unit located on the same plant site as the storage vessel that has the greatest input into or output from the storage vessel (i.e., the process unit has the predominant use of the storage vessel.)

(4) If predominant use cannot be determined for a storage vessel that is shared among process units and if only one of those process units is subject to this subpart, the storage vessel shall belong to that process unit.

(5) If predominant use cannot be determined for a storage vessel that is shared among process units and if more than one of the process units are subject to standards under this subpart that have different primary products, then the owner or operator shall assign the storage vessel to any one of the process units sharing the storage vessel.

(6) If the predominant use of a storage vessel varies from year to year, then predominant use shall be determined based on the utilization that occurred during the year preceding the date of promulgation of standards for an affected source under this subpart or based on the expected utilization for the 5 years following the promulgation date of standards for an affected source under this subpart for existing affected sources, whichever is more representative of the expected operations for that storage vessel, and based on the expected utilization for the 5 years after initial startup for new affected sources. The determination of predominant use shall be reported in the Notification of Compliance Status Report required by §63.1110(a)(4). If the predominant use changes, the redetermination of predominant use shall be reported in the next Periodic Report.

(7) If the storage vessel begins receiving material from (or sending material to) another process unit; ceases to receive material from (or send material to) a process unit; or if the applicability of this subpart to a storage vessel has been determined according to the provisions of paragraphs (e)(1) through (6) of this section and there is a significant change in the use of the storage vessel that could reasonably change the predominant use, the owner or operator shall reevaluate the applicability of this subpart to the storage vessel.

(8) Where a storage vessel is located at a major source that includes one or more process units that place material into, or receive materials from, the storage vessel, but the storage vessel is located in a tank farm, the applicability of this subpart shall be determined according to the provisions in paragraphs (e)(8)(i) through (iii) of this section.

(i) The storage vessel may only be assigned to a process unit that utilizes the storage vessel and does not have an intervening storage vessel for that product (or raw material, as appropriate). With respect to any process unit, an intervening storage vessel means a storage vessel connected by hard-piping to the process unit and to the storage vessel in the tank farm so that product or raw material entering or leaving the process unit flows into (or from) the intervening storage vessel and does not flow directly into (or from) the storage vessel in the tank farm.

(ii) If there is only one process unit at a major source that meets the criteria of paragraph (e)(8)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to that process unit.

(iii) If there are two or more process units at the major source that meet the criteria of paragraph (e)(8)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to one of those process units according to the provisions of paragraph (e)(6) of this section. The predominant use shall be determined among only those process units that meet the criteria of paragraph (e)(8)(i) of this section.

(f) *Recovery operation equipment ownership determination.* To determine the process unit to which recovery equipment shall belong, the owner or operator shall sequentially follow the procedures specified in paragraphs (f)(1) through (7) of this section, stopping as soon as the determination is made.

(1) If recovery operation equipment is already subject to another subpart of this part on the date standards are promulgated for an affected source, that recovery operation equipment shall belong to the process unit subject to the other subpart.

(2) If recovery operation equipment is used exclusively by a single process unit, the recovery operation shall belong to that process unit.

(3) If recovery operation equipment is shared among process units, then the recovery operation equipment shall belong to that process unit that has the greatest input into or output from the recovery operation equipment (i.e., that process unit has the predominant use of the recovery operation equipment).

(4) If predominant use cannot be determined for recovery operation equipment that is shared among process units and if one of those process units is a process unit subject to this subpart, the recovery operation equipment shall belong to the process unit subject to this subpart.

(5) If predominant use cannot be determined for recovery operation equipment that is shared among process units and if more than one of the process units are process units that have different primary products and that are subject to this subpart, then the owner or operator shall assign the recovery operation equipment to any one of those process units.

(6) If the predominant use of recovery operation equipment varies from year to year, then the predominant use shall be determined based on the utilization that occurred during the year preceding the promulgation date of standards for an affected source under this subpart or based on the expected utilization for the 5 years following the promulgation date for standards for an affected source under this subpart for existing affected sources, whichever is the more representative of the expected operations for the recovery operations equipment, and based on the expected utilization for the first 5 years after initial startup for new affected sources. This determination shall be reported in the Notification of Compliance Status Report required by §63.1110(a)(4). If the predominant use changes, the redetermination of predominant use shall be reported in the next Periodic Report.

(7) If there is an unexpected change in the utilization of recovery operation equipment that could reasonably change the predominant use, the owner or operator shall redetermine to which process unit the recovery operation belongs by reperforming the procedures specified in paragraphs (f)(2) through (6) of this section.

(g) *Overlap with other regulations.* Paragraphs (g)(1) through (7) of this section specify the applicability of this subpart YY emission point requirements when other rules may apply. Where this subpart YY allows an owner or operator an option to comply with one or another regulation to comply with this subpart YY, an owner or operator must report which regulation they choose to comply with in the Notification of Compliance Status report required by §63.1110(a)(4).

(1) *Overlap of subpart YY with other regulations for storage vessels.* (i) After the compliance dates specified in §63.1102, a storage vessel subject to this subpart YY that is also subject to subpart G or CC of this part is required to comply only with the provisions of this subpart YY.

(ii) After the compliance dates specified in §63.1102, a storage vessel that must be controlled according to the requirements of this subpart and subpart Ka or Kb of 40 CFR part 60 is required to comply only with the storage vessel requirements of this subpart.

(2) *Overlap of subpart YY with other regulations for process vents.* (i) After the compliance dates specified in §63.1102, a process vent that must be controlled according to the requirements of this subpart and subpart G of this part is in compliance with this subpart if it complies with either set of requirements. The owner or operator must specify the rule with which they will comply in the Notification of Compliance Status report required by §63.1110(a)(4).

(ii) After the compliance dates specified in §63.1102, a process vent that must be controlled according to the requirements of this subpart and subpart III, RRR or NNN of 40 CFR part 60 is required to comply only with the process vent requirements of this subpart.

(3) *Overlap of this subpart YY with other regulations for transfer racks.* After the compliance dates specified in §63.1102, a transfer rack that must be controlled according to the requirements of this subpart YY and either subpart G of this part or subpart BB of 40 CFR part 61 is required to comply only with the transfer rack requirements of this subpart YY.

(4) *Overlap of subpart YY with other regulations for equipment leaks.* (i) After the compliance dates specified in §63.1102, equipment that must be controlled according to this subpart and 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart J or subpart V, is required only to comply with the equipment leak requirements of this subpart.

(ii) After the compliance dates specified in §63.1102, equipment that must be controlled according to this subpart YY and subpart H of this part is in compliance with the equipment leak requirements of this subpart YY if it complies with either set of requirements. For ethylene production affected sources, the requirement in §63.1103(e)(9)(i) also applies. The owner or

operator must specify the rule with which they will comply in the Notification of Compliance Status report required by §63.1110(a)(4).

(iii) Beginning no later than the compliance dates specified in §63.1102(c), for ethylene production affected sources, equipment that must be controlled according to this subpart YY and subpart VVa of 40 CFR part 60 is required only to comply with the equipment leak requirements of this subpart, except the owner or operator must also comply with the calibration drift assessment requirements specified at 40 CFR 60.485a(b)(2) if they are required to do so in subpart VVa of 40 CFR part 60. When complying with the calibration drift assessment requirements at 40 CFR 60.485a(b)(2), the requirement at 40 CFR 60.486a(e)(8)(v) to record the instrument reading for each scale used applies.

(5) *Overlap of this subpart YY with other regulations for wastewater for source categories other than ethylene production.* (i) After the compliance dates specified in §63.1102 for an affected source subject to this subpart, a wastewater stream that is subject to the wastewater requirements of this subpart and the wastewater requirements of subparts F, G, and H of this part (collectively known as the "HON") shall be deemed to be in compliance with the requirements of this subpart if it complies with either set of requirements. In any instance where a source subject to this subpart is collocated with a Synthetic Organic Chemical Manufacturing Industry (SOCMI) source, and a single wastewater treatment facility treats both Group 1 wastewaters and wastewater residuals from the source subject to this subpart and wastewaters from the SOCMI source, a certification by the treatment facility that they will manage and treat the waste in conformity with the specific control requirements set forth in §§63.133 through 63.147 will also be deemed sufficient to satisfy the certification requirements for wastewater treatment under this subpart.

(6) *Overlap of subpart YY with other regulations for waste for the ethylene production source category.* (i) After the compliance date specified in §63.1102, a waste stream that is conveyed, stored, or treated in a wastewater stream management unit, waste management unit, or wastewater treatment system that receives streams subject to both the control requirements of §63.1103(e)(3) for ethylene production sources and the provisions of §§63.133 through 63.147 shall comply as specified in paragraphs (g)(6)(i)(A) through (C) of this section. Compliance with the provisions of this paragraph (g)(6)(i) shall constitute compliance with the requirements of this subpart for that waste stream.

(A) Comply with the provisions in §§63.133 through 63.137 and 63.140 for all equipment used in the storage and conveyance of the waste stream.

(B) Comply with the provisions in §§63.1103(e), 63.138, and 63.139 for the treatment and control of the waste stream.

(C) Comply with the provisions in §§63.143 through 63.148 for monitoring and inspections of equipment and for recordkeeping and reporting requirements. The owner or operator is not required to comply with the monitoring, recordkeeping, and reporting requirements associated with the treatment and control requirements in §§61.355 through 61.357.

(ii) After the compliance date specified in §63.1102, compliance with §63.1103(e) shall constitute compliance with the Benzene Waste Operations NESHAP (subpart FF of 40 CFR part 61) for waste streams that are subject to both the control requirements of §63.1103(e)(3) for ethylene production sources and the control requirements of 40 CFR part 61, subpart FF.

(7) *Overlap of this subpart YY with other regulations for flares for the ethylene production source category.* (i) Beginning no later than the compliance dates specified in §63.1102(c), flares that are subject to 40 CFR 60.18 or §63.11 and used as a control device for an emission point subject to the requirements in Table 7 to §63.1103(e) are required to comply only with §63.1103(e)(4). At any time before the compliance dates specified in §63.1102(c), flares that are subject to 40 CFR 60.18 or §63.11 and elect to comply with §63.1103(e)(4) are required to comply only with §63.1103(e)(4).

(ii) Beginning no later than the compliance dates specified in §63.1102(c), flares subject to §63.987 and used as a control device for an emission point subject to the requirements in Table 7 to §63.1103(e) are only required to comply with §63.1103(e)(4).

(iii) Beginning no later than the compliance dates specified in §63.1102(c), flares subject to the requirements in 40 CFR part 63, subpart CC and used as a control device for an emission point subject to the requirements in Table 7 to §63.1103(e) are only required to comply with the flare requirements in 40 CFR part 63, subpart CC. This paragraph does not apply to multi-point pressure assisted flares.

§63.1101 Definitions.

All terms used in this subpart shall have the meaning given them in the Act, in 40 CFR 63.2 (General Provisions), and in this section. The definitions in this section do not apply to waste requirements for ethylene production sources.

Annual average concentration, as used in the wastewater provisions, means the flow-weighted annual average concentration, as determined according to the procedures specified in §63.144(b).

Annual average flow rate, as used in the wastewater provisions, means the annual average flow rate, as determined according to the procedures specified in §63.144(c).

Batch cycle refers to manufacturing a product from start to finish in a batch unit operation.

Batch emission episode means a discrete venting episode that may be associated with a single unit operation. A unit operation may have more than one batch emission episode per batch cycle. For example, a displacement of vapor resulting from the charging of a vessel with organic HAP will result in a discrete emission episode. If the vessel is then heated, there may also be another discrete emission episode resulting from the expulsion of expanded vapor. Both emission episodes may occur during the same batch cycle 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 unit operation means a unit operation involving intermittent or discontinuous feed into equipment and, in general, involves the emptying of equipment after the batch cycle ceases and prior to beginning a new batch cycle. Mass, temperature, concentration and other properties of the process may vary with time. Addition of raw material and withdrawal of product do not simultaneously occur in a batch unit operation.

Bottoms receiver means a tank that collects distillation bottoms before the stream is sent for storage or for further downstream processing.

By compound means by individual stream components, not carbon equivalents.

Capacity means the volume of liquid that is capable of being stored in a storage vessel, determined by multiplying the vessel's internal cross-sectional area by the internal height of the shell.

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. A closed vent system does not include the vapor collection system that is part of any tank truck or railcar or the loading arm or hose that is used for vapor return. For transfer racks, the closed vent system begins at, and includes, the first block valve on the downstream side of the loading arm or hose used to convey displaced vapors.

Combined vent stream means a process vent that is comprised of at least one gas stream from a batch unit operation manifolded with at least one gas stream from a continuous unit operation.

Compliance equipment means monitoring equipment used by an owner or operator of an affected source under this subpart to demonstrate compliance with an operation or emission limit standard.

Continuous parameter monitoring system or *CPMS* means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, and that is used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Continuous unit operation means a unit operation where the inputs and outputs flow continuously. Continuous unit operations typically approach steady-state conditions. Continuous unit operations typically involve the simultaneous addition of raw material and withdrawal of the product.

Control device means, with the exceptions noted below, a combustion device, recovery device, recapture device, or any combination of these devices used to comply with this subpart or a referencing subpart. For process vents from continuous unit operations at affected sources in

source categories where the applicability criteria includes a TRE index value, recovery devices are not considered to be control devices. Primary condensers on steam strippers or fuel gas systems are not considered to be control devices.

Day means a calendar day.

Distillate receiver means overhead receivers, overhead accumulators, reflux drums, and condenser(s) including ejector condenser(s) associated with a distillation unit.

Distillation unit means a device or vessel in which one or more feed streams are separated into two or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and the vapor phases by vaporization and condensation as they approach equilibrium within the distillation unit. Distillation unit includes the distillate receiver, reboiler, and any associated vacuum pump or steam jet.

Emission point means an individual process vent, storage vessel, transfer rack, wastewater stream, kiln, fiber spinning line, equipment leak, or other point where a gaseous stream is released.

Equipment means each of the following that is subject to control under this subpart: pump, compressor, agitator, pressure relief device, sampling collection system, open-ended valve or line, valve, connector, instrumentation system in organic hazardous air pollutant service as defined in §63.1103 for the applicable process unit, whose primary product is a product produced by a source category subject to this subpart.

Equivalent method means any method of sampling and analysis for an air pollutant that has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

Excess emissions means emissions in excess of those that would have occurred if there were no start-up, shutdown, or malfunction and the owner or operator complied with the relevant provisions of this subpart.

Final recovery device means the last recovery device on a process vent stream from a continuous unit operation at an affected source in a source category where the applicability criteria includes a TRE index value. The final recovery device usually discharges to a combustion device, recapture device, or directly to the atmosphere.

Flexible operation unit means a process unit that manufactures different chemical products periodically by alternating raw materials or operating conditions.

Fuel gas means gases that are combusted to derive useful work or heat.

Fuel gas system means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources

of gas, and transports the gaseous stream for use as a fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

Group 1 wastewater stream means a process wastewater stream at an existing or new source that meets the criteria for Group 1 status in §63.132(c).

Group 2 wastewater stream means a process wastewater stream that does not meet the definition of a Group 1 wastewater stream.

Halogens and hydrogen halides means hydrogen chloride (HCl), chlorine (Cl2), hydrogen bromide (HBr), bromine (Br2), and hydrogen fluoride (HF).

Impurity means a substance that is produced coincidentally with the primary product, or is present in a raw material. An impurity does not serve a useful purpose in the production or use of the primary product and is not isolated.

Initial startup means, for new sources, the first time the source begins production. For additions or changes not defined as a new source by this subpart, initial startup means the first time additional or changed equipment is put into operation. Initial startup does not include operation solely for testing equipment. Initial startup does not include subsequent startup (as defined in this section) of process units following malfunctions or process unit shutdowns. Except for equipment leaks, initial startup also does not include subsequent startups (as defined in this section) of process units following changes in product for flexible operation units or following recharging of equipment in batch unit operations.

Low throughput transfer rack means a transfer rack that transfers less than a total of 11.8 million liters per year of liquid containing regulated HAP.

Maintenance wastewater means wastewater generated by the draining of process fluid from components in the process unit, whose primary product is a product produced by a source category subject to this subpart, into an individual drain system prior to or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown. Examples of activities that can generate maintenance wastewaters include descaling of heat exchanger tubing bundles, cleaning of distillation column traps, draining of low legs and high point bleeds, draining of pumps into an individual drain system, and draining of portions of the process unit, whose primary product is a product produced by a source category subject to this subpart, for repair.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the total organic HAP in the stored or transferred liquid at the temperature equal to the highest calendar-month average of the liquid storage or transfer temperature for liquids stored or transferred above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for liquids stored or transferred at the ambient temperature, as determined:

(1) In accordance with methods described in American Petroleum Institute Publication 2517, Evaporation Loss From External Floating-Roof Tanks (incorporated by reference as specified in §63.14 of subpart A of this part); or

(2) As obtained from standard reference texts; or

(3) As determined by the American Society for Testing and Materials Method D2879-83 (incorporated by reference as specified in §63.14 of subpart A of this part); or

(4) Any other method approved by the Administrator.

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

On-site means, with respect to records required to be maintained by this subpart, a location within a plant site that encompasses the affected source. On-site includes, but is not limited to, the affected source to which the records pertain, or central files elsewhere at the plant site.

Organic hazardous air pollutant or *organic HAP* means any organic chemicals that are also HAP.

Permitting authority means one of the following:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661) and part 71 of this chapter.

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common

control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

Point of determination means each point where process wastewater exits the process unit, whose primary product is a product produced by a source category subject to this subpart.

NOTE TO DEFINITION FOR POINT OF DETERMINATION: The regulation allows determination of the characteristics of a wastewater stream at the point of determination or downstream of the point of determination if corrections are made for changes in flow rate and annual average concentration of Table 9 compounds (as defined under this subpart) as determined in §63.144. Such changes include losses by air emissions, reduction of annual average concentration or changes in flow rate by mixing with other water or wastewater streams, and reduction in flow rate or annual average concentration by treating or otherwise handling the wastewater stream to remove or destroy hazardous air pollutants.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device. This release can be one release or a series of releases over a short time period.

Pressure relief device or valve means a safety device used to prevent operating pressures from exceeding the maximum allowable working pressure of the process equipment. A common pressure relief device is a spring-loaded pressure relief valve. Devices that are actuated either by a pressure of less than or equal to 2.5 pounds per square inch gauge or by a vacuum are not pressure relief devices. This definition does not apply to ethylene production affected sources.

Process condenser means a condenser whose primary purpose is to recover material as an integral part of a process. The condenser must support a vapor-to-liquid phase change for periods of source equipment operation that are above the boiling or bubble point of substance(s). Examples of process condensers include distillation condensers, reflux condensers, process condensers in line prior to the vacuum source, and process condensers used in stripping or flashing operations.

Process unit means the equipment assembled and connected by pipes or ducts to process raw and/or intermediate materials and to manufacture an intended product. A process unit includes more than one unit operation.

Process unit shutdown means a work practice or operational procedure that stops production from a process unit, or part of a process unit during which practice or procedure it is technically feasible to clear process material from the process unit, or part of the process unit, consistent with safety constraints and during which repairs can be effected. The following are not considered process unit shutdowns:

(1) An unscheduled work practice or operational procedure that stops production from a process unit, or part of a process unit, for less than 24 hours.

(2) An unscheduled work practice or operational procedure that would stop production from a process unit, or part of a process unit, for a shorter period of time than would be required to clear the process unit, or part of the process unit, of materials and start up the unit and result in greater emissions than delay of repair of leaking components until the next scheduled process unit shutdown.

(3) The use of spare equipment and technically feasible bypassing of equipment without stopping production.

Process vent means the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream from a unit operation within a source category subject to this subpart.

Process vent excludes the following gas stream discharges:

(1) Relief valve discharges;

(2) Leaks from equipment subject to this subpart;

(3) Gas streams exiting a control device complying with this subpart;

(4) Gas streams transferred to other processes (on-site or off-site) for reaction or other use in another process (i.e., for chemical value as a product, isolated intermediate, byproduct, or co-product for heat value);

(5) Gas streams transferred for fuel value (*i.e.,* net positive heating value), use, reuse, or sale for fuel value, use, or reuse;

(6) Gas streams from storage vessels or transfer racks subject to this subpart;

(7) Gas streams from waste management units subject to this subpart;

(8) Gas streams from wastewater streams subject to this subpart;

(9) Gas streams exiting process analyzers; and

(10) Gas stream discharges that contain less than or equal to 0.005 weight-percent total organic HAP.

Process wastewater means wastewater which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. Examples are product tank drawdown or feed tank drawdown, water formed during a chemical reaction or used as a reactant, water used to wash impurities from organic products or reactants, equipment washes between batches in a batch process, water used to cool or quench organic vapor streams through

direct contact, and condensed steam from jet ejector systems pulling vacuum on vessels containing organics.

Process wastewater stream means a stream that contains process wastewater.

Product means a compound or chemical which is manufactured as the intended product of the applicable production process unit as defined in §63.1103. By-products, isolated intermediates, impurities, wastes, and trace contaminants are not considered products.

Recapture device means an individual unit of equipment capable of and used for the purpose of recovering chemicals, but not normally for use, reuse, or sale. For example, a recapture device may recover chemicals primarily for disposal. Recapture devices include, but are not limited to, absorbers, carbon adsorbers, and condensers. For purposes of the monitoring, recordkeeping, and reporting requirements of this subpart, recapture devices are considered recovery devices.

Recovery device means an individual unit of equipment capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. For purposes of the monitoring, recordkeeping, and reporting requirements of this subpart, recapture devices are considered recovery devices.

Research and development facility means laboratory and pilot plant 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.

Shutdown means the cessation of operation of an affected source or equipment that is used to comply with this subpart, or the emptying and degassing of a storage vessel. For the purposes of this subpart, shutdown includes, but is not limited to, periodic maintenance, replacement of equipment, or repair. Shutdown does not include the routine rinsing or washing of equipment in batch operation between batches. Shutdown includes the decoking of ethylene cracking furnaces.

Startup means the setting into operation of a regulated source and/or equipment required or used to comply with this subpart. Startup includes initial startup, operation solely for testing equipment, the recharging of equipment in batch operation, and transitional conditions due to changes in product for flexible operation units.

Storage vessel or *tank,* for the purposes of regulation under the storage vessel provisions of this subpart, means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) that provides structural support and is designed to hold an accumulation of liquids or other materials. Storage vessel includes surge control vessels and bottoms receiver vessels. For the purposes of regulation under the storage

vessel provisions of this subpart, storage vessel does not include vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships; pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere; or wastewater storage vessels. Wastewater storage vessels are covered under the wastewater provisions of §63.1106.

Subsequent startup means any setting into operation of a regulated source and/or equipment required or used to comply with this subpart following the initial startup.

Surge control vessel means a feed drum, recycle drum, or intermediate vessel. Surge control vessels are used within a process unit (as defined in this subpart) when in-process storage, mixing, or management of flow rates or volumes is needed to assist in production of a product.

Table 9 compounds means compounds listed in Table 9 of subpart G of this part.

Total organic compounds or (TOC) means the total gaseous organic compounds (minus methane and ethane) in a vent stream, with the concentrations expressed on a carbon basis.

Total resource effectiveness index value or *TRE index value* means a measure of the supplemental total resource requirement per unit reduction of organic HAP associated with a process vent stream, based on vent stream flow rate, emission rate of organic HAP, net heating value, and corrosion properties (whether or not the vent stream contains halogenated compounds), as quantified by the equations given under §63.1104(j).

Transfer rack means a single system used to fill bulk cargo tanks mounted on or in a truck or railcar. A transfer rack includes all loading arms, pumps, meters, shutoff valves, relief valves, and other piping and equipment necessary for the transfer operation. Transfer equipment and operations that are physically separate (i.e., do not share common piping, valves, and other equipment) are considered to be separate transfer racks.

Unit operation means distinct equipment used in processing, among other things, to prepare reactants, facilitate reactions, separate and purify products, and recycle materials. Equipment used for these purposes includes, but is not limited to, reactors, distillation columns, extraction columns, absorbers, decanters, dryers, condensers, and filtration equipment.

Vapor balancing system means a piping system that is designed to collect organic HAP vapors displaced from tank trucks or railcars during loading; and to route the collected organic HAP vapors to the storage vessel from which the liquid being loaded originated, or to compress collected organic HAP vapors and commingle with the raw feed of a production process unit.

Wastewater is either a process wastewater or a maintenance wastewater and means water that:

(1) Contains either:

(i) An annual average concentration of Table 9 compounds (as defined under this subpart) of at least 5 parts per million by weight at the point of determination and has an annual average flow rate of 0.02 liter per minute or greater, or

(ii) An annual average concentration of Table 9 compounds (as defined under this subpart) of at least 10,000 parts per million by weight at the point of determination at any flow rate, and that

(2) Is discarded from a process unit, whose primary product is a product produced by a source category subject to this subpart.

Wastewater stream means a stream that contains wastewater.

[64 FR 34921, June 29, 1999, as amended at 64 FR 63699, 63706, Nov. 22, 1999; 66 FR 55847, Nov. 2, 2001; 67 FR 39305, June 7, 2002; 67 FR 46280, July 12, 2002; 71 FR 20458, Apr. 20, 2006; 79 FR 60922, Oct. 8, 2014; 85 FR 40424, July 6, 2020]

§63.1102 Compliance schedule.

(a) *General requirements.* Affected sources, as defined in §63.1103(a)(1)(i) for acetyl resins production, §63.1103(b)(1)(i) for acrylic and modacrylic fiber production, §63.1103(c)(1)(i) for hydrogen fluoride production, §63.1103(d)(1)(i) for polycarbonate production, §63.1103(e)(1)(i) for ethylene production, §63.1103(f)(1)(i) for carbon black production, §63.1103(g)(1)(i) for cyanide chemicals manufacturing, or §63.1103(h)(1)(i) for spandex production shall comply with the appropriate provisions of this subpart and the subparts referenced by this subpart YY according to the schedule in paragraph (a)(1) or (2) of this section, as appropriate, except as provided in paragraph (b) of this section. Affected sources in ethylene production also must comply according to paragraph (c) of this section. Affected sources in cyanide chemicals manufacturing also must comply according to paragraph (d) of this section. Proposal and effective dates are specified in Table 1 to this section.

(1) *Compliance dates for new and reconstructed sources.* (i) The owner or operator of a new or reconstructed affected source that commences construction or reconstruction after the proposal date, and that has an initial startup before the effective date of standards for an affected source, shall comply with this subpart no later than the applicable effective date in Table 1 to §63.1102 of this section.

(ii) The owner or operator of a new or reconstructed affected source that has an initial startup after the applicable effective date in Table 1 to §63.1102 of this section shall comply with this subpart upon startup of the source.

(iii) The owner or operator of an affected source that commences construction or reconstruction after the proposal date, but before the effective date in Table 1 to this section, shall comply with this subpart no later than the date 3 years after the effective date if the conditions in paragraphs (a)(1)(iii) (A) and (B) of this section are met.

(A) The promulgated standards are more stringent than the proposed standards.

(B) The owner or operator complies with this subpart as proposed during the 3-year period immediately after the effective date of standards for the affected source.

(2) *Compliance dates for existing sources.* (i) The owner or operator of an existing affected source shall comply with the requirements of this subpart within 3 years after the effective date of standards for the affected source.

(ii) The owner or operator of an area source that increases its emissions of (or its potential to emit) HAP such that the source becomes a major source shall be subject to the relevant standards for existing sources under this subpart. Such sources shall comply with the relevant standards within 3 years of becoming a major source.

(b) All acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources that commenced construction or reconstruction on or before January 9, 2014, shall be in compliance with the pressure relief device monitoring requirements of §63.1107(e)(3) upon initial startup or October 9, 2017, whichever is later, and the equipment leaks requirements of 40 CFR part 63, subpart UU upon initial startup or October 8, 2015, whichever is later. New acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources that commence construction or reconstruction after January 9, 2014, shall be in compliance with the pressure relief device monitoring requirements of §63.1107(e)(3) upon initial startup or by October 8, 2014, whichever is later.

TABLE 1 TO §63.1102—SOURCE CATEGORY PROPOSAL AND EFFECTIVE DATES

Source category	Proposal date	Effective date
(a) Acetal Resins Production	October 14, 1998	June 29, 1999.
(b) Acrylic and Modacrylic Fibers Production	October 14, 1998	June 29, 1999.
(c) Hydrogen Fluoride Production	October 14, 1998	June 29, 1999.
(d) Polycarbonate Production	October 14, 1998	June 29, 1999.
(e) Ethylene Production	December 6, 2000	July 12, 2002.
(f) Carbon Black Production	December 6, 2000	July 12, 2002.
(g) Cyanide Chemicals Manufacturing	December 6, 2000	July 12, 2002.
(h) Spandex Production	December 6, 2000	July 12, 2002.

(c) All ethylene production affected sources that commenced construction or reconstruction on or before October 9, 2019, must be in compliance with the requirements listed in paragraphs (c)(1) through (13) of this section upon initial startup or July 6, 2023, whichever is later. All ethylene production affected sources that commenced construction or reconstruction

after October 9, 2019, must be in compliance with the requirements listed in paragraphs (c)(1) through (13) of this section upon initial startup, or July 6, 2020, whichever is later.

(1) Overlap requirements specified in §63.1100(g)(4)(iii) and (7), if applicable.

(2) The storage vessel requirements specified in paragraphs (b)(1)(iii) and (c)(1)(ii) of Table 7 to §63.1103(e), and the degassing requirements specified in §63.1103(e)(10).

(3) The ethylene process vent requirements specified in paragraph (d)(1)(ii) of Table 7 to §63.1103(e).

(4) The transfer rack requirements specified in §63.1105(a)(5).

(5) The equipment requirements specified in paragraph (f)(1)(ii) of Table 7 to §63.1103(e) and §63.1107(h).

(6) The bypass line requirements specified in paragraph (i) of Table 7 to §63.1103(e), and §63.1103(e)(6).

(7) The decoking requirements for ethylene cracking furnaces specified in paragraph (j) of Table 7 to §63.1103(e), and §63.1103(e)(7) and (8).

(8) The flare requirements specified in §63.1103(e)(4).

(9) The maintenance vent requirements specified in §63.1103(e)(5).

(10) The requirements specified in §63.1103(e)(9).

(11) The requirements in §63.1108(a)(4)(i), (b)(1)(ii), (b)(2), and (b)(4)(ii)(B).

(12) The recordkeeping requirements specified in §63.1109(e) through (i).

(13) The reporting requirements specified in §63.1110(a)(10), (d)(1)(iv) and (v), and (e)(4) through (8).

(d) *Cyanide chemicals manufacturing*. (1) If applicable, all cyanide chemicals manufacturing affected sources that commenced construction or reconstruction on or before [INSERT DATE OF PUBLICATION OF THE PROPOSED RULE IN THE FEDERAL REGISTER], must be in compliance with the requirements listed in paragraphs (d)(1)(i) and (ii) of this section upon initial startup or [DATE ONE YEAR AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], whichever is later. If applicable, all cyanide chemicals manufacturing affected sources that commenced construction or reconstruction after [DATE OF PUBLICATION OF THE PROPOSED RULE IN THE FEDERAL REGISTER], must be in compliance with the requirements listed in paragraphs (d)(1)(i) and (ii) of this section upon initial startup, or [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], whichever is later.

(i) Requirements specified in Table 9 to §63.1103(g), table entry (f)(1)(ii), for new cyanide chemicals manufacturing process units that generate process wastewater.

(ii) Requirements specified in Table 9 to §63.1103(g), table entry (g), for existing cyanide chemicals manufacturing process units that generate process wastewater.

(2) All cyanide chemicals manufacturing affected sources that commenced construction or reconstruction on or before [INSERT DATE OF PUBLICATION OF THE PROPOSED RULE IN THE FEDERAL REGISTER], must be in compliance with the requirements listed in paragraphs (d)(2)(i) through (iii) of this section upon initial startup or [DATE 180 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], whichever is later. All cyanide chemicals manufacturing affected sources that commenced construction or reconstruction after [DATE OF PUBLICATION OF THE PROPOSED RULE IN THE FEDERAL REGISTER], must be in compliance with the requirements listed in paragraphs (d)(2)(i) through (iii) of this section upon initial startup, or [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], whichever is later.

(i) The exceptions specified in §63.1103(g)(6) related to 40 part 63, subparts SS, TT and UU startup, shutdown, and malfunction requirements.

(ii) The compliance requirements specified in §63.1108(a)(4)(i), (b)(1)(ii), (b)(2), and (b)(4)(ii)(B).

(iii) The electronic reporting requirements specified in §63.1110(a)(10).

§63.1103 Source category-specific applicability, definitions, and requirements.

(a) *Acetal resins production applicability, definitions, and requirements*—(1) *Applicability*—(i) *Affected source.* For the acetal resins production source category (as defined in paragraph (a)(2) of this section), the affected source shall comprise all emission points, in combination, listed in paragraphs (a)(1)(i)(A) through (D) of this section, that are associated with an acetal resins production process unit located at a major source, as defined in section 112(a) of the Clean Air Act (Act).

(A) All storage vessels that store liquids containing organic HAP. For purposes of regulation, surge control vessels and bottoms receivers that are located as part of the process train prior to the polymer reactor are to be regulated under the front-end process vent provisions.

(B) All process vents from continuous unit operations (front end process vents and back end process vents).

(C) All wastewater streams associated with the acetal resins production process unit as defined in (a)(2) of this section.

(D) Equipment (as defined in §63.1101 of this subpart) that contains or contacts organic HAP.

(ii) *Compliance schedule.* The compliance schedule for affected sources as defined in paragraph (a)(1)(i) of this section is specified in §63.1102(a).

(2) *Definitions.*

Acetal resins production means the production of homopolymers and/or copolymers of alternating oxymethylene units. Acetal resins are also known as polyoxymethylenes, polyacetals, and aldehyde resins. Acetal resins are generally produced by polymerizing formaldehyde (HCHO) with the methylene functional group (CH_2) and are characterized by repeating oxymethylene units (CH_2O) in the polymer backbone.

Back end process vent means any process vent from a continuous unit operation that is not a front end process vent up to the final separation of raw materials and by-products from the stabilized polymer.

Front end process vent means any process vent from a continuous unit operation involved in the purification of formaldehyde feedstock for use in the acetal homopolymer process. All front end process vents are restricted to those vents that occur prior to the polymer reactor.

(3) *Requirements.* Table 1 of this section specifies the acetal resins production standards applicability for existing and new sources. Applicability assessment procedures and methods are specified in §§63.1104 through 63.1107. An owner or operator of an affected source is not required to perform tests, TRE calculations or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Procedures for approval of alternative means of emission limitations are specified in §63.1113. The owner or operator must control organic HAP emissions from each affected source emission point by meeting the applicable requirements specified in table 1 of this section.

TABLE 1 TO §63.1103(a)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACETAL RESINS PRODUCTION EXISTING OR NEW AFFECTED SOURCE?

If you own or operate. . .	And if. . .	Then you must. . .
1. A storage vessel with: 34 cubic meters <capacity	The maximum true vapor pressure of organic HAP >17.1 kilopascals (for existing sources) or >11.7 kilopascals (for new sources)	a. Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process), as specified in §63.982(a)(1) (storage vessel requirements) of this part; or

		b. Comply with the requirements of subpart WW (national emission standards for storage vessels (control level 2)) of this part.
2. A front end process vent from continuous unit operations		a. Reduce emissions of total organic HAP by using a flare meeting the requirements of subpart SS of this part; or
		b. Reduce emissions of total organic HAP by 60 weight-percent, or reduce TOC to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(2) (process vent requirements) of this part.
3. A back end process vent from continuous unit operations	The vent stream has a TRE[a] <1.0	a. Reduce emissions of total organic HAP by using a flare meeting the requirements of subpart SS of this part; or
		b. Reduce emissions of total organic HAP by 98 weight-percent, or reduce TOC to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(2) (process vent requirements) of this part; or
		c. Achieve and maintain a TRE index value greater than 1.0.
4. A back end process vent from continuous unit operations	1.0 ≤TRE[a] ≤4.0	Monitor and keep records of equipment operating parameters specified to be monitored under subpart SS, §§63.990(c)(absorber, condenser, and carbon adsorber monitoring) or 63.995(c) (other noncombustion systems used as a control device monitoring) of this part.
5. Equipment as defined under §63.1101	The equipment contains or contacts ≥10 weight-percent organic HAP[b], and operates ≤300 hours per year	Comply with the requirements of subpart TT (national emission standards for equipment leaks (control level 1)) or subpart UU (national emission standards for equipment leaks (control level 2)) of this part.
6. An acetal resins production process	The process wastewater stream is a Group 1 or	Comply with the requirements of §63.1106(a).

unit that generates process wastewater	Group 2 wastewater stream	
7. An acetal resins production process unit that generates maintenance wastewater	The maintenance wastewater contains organic HAP	Comply with the requirements of §63.1106(b).
8. An item of equipment listed in §63.1106(c)(1)	The item of equipment meets the criteria specified in §63.1106(c)(1) through (3) and either (c)(4)(i) or (ii)	Comply with the requirements in Table 35 of subpart G of this part.

[a]The TRE is determined according to the procedures specified in §63.1104(j).

[b]The weight-percent organic HAP is determined for equipment according to procedures specified in §63.1107.

(b) *Acrylic and modacrylic fiber production applicability, definitions, and requirements*—(1) *Applicability*—(i) *Affected source.* For the acrylic fibers and modacrylic fibers production (as defined in paragraph (b)(2) of this section) source category, the affected source shall comprise all emission points, in combination, listed in paragraphs (b)(1)(i)(A) through (E) of this section, that are associated with a suspension or solution polymerization process unit that produces acrylic and modacrylic fiber located at a major source as defined in section 112(a) of the Act.

(A) All storage vessels that store liquid containing acrylonitrile or organic HAP.

(B) All process vents from continuous unit operations.

(C) All wastewater streams associated with the acrylic and modacrylic fibers production process unit as defined in (b)(2) of this section.

(D) Equipment (as defined in §63.1101 of this subpart) that contains or contacts acrylonitrile or organic HAP.

(E) All acrylic and modacrylic fiber spinning lines using a spinning solution or suspension having organic acrylonitrile or organic HAP. For the purposes of implementing this paragraph, a spinning line includes the spinning solution filters, spin bath, and the equipment used downstream of the spin bath to wash, dry, or draw the spun fiber.

(ii) *Compliance schedule.* The compliance schedule, for affected sources as defined in paragraph (b)(1)(i) of this section, is specified in §63.1102.

(2) *Definitions.*

Acrylic fiber means a manufactured synthetic fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 85 percent by weight of acrylonitrile units.

Acrylic and modacrylic fibers production means the production of either of the following synthetic fibers composed of acrylonitrile units:

(i) Acrylic fiber.

(ii) Modacrylic fiber.

Acrylonitrile solution polymerization means a process where acrylonitrile and comonomers are dissolved in a solvent to form a polymer solution (typically polyacrylonitrile). The polyacrylonitrile is soluble in the solvent. In contrast to suspension polymerization, the resulting reactor polymer solution (spin dope) is filtered and pumped directly to the fiber spinning process.

Acrylonitrile suspension polymerization means a polymerization process where small drops of acrylonitrile and comonomers are suspended in water in the presence of a catalyst where they polymerize under agitation. Solid beads of polymer are formed in this suspension reaction which are subsequently filtered, washed, refiltered, and dried. The beads must be subsequently redissolved in a solvent to create a spin dope prior to introduction to the fiber spinning process.

Fiber spinning line means the group of equipment and process vents associated with acrylic or modacrylic fiber spinning operations. The fiber spinning line includes (as applicable to the type of spinning process used) the blending and dissolving tanks, spinning solution filters, wet spinning units, spin bath tanks, and the equipment used downstream of the spin bath to wash, dry, or draw the spun fiber.

In organic hazardous air pollutant or in organic HAP service means, for acrylic and modacrylic fiber production affected sources, that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of total organic HAP as determined according to the provisions of §63.180(d). The provisions of §63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

Modacrylic fiber means a manufactured synthetic fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 35 percent by weight of acrylonitrile units but less than 85 percent by weight of acrylonitrile units.

Seal means, for acrylic and modacrylic fiber production affected sources complying with the requirements of §63.1033(b) or §63.167(a) on or after October 8, 2014, that instrument monitoring of the open-ended valve or line conducted according to the method specified in §63.1023(b) and, as applicable, §63.1023(c), or §63.180(b) and, as applicable, §63.180(c), indicates no readings of 500 parts per million or greater.

Spin dope means the liquid mixture of polymer and solvent that is fed to the spinneret to form the acrylic and modacrylic fibers.

(3) *Requirements.* An owner or operator of an affected source must comply with the requirements of paragraph (b)(3)(i) or (ii) of this section.

(i) Table 2 of this section specifies the acrylic and modacrylic fiber production source category control requirement applicability for both existing and new sources. Applicability assessment procedures and methods are specified in §§63.1104 through 63.1107. An owner or operator of an affected source is not required to perform tests, or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Procedures for approval of alternative means of emission limitations are specified in §63.1113. The owner or operator must control organic HAP emissions from each affected source emission point by meeting the applicable requirements specified in table 2 of this section.

TABLE 2 TO §63.1103(b)(3)(i)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACRYLIC AND MODACRYLIC FIBER PRODUCTION EXISTING OR NEW AFFECTED SOURCE AND AM COMPLYING WITH PARAGRAPH (b)(3)(i) OF THIS SECTION?

If you own or operate. . .	And if. . .	Then you must. . .
1. A storage vessel	The stored material contains organic HAP	a. Reduce emissions of organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of control device meeting the requirements of subpart SS of this part, as specified in §63.982(a)(1) (storage vessel requirements), or 95 weight-percent or greater by venting through a closed vent system to a recovery device meeting the requirements of subpart SS, §63.993 (recovery device requirements); or
		b. Comply with the requirements of subpart WW of this part.
2. A process vent from continuous unit operations (halogenated)	The vent steam has a mass emission rate of halogen atoms contained in organic compounds ≥0.45 kilograms per hour,[a] and an organic HAP concentration ≥50 parts per million by volume[b] and an	a. Reduce emissions of organic HAP or TOC as specified for nonhalogenated process vents from continuous unit operations (other than by using a flare) by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of

	average flow rate ≥0.005 cubic meters per minute	subpart SS of this part, §63.994 (halogen reduction devices requirements) that reduces hydrogen halides and halogens by 99 weight-percent or to less than 0.45 kilograms per year, whichever is less stringent; or
		b. Reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS of this part, §63.994 (halogen reduction devices requirements) and then complying with the requirements specified for process vents from continuous unit operations (nonhalogenated).
3. A process vent from continuous unit operations (nonhalogenated)	The vent steam has a mass emission rate of halogen atoms contained in organic compounds <0.45 kilograms per hour,[a] and an organic HAP concentration ≥50 parts per million by volume[b] and an average flow rate ≥0.005 cubic meters per minute	a. Reduce emissions of organic HAP by using a flare meeting the requirements of subpart SS of this part, §63.987 (flare requirements); or b. Reduce emissions of organic HAP by 98 weight-percent, or reduce TOC to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in §63.982(a)(2) (process vent requirements).
4. A fiber spinning line that is a new or reconstructed source	The lines use a spin dope produced from either a suspension polymerization process or solution polymerization process	a. Reduce organic HAP emissions by 85 weight-percent or more. (For example, you may enclose the spinning and washing areas of the spinning line (as specified in paragraph (b)(4) of this section) and vent through a closed vent system and use any combination of control devices meeting the requirements of subpart SS of this part, as specified in §63.982(a).); or
		b. Reduce organic HAP emissions from the spinning line to less than or equal to

		0.25 kilograms of organic HAP per megagram (0.5 pounds of organic HAP per ton) of acrylic and modacrylic fiber produced; or
		c. Reduce the organic HAP concentration of the spin dope to less than 100 ppmw.
5. A fiber spinning line that is an existing source	The spinning line uses a spin dope produced from a solution polymerization process	Reduce organic HAP emissions from the spinning line to less than or equal to 20 kilograms of organic HAP per megagram (40 pounds of organic HAP per ton) of acrylic and modacrylic fiber produced.
6. A fiber spinning line that is an existing source	The spinning line uses a spin dope produced from a suspension polymerization process	a. Reduce the organic HAP concentration of the spin dope to less than 100 ppmw;[b] or b. Reduce organic HAP emissions from the spinning line to less than or equal to 0.25 kilograms of organic HAP per megagram of acrylic and modacrylic fiber produced.
7. Equipment as defined under §63.1101 (with the differences for pressure relief devices described in item 11 below)	It contains or contacts ≥10 weight-percent organic HAP,[c] and operates ≥300 hours per year	a. Comply with either §63.1008 or §63.1027 for connectors in gas and vapor service and in light liquid service, and comply with the requirements of subpart UU of this part, except §63.1030, for all other applicable equipment; or
		b. Comply with the requirements in subpart H of this part, except §63.165, as provided by the regulatory overlap provisions in §63.1100(g)(4)(ii).
8. An acrylic and modacrylic fiber production process unit that generates process wastewater	The process wastewater stream is a Group 1 or Group 2 wastewater stream	Comply with the requirements of §63.1106(a).
9. An acrylic and modacrylic fiber production process unit that generates	The maintenance wastewater contains organic HAP	Comply with the requirements of §63.1106(b).

maintenance wastewater		
10. An item of equipment listed in §63.1106(c)(1)	The item of equipment meets the criteria specified in §63.1106(c)(1) through (3) and either (c)(4)(i) or (ii)	Comply with the requirements in Table 35 of subpart G of this part.
11. Pressure relief devices	The pressure relief device is in organic HAP service	Comply with §63.1107(e).

[a]The mass emission rate of halogen atoms contained in organic compounds is determined according to the procedures specified in §63.1104(i).

[b]The percent by weight organic HAP is determined according to the procedures specified in §63.1107.

[c]The weight-percent organic HAP is determined for equipment according to procedures specified in §63.1107.

(ii) The owner or operator must control organic HAP emissions from the acrylic and modacrylic fibers production facility by meeting the applicable requirements specified in table 3 of this section. The owner or operator must determine the facility organic HAP emission rate using the procedures specified in paragraph (b)(5) of this section. Applicability assessment procedures and methods are specified in §§63.1104 through 63.1107. An owner or operator of an affected source does not have to perform tests, TRE calculations or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Procedures for approval of alternative means of emission limitations are specified in §63.1113.

TABLE 3 TO §63.1103(b)(3)(ii)**—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACRYLIC AND MODACRYLIC FIBER PRODUCTION EXISTING OR NEW AFFECTED SOURCE AND AM COMPLYING WITH PARAGRAPH** (b)(3)(ii) **OF THIS SECTION?**

If you own or operate . . .	Then you must control total organic HAP emissions from the affected source by . . .
1. An acrylic and modacrylic fibers production affected source and your facility is an existing source	Meeting all of following requirements: a. Reduce total organic HAP emissions from all affected storage vessels, process vents, wastewater streams associated with the acrylic and modacrylic fibers production process unit as defined in paragraph (b)(2) of this section, and fiber spinning lines operated in your acrylic and modacrylic fibers production facility to less than or equal to 0.5 kilograms (kg) of organic HAP per megagram (Mg) of fiber produced.

	b. Determine the facility organic HAP emission rate in accordance with the requirements specified in paragraph (b)(5) of this section.
2. An acrylic and modacrylic fibers production affected source and your facility is a new source	Meeting all of following requirements: a. Reduce total organic HAP emissions from all affected storage vessels, process vents, wastewater streams associated with the acrylic and modacrylic fibers production process unit as defined in paragraph (b)(2) of this section, and fiber spinning lines operated in your acrylic and modacrylic fibers production facility to less than or equal to 0.25 kilograms (kg) of organic HAP per megagram (Mg) of fiber produced.
	b. Determine the facility organic HAP emission rate in accordance with the requirements specified in paragraph (b)(5) of this section.
3. Equipment as defined under §63.1101 and it contains or contacts >10 weight-percent organic HAP,[a] and operates >300 hours per year (with the differences for pressure relief devices described in item 4 below)	a. Comply with either §63.1008 or §63.1027 for connectors in gas and vapor service and in light liquid service, and comply with subpart UU of this part, except §63.1030, for all other applicable equipment; or b. Comply with the requirements in subpart H of this part, except §63.165, as provided by the regulatory overlap provisions in §63.1100(g)(4)(ii).
4. A pressure relief device in organic HAP service	Complying with §63.1107(e).

(4) *Fiber spinning line enclosure requirements.* For an owner or operator of a new or modified source electing to comply with paragraph (b)(3)(i) of this section, the fiber spinning line enclosure must be designed and operated to meet the requirements specified in paragraphs (b)(4)(i) through (iv) of this section.

(i) The enclosure must cover the spinning and washing areas of the spinning line.

(ii) The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B.

(iii) The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or to direct airflow into the enclosure.

(iv) The owner or operator must perform the verification procedure for the enclosure as specified in section 5.0 to "Procedure T—Criteria for and Verification of a Permanent or

Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(5) *Facility organic HAP emission rate determination.* For an owner or operator electing to comply with paragraph (b)(3)(ii) of this section, the facility organic HAP emission rate must be determined using the requirements specified in paragraphs (b)(5)(i) through (iii) of this section.

(i) The owner or operator must prepare an initial determination of the facility organic HAP emission rate.

(ii) Whenever changes to the acrylic or modacrylic fiber production operations at the facility could potentially cause the facility organic HAP emission rate to exceed the applicable limit of kilogram of organic HAP per Megagram of fiber produced, the owner or operator must prepare a new determination of the facility organic HAP emission rate.

(iii) For each determination, the owner or operator must prepare and maintain at the facility site sufficient process data, emissions data, and any other documentation necessary to support the facility organic HAP emission rate calculation.

(c) *Hydrogen fluoride production applicability, definitions, and requirements—*
(1) *Applicability—*(i) *Affected source—*For the hydrogen fluoride production (as defined in paragraph (c)(2) of this section) source category, the affected source shall comprise all emission points, in combination, listed in paragraphs (c)(1)(i)(A) through (D) of this section, that are associated with a hydrogen fluoride production process unit located at a major source as defined in section 112(a) of the Act.

(A) All storage vessels used to accumulate or store hydrogen fluoride.

(B) All process vents from continuous unit operations associated with hydrogen fluoride recovery and refining operations. These process vents include vents on condensers, distillation units, and water scrubbers.

(C) All transfer racks used to load hydrogen fluoride into tank trucks or railcars.

(D) Equipment in hydrogen fluoride service (as defined in paragraph (c)(2) of this section).

(2) *Definitions.*

Connector means flanged, screwed, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purposes of this subpart.

Equipment means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in hydrogen fluoride service; and any control devices or closed-vent systems used to comply with this subpart.

Hydrogen fluoride production means a process engaged in the production and recovery of hydrogen fluoride by reacting calcium fluoride with sulfuric acid. For the purpose of implementing this subpart, hydrogen fluoride production is not a process that produces gaseous hydrogen fluoride for direct reaction with hydrated aluminum to form aluminum fluoride (i.e., the hydrogen fluoride is not recovered as an intermediate or final product prior to reacting with the hydrated aluminum).

In hydrogen fluoride service means that a piece of equipment either contains or contacts a hydrogen fluoride process fluid (liquid or gas).

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals below ambient pressure.

Instrumentation system means a group of equipment components used to condition and convey a sample of the process fluid to analyzers and instruments for the purpose of determining process operating conditions (e.g., composition, pressure, flow, etc.). Valves and connectors are the predominant type of equipment used in instrumentation systems; however, other types of equipment may also be included in these systems.

Kiln seal means the mechanical or hydraulic seals at both ends of the kiln, designed to prevent the infiltration of moisture and air through the interface of the rotating kiln and stationary pipes and equipment attached to the kiln during normal vacuum operation of the kiln (operation at an internal pressure of at least 0.25 kilopascal [one inch of water] below ambient pressure).

Leakless pump means a pump whose seals are submerged in liquid, a magnetically-driven pump, a pump equipped with a dual mechanical seal system that includes a barrier fluid system, a canned pump, or other pump that is designed with no externally actuated shaft penetrating the pump housing.

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

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the relief device. This release can be one release or a series of releases over a short time period due to a malfunction in the process.

Pressure relief device or valve means a safety device used to prevent operating pressures from exceeding the maximum allowable working pressure of the process equipment. A common pressure relief device is a spring-loaded pressure relief valve. Devices that are actuated either by

a pressure of less than or equal to 2.5 pounds per square inch gauge or by a vacuum are not pressure relief devices.

Relief device or valve means a valve used only to release an unplanned, nonroutine discharge. A relief valve discharge can result from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected cause that requires immediate venting of gas from process equipment in order to avoid safety hazards or equipment damage.

Repaired for the purpose of this regulation means equipment is adjusted, or otherwise altered, to eliminate a leak identified by sensory monitoring.

Sampling connection system means an assembly of equipment within a process unit or affected facility used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.

Sensory monitoring means the detection of a potential leak to the atmosphere by walk-through visual, audible, or olfactory monitoring. Comprehensive component-by-component inspection is not required.

Shift means the time a shift operator normally works, typically 8 or 12 hours.

(3) *Requirements.* Table 4 of this section specifies the hydrogen fluoride production source category applicability and control requirements for both existing and new sources. The owner or operator must control hydrogen fluoride emissions from each affected source emission point as specified in table 4. General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Specific monitoring, recordkeeping, and reporting requirements are specified in table 4. Minimization of emissions from startups, shutdowns, and malfunctions, including those resulting from kiln seals must be addressed in the startup, shutdown, and malfunction plan required by §63.1111; the plan must also establish reporting and recordkeeping of such events. Procedures for approval of alternative means of emission limitations are specified in §63.1113.

TABLE 4 TO §63.1103(c)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A HYDROGEN FLUORIDE PRODUCTION EXISTING OR NEW AFFECTED SOURCE?

If you own or operate . . .	And if . . .	Then you must . . .
1. A storage vessel	The stored material is hydrogen fluoride	Reduce emissions of hydrogen fluoride by venting displacement emissions created by normal filling or emptying activities through a closed-vent system to a recovery system or wet scrubber that is designed and operated to achieve a 99 weight-percent removal efficiency. The minimum liquid flow rate to the scrubber that achieves a 99 weight-percent removal efficiency

		shall be established, and may be done so by design analysis. The liquid flow rate to the scrubber shall be continuously monitored and records maintained according to §§63.996 and 63.998(b), (c), and (d)(3) of 40 CFR subpart SS of this part. The Periodic Report specified in §63.1110(a)(5) of this subpart shall include the information specified in §63.999(c) of 40 CFR subpart SS of this part, as applicable.
2. A process vent from continuous unit operations	The vent stream is from hydrogen fluoride recovery and refining vessels	Reduce emissions of hydrogen fluoride from the process vent by venting emissions through a closed-vent system to a wet scrubber that is designed and operated to achieve a 99 weight-percent removal efficiency. Monitoring, recordkeeping, and reporting of wet scrubber operation shall be in accordance with the requirements stated above for a wet scrubber controlling hydrogen fluoride emissions from a storage vessel.
3. A transfer rack	The transfer rack is associated with bulk hydrogen fluoride liquid loading into tank trucks and rail cars	Reduce emissions of hydrogen fluoride by venting emissions through a closed-vent system to a recovery system or wet scrubber that is designed and operated to achieve a 99 weight-percent removal efficiency. Monitoring, recordkeeping, and reporting of wet scrubber operation shall be in accordance with the requirements stated above for a wet scrubber controlling HF emissions from a storage vessel. You also must load hydrogen fluoride into only tank trucks and railcars that have a current certification in accordance with the U.S. DOT pressure test requirements of 49 CFR part 180 for tank trucks and 49 CFR 173.31 for railcars; or have been demonstrated to be vapor-tight (i.e. will sustain a pressure change of not more than 750 Pascals within 5 minutes after it is pressurized to a minimum or 4,500 Pascals) within the preceding 12 months.
4. Equipment	It is in hydrogen fluoride service and operates ≥300 hours per year and is not in vacuum service	Control hydrogen fluoride emissions by using leakless pumps and by implementing a sensory monitoring leak detection program. Equipment that is excluded from sensory monitoring because it operates less than 300 hours per year or is in vacuum service shall be identified by list, location, or other method and the identity shall be recorded. An owner or operator is required to perform sensory monitoring at least once every shift, but no later than within 15 days. When a leak is detected, repair must begin within one hour and be completed as soon as practical. A record shall be kept of each leak detected and repaired including: equipment identification number,

		date and time the leak was detected and that repair was initiated, and the date of successful repair.

(d) *Polycarbonate production applicability, definitions, and requirements—*
(1) *Applicability*—(i) *Affected source.* For the polycarbonate production (as defined in paragraph (d)(2) of this section) source category, the affected source shall comprise all emission points, in combination, listed in paragraphs (d)(1)(i)(A) through (D) of this section, that are part of a polycarbonate production process unit located at a major source as defined in section 112(a) of the Act. For the purposes of this rule, a polycarbonate production process unit is a unit that produces polycarbonate by interfacial polymerization from bisphenols and phosgene. Phosgene production units that are associated with polycarbonate production process units are considered to be part of the polycarbonate production process. A phosgene production unit consists of the reactor in which phosgene is formed and all equipment (listed in paragraphs (d)(1)(i)(A) through (D) of this section) downstream of the reactor that provides phosgene for the production of polycarbonate. Therefore, for the purposes of this rule, such a phosgene production unit is considered to be a polycarbonate production process unit.

(A) All storage vessels that store liquids containing organic HAP.

(B) All process vents from continuous and batch unit operations.

(C) All wastewater streams.

(D) Equipment (as defined in §63.1101 of this subpart) that contains or contacts organic HAP.

(ii) *Compliance schedule.* The compliance schedule, for affected sources as defined in paragraph (d)(1)(i) of this section, is specified in §63.1102.

(2) *Definitions.*

In organic hazardous air pollutant or in organic HAP service means, for polycarbonate production affected sources, that a piece of equipment either contains or contracts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of §63.180(d). The provisions of §63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

Polycarbonate production means a process engaged in the production of a special class of polyester formed from any dihydroxy compound and any carbonate diester or by ester exchange. Polycarbonate may be produced by solution or emulsion polymerization, although other methods may be used. A typical method for the manufacture of polycarbonate includes the reaction of bisphenol-A with phosgene in the presence of pyridine or other catalyst to form polycarbonate. Methylene chloride or other solvents are used in this polymerization reaction.

Seal means, for polycarbonate production affected sources complying with the requirements of §63.1033(b) or §63.167(a) or after October 8, 2014, that instrument monitoring

of the open-ended valve or line conducted according to the method specified in §63.1023(b) and, as applicable, §63.1023(c), or §63.180(b) and, as applicable, §63.180(c), indicates no readings of 500 parts per million or greater.

(3) *Requirements.* Tables 5 and 6 of this section specify the applicability criteria and standards for existing and new sources within the polycarbonate production source category. The owner or operator must control organic HAP emissions from each affected source emission point by meeting the applicable requirements specified in tables 5 and 6. Applicability assessment procedures and methods are specified in §§63.1104 through 63.1107. An owner or operator of an affected source is not required to perform tests, TRE calculations or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Procedures for approval of alternative means of emission limitations are specified in §63.1113.

TABLE 5 TO §63.1103(d)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A POLYCARBONATE PRODUCTION EXISTING AFFECTED SOURCE?

If you own or operate...	And if...	Then you must...
1. A storage vessel with: 75 cubic meters ≤capacity <151 cubic meters	27.6 kilopascals ≤maximum true vapor pressure of total organic HAP <76.6 kilopascals	Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process), as specified in §63.982(a)(1) (storage vessel requirements) of this part; or comply with the requirements of subpart WW (national emission standards for storage vessels (control level 2)) of this part.
2. A storage vessel with: 151 cubic meters ≤capacity	The maximum true vapor pressure of total organic HAP ≥5.2 kilopascals	Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(1) (storage vessel requirements) of this part
3. A storage vessel with: 75 cubic meters ≤capacity <151 cubic meters	The maximum true vapor pressure of total organic HAP ≥76.6 kilopascals	Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(1) (storage vessel requirements) of this part.
4. A process vent from continuous unit operations or a combined vent stream[a] (halogenated)	The vent stream has a TRE[bc] ≤2.7	a. Reduce emissions of total organic HAP by 98 weight-percent, or reduce total organic HAP to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in §63.982(c)(2) and (e); and then vent emissions from those control device(s) through a closed vent system to a halogen reduction device

		meeting the requirements of subpart SS, §63.994, that reduces hydrogen halides and halogens by 99 weight-percent or to less than 0.45 kilograms per hour,[d] whichever is less stringent; or
		b. Reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS of this part, §63.994; and then vent emissions from those control device(s) through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(c)(2) and (e), that reduces emissions of total organic HAP by 98 weight-percent, or reduce total organic HAP or TOC to a concentration of 20 parts per million by volume, whichever is less stringent; or
		c. Achieve and maintain a TRE index value greater than 2.7.
5. A process vent from continuous unit operations or a combined vent stream[a] (nonhalogenated)	The vent stream has a $TRE^{bc} \leq 2.7$	a. Reduce emissions of total organic HAP by 98 weight-percent; or reduce total organic HAP to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in §63.982(a)(2) (process vent requirements); or
		b. Achieve and maintain a TRE index value greater than 2.7.
6. A process vent from continuous unit operations or a combined vent stream[a]	$2.7 < TRE^{bc} \leq 4.0$	Monitor and keep records of equipment operating parameters specified to be monitored under subpart SS of this part, §§63.982(e) and 63.993(c) (absorbers, condensers, carbon adsorbers and other recovery devices used as final recovery devices).

7. Equipment as defined under §63.1101 (with the differences for pressure relief devices described in item 11 below)	The equipment contains or contacts ≥5 weight-percent total organic HAP,[e] and operates ≥300 hours per year	a. Comply with either §63.1008 or §63.1027 for connectors in gas and vapor service and in light liquid service, and comply with the requirements of subpart UU of this part, except §63.1030, for all other applicable equipment; or
		b. Comply with the requirements in subpart H of this part, except §63.165, as provided by the regulatory overlap provisions in §63.1100(g)(4)(ii).
8. A polycarbonate production process unit that generates process wastewater	The process wastewater stream is a Group 1 or a Group 2 wastewater stream	Comply with the requirements of §63.1106(a).
9. A polycarbonate production process unit that generates maintenance wastewater	The maintenance wastewater contains organic HAP	Comply with the requirements of §63.1106(b).
10. An item of equipment listed in §63.1106(c)(1)	The item of equipment meets the criteria specified in §63.1106(c)(1) through (3) and either (c)(4)(i) or (ii)	Comply with the requirements in Table 35 of subpart G of this part.
11. Pressure relief devices	The pressure relief device is in organic HAP service	Comply with §63.1107(e).

[a]Combined vent streams shall use the applicability determination procedures and methods for process vents from continuous unit operations (§63.1104).

[b]The TRE equation coefficients for halogenated streams (table 1 of §63.1104(j)(1)) shall be used to calculate the TRE index value.

[c]The TRE is determined according to the procedures specified in §63.1104(j). If a dryer is manifolded with such vents, and the vent is routed to a recovery, recapture, or combustion device, then the TRE index value for the vent must be calculated based on the properties of the vent stream (including the contributions of the dryer). If a dryer is manifolded with other vents and not routed to a recovery, recapture, or combustion device, then the TRE index value must be calculated excluding the contributions of the dryer. The TRE index value for the dryer must be calculated separately in this case.

[d]The mass emission rate of halogen atoms contained in organic compounds is determined according to the procedures specified in §63.1104(i).

[e]The weight-percent organic HAP is determined for equipment according to procedures specified in §63.1107.

TABLE 6 TO §63.1103(d)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A POLYCARBONATE PRODUCTION NEW AFFECTED SOURCE?

If you own or operate. . .	And if. . .	Then you must. . .
1. A storage vessel with: 38 cubic meters ≤capacity <151 cubic meters	13.1 kilopascals ≤maximum true vapor pressure of total organic HAP <76.6 kilopascals	a. Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process), as specified in §63.982(a)(1) (storage vessel requirements) of this part; or b. Comply with the requirements of subpart WW (national emission standards for storage vessels (control level 2)) of this part.
2. A storage vessel with: 151 cubic meters ≤capacity	The maximum true vapor pressure of total organic HAP is ≥5.2 kilopascals	Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(1) (storage vessel requirements) of this part.
3. A storage vessel with: 38 cubic meters ≤capacity <151 cubic meters	The maximum true vapor pressure of total organic HAP is ≥76.6 kilopascals	Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(1) (storage vessel requirements) of this part.
4. A process vent from continuous unit operations or a combined vent stream[a] (halogenated)	The vent stream has a TRE[bc] ≤9.6	a. Reduce emissions of total organic HAP by 98 weight-percent, or reduce total organic HAP to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in §63.982(c)(2) and (e); and then vent

		emissions from those control device(s) through a closed vent system to a halogen reduction device meeting the requirements of subpart SS, §63.994, that reduces hydrogen halides and halogens by 99 weight-percent or to less than 0.45 kilograms per hour,[d] whichever is less stringent; or
		b. Reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS of this part, §63.994; and then vent emissions from those control device(s) through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(c)(2) and (e), that reduces emissions of total organic HAP by 98 weight-percent, or reduce total organic HAP or TOC to a concentration of 20 parts per million by volume, whichever is less stringent; or
		c. Achieve and maintain a TRE index value greater than 9.6.
5. A process vent from continuous unit operations or a combined vent stream[a] (nonhalogenated)	The vent stream has a TRE[bc] ≤9.6	a. Reduce emissions of total organic HAP by 98 weight-percent; or reduce total organic HAP to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in §63.982(a)(2) (process vent requirements); or b. Achieve and maintain a TRE index value greater than 9.6.
6. Equipment as defined under §63.1101 (with the differences for pressure relief devices described in item 6 below)	The equipment contains or contacts ≥5 weight-percent total organic HAP[e], and	a. Comply with either §63.1008 or §63.1027 for connectors in gas and vapor service and in light liquid service, and comply with the requirements of subpart UU of this part, except §63.1030, for all other applicable equipment; or

	operates ≥300 hours per year	
		b. Comply with the requirements in subpart H of this part, except §63.165, as provided by the regulatory overlap provisions in §63.1100(g)(4)(ii).
7. Pressure relief devices	The pressure relief device is in organic HAP service	Comply with §63.1107(e).

[a]Combined vent streams shall use the applicability determination procedures and methods for process vents from continuous unit operations (§63.1104).

[b]The TRE equation coefficients for halogenated streams (Table 1 of §63.1104(j)(1) of this subpart) shall be used to calculate the TRE index value.

[c]The TRE is determined according to the procedures specified in §63.1104(j). If a dryer is manifolded with such vents, and the vent is routed to a recovery, recapture, or combustion device, then the TRE index value for the vent must be calculated based on the properties of the vent stream (including the contributions of the dryer). If a dryer is manifolded with other vents and not routed to a recovery, recapture, or combustion device, then the TRE index value must be calculated excluding the contributions of the dryer. The TRE index value for the dryer must be calculated separately in this case.

[d]The mass emission rate of halogen atoms contained in organic compounds is determined according to the procedures specified in §63.1104(i).

[e]The weight-percent organic HAP is determined for equipment according to procedures specified in §63.1107.

(e) *Ethylene production applicability, definitions, and requirements*—(1) *Applicability*—(i) *Affected source.* For the ethylene production (as defined in paragraph (e)(2) of this section) source category, the affected source comprises all emission points listed in paragraphs (e)(1)(i)(A) through (G) of this section that are associated with an ethylene production unit that is located at a major source, as defined in section 112(a) of the Act.

(A) All storage vessels (as defined in §63.1101) that store liquids containing organic HAP.

(B) All ethylene process vents (as defined in paragraph (e)(2) of this section) from continuous unit operations.

(C) All transfer racks (as defined in paragraph (e)(2) of this section) that load HAP-containing material.

(D) Equipment (as defined in §63.1101) that contains or contacts organic HAP.

(E) All waste streams (as defined in paragraph (e)(2) of this section) associated with an ethylene production unit.

(F) All heat exchange systems (as defined in §63.1082(b)) associated with an ethylene production unit.

(G) All ethylene cracking furnaces and associated decoking operations.

(ii) *Exceptions.* The emission points listed in paragraphs (e)(1)(ii) (A) through (L) of this section are in the ethylene production source category but are not subject to the requirements of paragraph (e)(3) of this section.

(A) Equipment that is located within an ethylene production unit that is subject to this subpart but does not contain organic HAP.

(B) Stormwater from segregated sewers.

(C) Water from fire-fighting and deluge systems in segregated sewers.

(D) Spills.

(E) Water from safety showers.

(F) Water from testing of fire-fighting and deluge systems.

(G) Vessels storing organic liquids that contain organic HAP as impurities.

(H) Transfer racks, loading arms, or loading hoses that only transfer liquids containing organic HAP as impurities.

(I) Transfer racks, loading arms, or loading hoses that vapor balance during all transfer operations.

(J) Air emissions from all ethylene cracking furnaces.

(K) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

(L) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships.

(iii) *Exclusions.* The provisions of this subpart do not apply to process units and emission points subject to subparts F, G, H, I and CC of this part.

(iv) *Compliance schedule.* The compliance schedule for the ethylene production source category is specified in §63.1102.

(2) *Definitions.*

Decoking operation means the coke combustion activity that occurs inside the radiant tube(s) in the ethylene cracking furnace firebox. Coke combustion activities during decoking can also occur in other downstream equipment such as the process gas outlet piping and transfer line exchangers or quench points.

Ethylene process vent means a gas stream with a flow rate greater than 0.005 standard cubic meters per minute containing greater than 20 parts per million by volume HAP that is continuously discharged during operation of an ethylene production unit. On and after July 6, 2023, ethylene process vent means a gas stream with a flow rate greater than 0.005 standard cubic meters per minute containing greater than 20 parts per million by volume HAP that is continuously or periodically discharged during operation of an ethylene production unit. Ethylene process vents are gas streams that are discharged to the atmosphere (or the point of entry into a control device, if any) either directly or after passing through one or more recovery devices. Ethylene process vents do not include:

(A) Pressure relief device discharges;

(B) Gaseous streams routed to a fuel gas system, including any flares using fuel gas, of which less than 50 percent of the fuel gas is derived from an ethylene production unit;

(C) Gaseous streams routed to a fuel gas system whereby any flares using fuel gas, of which 50 percent or more of the fuel gas is derived from an ethylene production unit, comply with §63.1103(e)(4) beginning no later than the compliance dates specified in §63.1102(c);

(D) Leaks from equipment regulated under this subpart;

(E) Episodic or nonroutine releases such as those associated with startup, shutdown, and malfunction until July 6, 2023;

(F) In situ sampling systems (online analyzers) until July 6, 2023; and

(G) Coke combustion emissions from decoking operations beginning no later than the compliance dates specified in §63.1102(c).

Ethylene production or production unit means a chemical manufacturing process unit in which ethylene and/or propylene are produced by separation from petroleum refining process streams or by subjecting hydrocarbons to high temperatures in the presence of steam. The ethylene production unit includes the separation of ethylene and/or propylene from associated streams such as a C_4 product, pyrolysis gasoline, and pyrolysis fuel oil. Ethylene production does not include the manufacture of SOCMI chemicals such as the production of butadiene from the C_4 stream and aromatics from pyrolysis gasoline.

Force majeure event means a release of HAP, either directly to the atmosphere from a pressure relief device or discharged via a flare, that is demonstrated to the satisfaction of the Administrator to result from an event beyond the owner or operator's control, such as natural disasters; acts of war or terrorism; loss of a utility external to the ethylene production unit (*e.g.,* external power curtailment), excluding power curtailment due to an interruptible service agreement; and fire or explosion originating at a near or adjoining facility outside of the ethylene production unit that impacts the ethylene production unit's ability to operate.

Organic HAP means the compounds listed in Table 1 to subpart XX of this part.

Periodically discharged means gas stream discharges that are intermittent for which the total organic HAP concentration is greater than 20 parts per million by volume and total volatile organic compound emissions are 50 pounds per day or more. These intermittent discharges are associated with routine operations, maintenance activities, startups, shutdowns, malfunctions, or process upsets and do not include pressure relief device discharges or discharges classified as maintenance vents.

Pressure-assisted multi-point flare means a flare system consisting of multiple flare burners in staged arrays whereby the vent stream pressure is used to promote mixing and smokeless operation at the flare burner tips. Pressure-assisted multi-point flares are designed for smokeless operation at velocities up to Mach = 1 conditions (*i.e.,* sonic conditions), can be elevated or at ground level, and typically use cross-lighting for flame propagation to combust any flare vent gases sent to a particular stage of flare burners.

Pressure relief device means a valve, rupture disk, or similar device used only to release an unplanned, nonroutine discharge of gas from process equipment in order to avoid safety hazards or equipment damage. A pressure relief device discharge can result from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected cause. Such devices include conventional, spring-actuated relief valves, balanced bellows relief valves, pilot-operated relief valves, rupture disks, and breaking, buckling, or shearing pin devices. Devices that are actuated either by a pressure of less than or equal to 2.5 pounds per square inch gauge or by a vacuum are not pressure relief devices.

Radiant tube(s) means any portion of the tube coil assembly located within the ethylene cracking furnace firebox whereby a thermal cracking reaction of hydrocarbons (in the presence of steam) occurs. Hydrocarbons and steam pass through the radiant tube(s) of the ethylene cracking furnace during normal operation and coke is removed from the inside of the radiant tube(s) during decoking operation.

Relief valve means a type of pressure relief device that is designed to re-close after the pressure relief.

Transfer rack means the collection of loading arms and loading hoses at a single loading rack that is used to fill tank trucks and/or railcars with organic HAP. Transfer rack includes the associated pumps, meters, shutoff valves, relief valves, and other piping and valves. Transfer

rack does not include racks, arms, or hoses that contain organic HAP only as impurities; or racks, arms, or hoses that vapor balance during all loading operations.

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

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

(3) *Requirements.* The owner or operator must control organic HAP emissions from each affected source emission point by meeting the applicable requirements specified in Table 7 to this section. An owner or operator must perform the applicability assessment procedures and methods for process vents specified in §63.1104, except for paragraphs (d), (g), (h) through (j), (l)(1), and (n). An owner or operator must perform the applicability assessment procedures and methods for equipment leaks specified in §63.1107. General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Before July 6, 2023, minimization of emissions from startup, shutdown, and malfunctions must be addressed in the startup, shutdown, and malfunction plan required by §63.1111; the plan must also establish reporting and recordkeeping of such events. A startup, shutdown, and malfunction plan is not required on and after July 6, 2023 and the requirements specified in §63.1111 no longer apply; however, for historical compliance purposes, a copy of the plan must be retained and available on-site for five years after July 6, 2023. Except as specified in paragraph (e)(4)(i) of this section, procedures for approval of alternate means of emission limitations are specified in §63.1113.

(4) *Flares.* Beginning no later than the compliance dates specified in §63.1102(c), if a steam-assisted, air-assisted, non-assisted, or pressure-assisted multi-point flare is used as a control device for an emission point subject to the requirements in Table 7 to this section, then the owner or operator must meet the applicable requirements for flares as specified in §§63.670 and 63.671 of subpart CC, including the provisions in Tables 12 and 13 to subpart CC of this part, except as specified in paragraphs (e)(4)(i) through (xiv) of this section. This requirement also applies to any flare using fuel gas from a fuel gas system, of which 50 percent or more of the fuel gas is derived from an ethylene production unit, being used to control an emission point subject to the requirements in Table 7 of this section. For purposes of compliance with this paragraph, the following terms are defined in §63.641 of subpart CC: Assist air, assist steam, center steam, combustion zone, combustion zone gas, flare, flare purge gas, flare supplemental gas, flare sweep gas, flare vent gas, lower steam, net heating value, perimeter assist air, pilot gas, premix assist air, total steam, and upper steam.

(i) The owner or operator may elect to comply with the alternative means of emissions limitation requirements specified in of §63.670(r) of subpart CC in lieu of the requirements in §63.670(d) through (f) of subpart CC, as applicable. However, instead of complying with

§63.670(r)(3) of subpart CC, the owner or operator must submit the alternative means of emissions limitation request following the requirements in §63.1113.

(ii) Instead of complying with §63.670(o)(2)(i) of subpart CC, the owner or operator must develop and implement the flare management plan no later than the compliance dates specified in §63.1102(c).

(iii) Instead of complying with §63.670(o)(2)(iii) of subpart CC, if required to develop a flare management plan and submit it to the Administrator, then the owner or operator must also submit all versions of the plan in portable document format (PDF) to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). If you claim some of the information in your flare management plan is confidential business information (CBI), submit a version with the CBI omitted via CEDRI. A complete plan, including information claimed to be CBI and clearly marked as CBI, must be mailed to the following address: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, U.S. EPA Mailroom (E143-01), Attention: Ethylene Production Sector Lead, 109 T.W. Alexander Drive, Research Triangle Park, NC 27711.

(iv) Section 63.670(o)(3)(ii) of subpart CC and all references to §63.670(o)(3)(ii) of subpart CC do not apply. Instead, the owner or operator must comply with the maximum flare tip velocity operating limit at all times.

(v) Substitute “ethylene production unit” for each occurrence of “petroleum refinery.”

(vi) Each occurrence of “refinery” does not apply.

(vii) Except as specified in paragraph (e)(4)(vii)(G) of this section, if a pressure-assisted multi-point flare is used as a control device for an emission point subject to the requirements in Table 7 to this section, then the owner or operator must comply with the requirements specified in paragraphs (e)(4)(vii)(A) through (F) of this section.

(A) The owner or operator is not required to comply with the flare tip velocity requirements in §63.670(d) and (k) of subpart CC;

(B) The owner or operator must substitute “800” for each occurrence of “270” in §63.670(e) of subpart CC;

(C) The owner or operator must determine the 15-minute block average NHVvg using only the direct calculation method specified in §63.670(l)(5)(ii) of subpart CC;

(D) Instead of complying with §63.670(b) and (g) of subpart CC, if a pressure-assisted multi-point flare uses cross-lighting on a stage of burners rather than having an individual pilot flame on each burner, the owner or operator must operate each stage of the pressure-assisted multi-point flare with a flame present at all times when regulated material is routed to that stage of burners. Each stage of burners that cross-lights in the pressure-assisted multi-point flare must

have at least two pilots with at least one continuously lit and capable of igniting all regulated material that is routed to that stage of burners. Each 15-minute block during which there is at least one minute where no pilot flame is present on a stage of burners when regulated material is routed to that stage is a deviation of the standard. Deviations in different 15-minute blocks from the same event are considered separate deviations. The pilot flame(s) on each stage of burners that use cross-lighting must be continuously monitored by a thermocouple or any other equivalent device used to detect the presence of a flame;

(E) Unless the owner or operator of a pressure-assisted multi-point flare chooses to conduct a cross-light performance demonstration as specified in this paragraph, the owner or operator must ensure that if a stage of burners on the flare uses cross-lighting, that the distance between any two burners in series on that stage is no more than 6 feet when measured from the center of one burner to the next burner. A distance greater than 6 feet between any two burners in series may be used provided the owner or operator conducts a performance demonstration that confirms the pressure-assisted multi-point flare will cross-light a minimum of three burners and the spacing between the burners and location of the pilot flame must be representative of the projected installation. The compliance demonstration must be approved by the permitting authority and a copy of this approval must be maintained onsite. The compliance demonstration report must include: A protocol describing the test methodology used, associated test method QA/QC parameters, the waste gas composition and NHVcz of the gas tested, the velocity of the waste gas tested, the pressure-assisted multi-point flare burner tip pressure, the time, length, and duration of the test, records of whether a successful cross-light was observed over all of the burners and the length of time it took for the burners to cross-light, records of maintaining a stable flame after a successful cross-light and the duration for which this was observed, records of any smoking events during the cross-light, waste gas temperature, meteorological conditions (*e.g.,* ambient temperature, barometric pressure, wind speed and direction, and relative humidity), and whether there were any observed flare flameouts; and

(F) The owner or operator of a pressure-assisted multi-point flare must install and operate pressure monitor(s) on the main flare header, as well as a valve position indicator monitoring system for each staging valve to ensure that the flare operates within the proper range of conditions as specified by the manufacturer. The pressure monitor must meet the requirements in Table 13 to subpart CC of this part.

(G) If a pressure-assisted multi-point flare is operating under the requirements of an approved alternative means of emission limitations, the owner or operator shall either continue to comply with the terms of the alternative means of emission limitations or comply with the provisions in paragraphs (e)(4)(vii)(A) through (F) of this section.

(viii) If an owner or operator chooses to determine compositional analysis for net heating value with a continuous process mass spectrometer, the owner or operator must comply with the requirements specified in paragraphs (e)(4)(viii)(A) through (G) of this section.

(A) The owner or operator must meet the requirements in §63.671(e)(2). The owner or operator may augment the minimum list of calibration gas components found in §63.671(e)(2)

with compounds found during a pre-survey or known to be in the gas through process knowledge.

(B) Calibration gas cylinders must be certified to an accuracy of 2 percent and traceable to National Institute of Standards and Technology (NIST) standards.

(C) For unknown gas components that have similar analytical mass fragments to calibration compounds, the owner or operator may report the unknowns as an increase in the overlapped calibration gas compound. For unknown compounds that produce mass fragments that do not overlap calibration compounds, the owner or operator may use the response factor for the nearest molecular weight hydrocarbon in the calibration mix to quantify the unknown component's NHV_{vg}.

(D) The owner or operator may use the response factor for n-pentane to quantify any unknown components detected with a higher molecular weight than n-pentane.

(E) The owner or operator must perform an initial calibration to identify mass fragment overlap and response factors for the target compounds.

(F) The owner or operator must meet applicable requirements in Performance Specification 9 of 40 CFR part 60, appendix B, for continuous monitoring system acceptance including, but not limited to, performing an initial multi-point calibration check at three concentrations following the procedure in Section 10.1 and performing the periodic calibration requirements listed for gas chromatographs in Table 13 to subpart CC of this part, for the process mass spectrometer. The owner or operator may use the alternative sampling line temperature allowed under Net Heating Value by Gas Chromatograph in Table 13 to subpart CC of this part.

(G) The average instrument calibration error (CE) for each calibration compound at any calibration concentration must not differ by more than 10 percent from the certified cylinder gas value. The CE for each component in the calibration blend must be calculated using the following equation:

$$CE = \frac{C_m - C_a}{C_a} \, x \, 100$$

Where:

C_m = Average instrument response (ppm)

C_a = Certified cylinder gas value (ppm)

(ix) An owner or operator using a gas chromatograph or mass spectrometer for compositional analysis for net heating value may choose to use the CE of $NHV_{measured}$ versus the cylinder tag value NHV as the measure of agreement for daily calibration and quarterly audits in lieu of determining the compound-specific CE. The CE for NHV at any calibration level must

not differ by more than 10 percent from the certified cylinder gas value. The CE for must be calculated using the following equation:

$$CE = \frac{NHV_{measured} - NHV_a}{NHV_a} x\ 100$$

Where:

$NHV_{measured}$ = Average instrument response (Btu/scf)

NHV_a = Certified cylinder gas value (Btu/scf)

(x) Instead of complying with §63.670(p) of subpart CC, the owner or operator must keep the flare monitoring records specified in §63.1109(e).

(xi) Instead of complying with §63.670(q) of subpart CC, the owner or operator must comply with the reporting requirements specified in §63.1110(d) and (e)(4).

(xii) When determining compliance with the pilot flame requirements specified in §63.670(b) and (g), substitute "pilot flame or flare flame" for each occurrence of "pilot flame."

(xiii) When determining compliance with the flare tip velocity and combustion zone operating limits specified in §63.670(d) and (e), the requirement effectively applies starting with the 15-minute block that includes a full 15 minutes of the flaring event. The owner or operator is required to demonstrate compliance with the velocity and NHVcz requirements starting with the block that contains the fifteenth minute of a flaring event. The owner or operator is not required to demonstrate compliance for the previous 15-minute block in which the event started and contained only a fraction of flow.

(xiv) In lieu of meeting the requirements in §§63.670 and 63.671 of subpart CC, an owner or operator may submit a request to the Administrator for approval of an alternative test method in accordance with §63.7(f). The alternative test method must be able to demonstrate on an ongoing basis at least once every 15-minutes that the flare meets 96.5% combustion efficiency and provide a description of the alternative recordkeeping and reporting that would be associated with the alternative test method. The alternative test method request may also include a request to use the alternative test method in lieu of the pilot or flare flame monitoring requirements of 63.670(g).

(5) *Maintenance vents.* Unless an extension is requested in accordance with the provisions in §63.6(i) of subpart A, beginning no later than the compliance dates specified in §63.1102(c), an owner or operator may designate an ethylene process vent as a maintenance vent if the vent is only used as a result of startup, shutdown, maintenance, or inspection of equipment where equipment is emptied, depressurized, degassed, or placed into service. The owner or operator must comply with the applicable requirements in paragraphs (e)(5)(i) through (iii) of this section for each maintenance vent.

(i) Prior to venting to the atmosphere, remove process liquids from the equipment as much as practical and depressurize the equipment to either: A flare meeting the requirements specified in paragraph (e)(4) of this section, or a non-flare control device meeting the requirements specified in §63.982(c)(2) of subpart SS, until one of the following conditions, as applicable, is met.

(A) The vapor in the equipment served by the maintenance vent has a lower explosive limit (LEL) of less than 10 percent.

(B) If there is no ability to measure the LEL of the vapor in the equipment based on the design of the equipment, the pressure in the equipment served by the maintenance vent is reduced to 5 pounds per square inch gauge (psig) or less. Upon opening the maintenance vent, active purging of the equipment cannot be used until the LEL of the vapors in the maintenance vent (or inside the equipment if the maintenance is a hatch or similar type of opening) is less than 10 percent.

(C) The equipment served by the maintenance vent contains less than 50 pounds of total volatile organic compounds (VOC).

(D) If, after applying best practices to isolate and purge equipment served by a maintenance vent, none of the applicable criterion in paragraphs (e)(5)(i)(A) through (C) of this section can be met prior to installing or removing a blind flange or similar equipment blind, then the pressure in the equipment served by the maintenance vent must be reduced to 2 psig or less before installing or removing the equipment blind. During installation or removal of the equipment blind, active purging of the equipment may be used provided the equipment pressure at the location where purge gas is introduced remains at 2 psig or less.

(ii) Except for maintenance vents complying with the alternative in paragraph (e)(5)(i)(C) of this section, the owner or operator must determine the LEL or, if applicable, equipment pressure using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

(iii) For maintenance vents complying with the alternative in paragraph (e)(5)(i)(C) of this section, the owner or operator must determine mass of VOC in the equipment served by the maintenance vent based on the equipment size and contents after considering any contents drained or purged from the equipment. Equipment size may be determined from equipment design specifications. Equipment contents may be determined using process knowledge.

(6) *Bypass lines.* Beginning on the compliance dates specified in §63.1102(c), the use of a bypass line at any time on a closed vent system to divert emissions subject to the requirements in Table 7 to §63.1103(e) to the atmosphere or to a control device not meeting the requirements specified in Table 7 of this subpart is an emissions standards violation. If the owner or operator is subject to the bypass monitoring requirements of §63.983(a)(3) of subpart SS, then the owner or operator must continue to comply with the requirements in §63.983(a)(3) of subpart SS and the recordkeeping and reporting requirements in §§63.998(d)(1)(ii) and 63.999(c)(2) of subpart SS, in addition to paragraph (e)(9) of this section, the recordkeeping requirements specified in

§63.1109(g), and the reporting requirements specified in §63.1110(e)(6). For purposes of compliance with this paragraph, the phrase "Except for equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines" in §63.983(a)(3) does not apply; instead, the exemptions specified in paragraph (e)(6)(i) and (ii) of this section apply.

(i) Except for pressure relief devices subject to 40 CFR 63.1107(h)(4), equipment such as low leg drains and equipment subject to the requirements specified in paragraph (f) of Table 7 to §63.1103(e) are not subject to this paragraph (e)(6) of this section.

(ii) Open-ended valves or lines that use a cap, blind flange, plug, or second valve and follow the requirements specified in §60.482-6(a)(2), (b), and (c) or follow requirements codified in another regulation that are the same as §60.482-6(a)(2), (b), and (c) are not subject to this paragraph (e)(6) of this section.

(7) *Decoking operation standards for ethylene cracking furnaces.* Beginning no later than the compliance dates specified in §63.1102(c), the owner or operator must comply with paragraph (e)(7)(i) of this section and also use at least two of the control measures specified in paragraphs (e)(7)(ii) through (v) of this section to minimize coke combustion emissions from the decoking of the radiant tube(s) in each ethylene cracking furnace.

(i) During normal operations, conduct daily inspections of the firebox burners and repair all burners that are impinging on the radiant tube(s) as soon as practical, but not later than 1 calendar day after the flame impingement is found. The owner or operator may delay burner repair beyond 1 calendar day using the procedures specified in paragraphs (e)(7)(i)(A) and (B) of this section provided the repair cannot be completed during normal operations, the burner cannot be shutdown without significantly impacting the furnace heat distribution and firing rate, and action is taken to reduce flame impingement as much as possible during continued operation. An inspection may include, but is not limited to: visual inspection of the radiant tube(s) for localized bright spots (this may be confirmed with a temperature gun), use of luminescent powders injected into the burner to illuminate the flame pattern, or identifying continued localized coke build-up that causes short runtimes between decoking cycles. A repair may include, but is not limited to: Taking the burner out of service, replacing the burner, adjusting the alignment of the burner, adjusting burner configuration, making burner air corrections, repairing a malfunction of the fuel liquid removal equipment, or adding insulation around the radiant tube(s).

(A) If a shutdown for repair would cause greater emissions than the potential emissions from delaying repair, repair must be completed following the next planned decoking operation (and before returning the ethylene cracking furnace back to normal operations) or during the next ethylene cracking furnace complete shutdown (when the ethylene cracking furnace firebox is taken completely off-line), whichever is earlier.

(B) If a shutdown for repair would cause lower emissions than the potential emissions from delaying repair, then shutdown of the ethylene cracking furnace must immediately commence and the repair must be completed before returning the ethylene cracking furnace back to normal operations.

(ii) During decoking operations, beginning before the expected end of the air-in decoke time, continuously monitor (or use a gas detection tube or equivalent sample technique every three hours to monitor) the CO_2 concentration in the combined decoke effluent downstream of the last component being decoked for an indication that the coke combustion in the ethylene cracking furnace radiant tube(s) is complete. The owner or operator must immediately initiate procedures to stop the coke combustion once the CO_2 concentration at the outlet consistently reaches a level that indicates combustion of coke is complete and site decoke completion assurance procedures have been concluded.

(iii) During decoking operations, continuously monitor the temperature at the radiant tube(s) outlet when air is being introduced to ensure the coke combustion occurring inside the radiant tube(s) is not so aggressive (*i.e.,* too hot) that it damages either the radiant tube(s) or ethylene cracking furnace isolation valve(s). The owner or operator must immediately initiate procedures to reduce the temperature at the radiant tube(s) outlet once the temperature reaches a level that indicates combustion of coke inside the radiant tube(s) is too aggressive.

(iv) After decoking, but before returning the ethylene cracking furnace back to normal operations, verify that decoke air is no longer being added.

(v) After decoking, but before returning the ethylene cracking furnace back to normal operations and/or during normal operations, inject materials into the steam or feed to reduce coke formation inside the radiant tube(s) during normal operation.

(8) *Ethylene cracking furnace isolation valve inspections.* Beginning no later than the compliance dates specified in §63.1102(c), the owner or operator must conduct ethylene cracking furnace isolation valve inspections as specified in paragraphs (e)(8)(i) and (ii) of this section.

(i) Prior to decoking operation, inspect the applicable ethylene cracking furnace isolation valve(s) to confirm that the radiant tube(s) being decoked is completely isolated from the ethylene production process so that no emissions generated from decoking operations are sent to the ethylene production process. If poor isolation is identified, then the owner or operator must rectify the isolation issue prior to continuing decoking operations to prevent leaks into the ethylene production process.

(ii) Prior to returning the ethylene cracking furnace to normal operations after a decoking operation, inspect the applicable ethylene cracking furnace isolation valve(s) to confirm that the radiant tube(s) that was decoked is completely isolated from the decoking pot or furnace firebox such that no emissions are sent from the radiant tube(s) to the decoking pot or furnace firebox once the ethylene cracking furnace returns to normal operation. If poor isolation is identified, then the owner or operator must rectify the isolation issue prior to continuing normal operations to prevent product from escaping to the atmosphere through the decoking pot or furnace firebox.

(9) *Startup, shutdown, and malfunction referenced provisions.* Beginning no later than the compliance dates specified in §63.1102(c), the referenced provisions specified in paragraphs (e)(9)(i) through (xx) of this section do not apply when demonstrating compliance with paragraph (e)(3) of this section.

(i) The second sentence of §63.181(d)(5)(i) of subpart H.

(ii) The second sentence of §63.983(a)(5) of subpart SS.

(iii) The phrase “except during periods of start-up, shutdown and malfunction as specified in the referencing subpart” in §63.984(a) of subpart SS.

(iv) The phrase “except during periods of start-up, shutdown and malfunction as specified in the referencing subpart” in §63.985(a) of subpart SS.

(v) The phrase “other than start-ups, shutdowns, or malfunctions” in §63.994(c)(1)(ii)(D) of subpart SS.

(vi) Section 63.996(c)(2)(ii) of subpart SS.

(vii) The last sentence of §63.997(e)(1)(i) of subpart SS.

(viii) Section 63.998(b)(2)(iii) of subpart SS.

(ix) The phrase “other than periods of startups, shutdowns, and malfunctions” from §63.998(b)(5)(i)(A) of subpart SS.

(x) The phrase “other than a start-up, shutdown, or malfunction” from §63.998(b)(5)(i)(B)(3) of subpart SS.

(xi) The phrase “other than periods of startups, shutdowns, and malfunctions” from §63.998(b)(5)(i)(C) of subpart SS.

(xii) The phrase “other than a start-up, shutdown, or malfunction” from §63.998(b)(5)(ii)(C) of subpart SS.

(xiii) The phrase “except as provided in paragraphs (b)(6)(i)(A) and (B) of this section” from §63.998(b)(6)(i) of subpart SS.

(xiv) The second sentence of §63.998(b)(6)(ii) of subpart SS.

(xv) Section 63.998(c)(1)(ii)(D) through (G) of subpart SS.

(xvi) Section 63.998(d)(3) of subpart SS.

(xvii) The phrase “may be included as part of the startup, shutdown, and malfunction plan, as required by the referencing subpart for the source, or” from §63.1024(f)(4)(i) of subpart UU.

(xviii) The phrase “(except periods of startup, shutdown, or malfunction)” from §63.1026(e)(1)(ii)(A) of subpart UU.

(xix) The phrase "(except periods of startup, shutdown, or malfunction)" from §63.1028(e)(1)(i)(A) of subpart UU.

(xx) The phrase "(except periods of startup, shutdown, or malfunction)" from §63.1031(b)(1) of subpart UU.

(10) *Storage vessel degassing.* Beginning no later than the compliance dates specified in §63.1102(c), for each storage vessel subject to paragraph (b) or (c) of Table 7 to §63.1103(e), the owner or operator must comply with paragraphs (e)(10)(i) through (iii) of this section during storage vessel shutdown operations (*i.e.,* emptying and degassing of a storage vessel) until the vapor space concentration in the storage vessel is less than 10 percent of the LEL. The owner or operator must determine the LEL using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

(i) Remove liquids from the storage vessel as much as practicable;

(ii) Comply with one of the following:

(A) Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to a flare and meet the requirements of §63.983 and paragraphs (e)(4) and (9) of this section.

(B) Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of non-flare control devices and meet the requirements specified in §63.982(c)(1) and paragraph (e)(9) of this section.

(C) Reduce emissions of total organic HAP by 98 weight-percent by routing emissions to a fuel gas system or process and meet the requirements specified in §63.982(d) and paragraph (e)(9) of this section.

(iii) Maintain records necessary to demonstrate compliance with the requirements in §63.1108(a)(4)(ii) including, if appropriate, records of existing standard site procedures used to empty and degas (deinventory) equipment for safety purposes.

TABLE 7 TO §63.1103(E)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ETHYLENE PRODUCTION EXISTING OR NEW AFFECTED SOURCE?

If you own or operate . . .	And if . . .	Then you must . . .
(a) A storage vessel (as defined in §63.1101) that stores liquid	(1) The maximum true vapor pressure of total organic HAP is ≥3.4 kilopascals but <76.6 kilopascals; and the capacity of the	(i) Fill the vessel through a submerged pipe; or (ii) Comply with the requirements for storage vessels with capacities ≥95 cubic meters.

containing organic HAP	vessel is ≥4 cubic meters but <95 cubic meters	
(b) A storage vessel (as defined in §63.1101) that stores liquid containing organic HAP	(1) The maximum true vapor pressure of total organic HAP is ≥3.4 kilopascals but <76.6 kilopascals; and the capacity of the vessel is ≥95 cubic meters	(i) Except as specified in paragraph (b)(1)(iii) of this table, comply with the requirements of subpart WW of this part; or (ii) Except as specified in paragraph (b)(1)(iii) of this table, reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of control devices and meet the requirements of §63.982(a)(1). (iii) Beginning no later than the compliance dates specified in §63.1102(c), comply with paragraph (b)(1)(iii)(A), (B), (C), or (D) of this table, and (e)(10) of this section. (A) Comply with the requirements of subpart WW of this part; or (B) Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to a flare and meet the requirements of §63.983 and paragraphs (e)(4) and (9) of this section; or (C) Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of non-flare control devices and meet the requirements specified in §63.982(c)(1) and (e)(9) of this section; or (D) Reduce emissions of total organic HAP by 98 weight-percent by routing emissions to a fuel gas system[(a)] or process and meet the requirements specified in §63.982(d) and (e)(9) of this section.
(c) A storage vessel (as defined in §63.1101) that stores liquid containing organic HAP	(1) The maximum true vapor pressure of total organic HAP is ≥76.6 kilopascals	(i) Except as specified in paragraph (c)(1)(ii) of this table, reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of control devices and meet the

		requirements of §63.982(a)(1). (ii) Beginning no later than the compliance dates specified in §63.1102(c), comply with paragraph (c)(1)(ii)(A), (B), or (C) of this table, and (e)(10) of this section. (A) Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to a flare and meet the requirements of §63.983 and paragraphs (e)(4) and (9) of this section; or (B) Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of non-flare control devices and meet the requirements specified in §63.982(c)(1) and (e)(9) of this section; or (C) Reduce emissions of total organic HAP by 98 weight-percent by routing emissions to a fuel gas system[(a)] or process and meet the requirements specified in §63.982(d) and (e)(9) of this section.
(d) An ethylene process vent (as defined in paragraph (e)(2) of this section)	(1) The process vent is at an existing source and the vent stream has a flow rate ≥0.011 scmm and a total organic HAP concentration ≥50 parts per million by volume on a dry basis; or the process vent is at a new source and the vent stream has a flow rate ≥0.008 scmm and a total organic HAP concentration ≥30 parts per million by volume on a dry basis	(i) Except as specified in paragraph (d)(1)(ii) of this table, reduce emissions of organic HAP by 98 weight-percent; or reduce organic HAP or TOC to a concentration of 20 parts per million by volume on a dry basis corrected to 3% oxygen; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices and meet the requirements specified in §63.982(b) and (c)(2). (ii) Beginning no later than the compliance dates specified in §63.1102(c), comply with the maintenance vent requirements specified in paragraph (e)(5) of this section and either paragraph (d)(1)(ii)(A) or (B) of this table. (A) Reduce emissions of organic HAP by 98 weight-percent; or reduce organic

		HAP or TOC to a concentration of 20 parts per million by volume on a dry basis corrected to 3-percent oxygen; whichever is less stringent, by venting emissions through a closed vent system to a flare and meet the requirements of §63.983 and paragraphs (e)(4) and (9) of this section; or (B) Reduce emissions of organic HAP by 98 weight-percent; or reduce organic HAP or TOC to a concentration of 20 parts per million by volume on a dry basis corrected to 3-percent oxygen; whichever is less stringent, by venting emissions through a closed vent system to any combination of non-flare control devices and meet the requirements specified in §63.982(c)(2) and (e)(9) of this section.
(e) A transfer rack (as defined in paragraph (e)(2) of this section)	(1) Materials loaded have a true vapor pressure of total organic HAP ≥3.4 kilopascals and ≥76 cubic meters per day (averaged over any consecutive 30-day period) of HAP-containing material is loaded	(i) Reduce emissions of organic HAP by 98 weight-percent; or reduce organic HAP or TOC to a concentration of 20 parts per million by volume on a dry basis corrected to 3-percent oxygen; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices as specified in §63.1105 and meet the requirements specified in paragraph (e)(9) of this section.; or
		(ii) Install process piping designed to collect the HAP-containing vapors displaced from tank trucks or railcars during loading and to route it to a process, a fuel gas system, or a vapor balance system, as specified in §63.1105 and meet the requirements specified in paragraph (e)(9) of this section.[(a)]
(f) Equipment (as defined in §63.1101) that contains or contacts organic HAP	(1) The equipment contains or contacts ≥5 weight-percent organic HAP; and the equipment is not in vacuum service	(i) Except as specified in paragraph (f)(1)(ii) of this table, comply with the requirements of subpart UU of this part. (ii) Beginning no later than the compliance dates specified in §63.1102(c), comply with the

		requirements of paragraph (e)(9) of this section and subpart UU of this part, except instead of complying with the pressure relief device requirements of §63.1030 of subpart UU, meet the requirements of §63.1107(h), and in lieu of the flare requirement of §63.1034(b)(2)(iii), comply with the requirements specified in paragraph (e)(4) of this section.[(a)]
(g) Processes that generate waste (as defined in paragraph (e)(2) of this section	(1) The waste stream contains any of the following HAP: Benzene, cumene, ethyl benzene, hexane, naphthalene, styrene, toluene, o-xylene, m-xylene, p-xylene, or 1,3-butadiene	Comply with the waste requirements of subpart XX of this part. For ethylene production unit waste stream requirements, terms have the meanings specified in subpart XX.
(h) A heat exchange system (as defined in §63.1082(b))		Comply with the heat exchange system requirements of subpart XX of this part.
(i) A closed vent system that contains one or more bypass lines	(1) The bypass line could divert a vent stream directly to the atmosphere or to a control device not meeting the requirements in this table	Beginning no later than the compliance dates specified in §63.1102(c), comply with the requirements specified in paragraphs (e)(6) and (9) of this section.
(j) A decoking operation associated with an ethylene cracking furnace		Beginning no later than the compliance dates specified in §63.1102(c), comply with the requirements specified in paragraphs (e)(7) and (8) of this section.

[(a)] Beginning no later than the compliance dates specified in §63.1102(c), any flare using fuel gas from a fuel gas system, of which 50 percent or more of the fuel gas is derived from an ethylene production unit as determined on an annual average basis, must be in compliance with paragraph (e)(4) of this section.

(f) *Carbon black production applicability, definitions, and requirements—*
(1) *Applicability*—(i) *Affected source.* For the carbon black production source category (as defined in paragraph (f)(2) of this section), the affected source shall comprise each carbon black production process unit located at a major source, as defined in section 112(a) of the Act. The affected source for the carbon black production source category includes all waste management units, maintenance wastewater, and equipment components that contain or contact HAP that are associated with the carbon black production process unit.

(ii) *Compliance schedule.* The compliance schedule for the carbon black production and acetylene decomposition carbon black production affected sources, as defined in paragraph (f)(1)(i) of this section, is specified in §63.1102.

(2) *Definitions. Carbon black production* means the production of carbon black by either the furnace, thermal, acetylene decomposition, or lampblack processes.

Carbon black production unit means the equipment assembled and connected by hard-piping or duct work to process raw materials to manufacture, store, and transport a carbon black product. For the purposes of this subpart, a carbon black production process unit includes reactors and associated operations; associated recovery devices; and any feed, intermediate and product storage vessels, product transfer racks, and connected ducts and piping. A carbon black production process unit includes pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, and control devices or systems.

Dryer means a rotary-kiln dryer that is heated externally and is used to dry wet pellets in the wet pelletization process.

Main unit filter means the filter that separates the carbon black from the tailgas.

Process filter means the filter that separates the carbon black from the conveying air.

Purge filter means the filter that separates the carbon black from the dryer exhaust.

(3) *Requirements.* (i) Table 8 to this section specifies the carbon black production standards applicability for existing and new sources. Applicability assessment procedures and methods are specified in §63.1104. An owner or operator of an affected source is not required to perform applicability tests or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Procedures for approval of alternative means of emission limitations are specified in §63.1113.

(ii) Pressure relief devices used to protect against overpressure in the case of catastrophic failure of your process filter system are exempt from the closed vent system inspection requirements of §63.983(b) and (c). Exempt pressure relief devices must be designated and identified in your Notification of Compliance Status report.

TABLE 8 TO §63.1103(f)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A CARBON BLACK PRODUCTION EXISTING OR NEW AFFECTED SOURCE?

If you own or operate . . .	And if . . .	Then you must . . .

(a) A carbon black production main unit filter process vent	(1) The HAP concentration of the emission stream is equal to or greater than 260 parts per million by volume[a]	(i) Reduce emissions of HAP by using a flare meeting the requirements of subpart SS of this part; or (ii) Reduce emissions of total HAP by 98 weight-percent or to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of §63.982(a)(2).

[a]The weight-percent organic HAP is determined according to the procedures specified in §63.1104(e).

(g) *Cyanide chemicals manufacturing applicability, definitions, and requirements*—(1) *Applicability*—(i) *Affected source.* For the cyanide chemicals manufacturing source category, the affected source shall include each cyanide chemicals manufacturing process unit located at a major source, as defined in section 112(a) of the Act. The affected source shall also include all waste management units, maintenance wastewater, and equipment (as defined in §63.1101) that contain or contact cyanide chemicals that are associated with the cyanide chemicals manufacturing process unit.

(ii) *Compliance schedule.* The compliance schedule for the affected source, as defined in paragraph (g)(1)(i) of this section, is specified in §63.1102.

(2) *Definitions.*

Andrussow process unit means a process unit that produces hydrogen cyanide by reacting methane and ammonia in the presence of oxygen over a platinum/rhodium catalyst. An Andrussow process unit begins at the point at which the raw materials are stored and ends at the point at which refined hydrogen cyanide is reacted as a raw material in a downstream process, burned on-site as fuel in a boiler or industrial furnace, or is shipped offsite. If raw hydrogen cyanide from the reactor is reacted with sodium hydroxide to form sodium cyanide prior to the refining process, the unit operation where sodium cyanide is formed is considered to be part of the Andrussow process unit.

Blausaure Methane Anlage (BMA) process unit means a process unit that produces hydrogen cyanide by reacting methane and ammonia over a platinum catalyst. A BMA process unit begins at the point at which raw materials are stored and ends at the point at which refined hydrogen cyanide is reacted as a raw material in a downstream process, burned on-site as a fuel in a boiler or industrial furnace, or is shipped offsite. If raw hydrogen cyanide from the reactor is reacted with sodium hydroxide to form sodium cyanide prior to the refining process, the unit operation where sodium cyanide is formed is considered to be part of the BMA process unit.

Byproduct means a chemical that is produced coincidentally during the production of another chemical.

Cyanide chemicals manufacturing process unit or *CCMPU* means the equipment assembled and connected by hard-piping or duct work to process raw materials to manufacture, store, and transport a cyanide chemicals product. A cyanide chemicals manufacturing process unit shall be limited to any one of the following: an Andrussow process unit, a BMA process unit, a sodium cyanide process unit, or a Sohio hydrogen cyanide process unit. For the purpose of this subpart, a cyanide chemicals manufacturing process unit includes reactors and associated unit operations; associated recovery devices; and any feed, intermediate and product storage vessels, product transfer racks, and connected ducts and piping. A cyanide chemicals manufacturing process unit includes pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, and control devices or systems.

Cyanide chemicals product means either hydrogen cyanide, potassium cyanide, or sodium cyanide which is manufactured as the intended product of a CCMPU or a byproduct of the Sohio process. Other hydrogen cyanide, potassium cyanide, or sodium cyanide byproducts, impurities, wastes, and trace contaminants are not considered to be cyanide chemicals products.

Dry-end process vent means a process vent originating from the drum filter or any other unit operation in the dry end of a sodium cyanide manufacturing process unit. For the purposes of this subpart, the dry end of the sodium cyanide process unit begins in the unit operation where water is removed from the sodium cyanide, usually in the drum filter, and ends when the sodium cyanide is used as a raw material in a downstream process, or is shipped offsite.

Organic HAP means, for purposes of applicability of the requirements of this subpart, all hydrogen cyanide compounds.

Raw hydrogen cyanide means hydrogen cyanide that has not been through the refining process. Raw hydrogen cyanide usually has a hydrogen cyanide concentration less than 10 percent.

Refined hydrogen cyanide means hydrogen cyanide that has been through the refining process. Refined hydrogen cyanide usually has a hydrogen cyanide concentration greater than 99 percent.

Refining process means the collection of equipment in a cyanide chemicals manufacturing processing unit used to concentrate raw hydrogen cyanide from a concentration around 10 percent or less to refined hydrogen cyanide at a concentration greater than 99 percent.

Sodium cyanide process unit means a process unit that produces sodium cyanide by reacting hydrogen cyanide and sodium hydroxide via the neutralization, or wet, process. A sodium cyanide process unit begins at the unit operation where refined hydrogen cyanide is reacted with sodium hydroxide and ends at the point the solid sodium cyanide product is shipped offsite or used as a raw material in a downstream process. If raw hydrogen cyanide is reacted with sodium hydroxide to form sodium cyanide prior to the hydrogen cyanide refining process, the unit operation where sodium cyanide is formed is not considered to be part of the sodium cyanide process unit. For this type of process, the sodium cyanide process unit begins at the point

that the aqueous sodium cyanide stream leaves the unit operation where the sodium cyanide is formed. In situations where potassium hydroxide is substituted for sodium hydroxide to produce potassium cyanide, the process unit is still considered a sodium cyanide process unit.

Sohio hydrogen cyanide process unit means a process unit that produces hydrogen cyanide as a byproduct of the acrylonitrile production process when acrylonitrile is manufactured using the Sohio process. A Sohio hydrogen cyanide process unit begins at the point the hydrogen cyanide leaves the unit operation where the hydrogen cyanide is separated from the acrylonitrile (usually referred to as the heads column). The Sohio hydrogen cyanide process unit ends at the point refined hydrogen cyanide is reacted as a raw material in a downstream process, burned on-site as fuel in a boiler or industrial furnace, or is shipped offsite. If raw hydrogen cyanide is reacted with sodium hydroxide to form sodium cyanide prior to the refining process, the unit operation where sodium cyanide is formed is considered to be part of the Sohio hydrogen cyanide process unit.

Wet-end process vent means a process vent originating from the reactor, crystallizer, or any other unit operation in the wet end of the sodium cyanide process unit. For the purposes of this subpart, the wet end of the sodium cyanide process unit begins at the point at which the raw materials are stored and ends just prior to the unit operation where water is removed from the sodium cyanide, usually in the drum filter. Wastewater streams containing discarded wastewater from the sodium cyanide production process are not considered to be part of the wet-end sodium cyanide process. Discarded wastewater that is no longer used in the production process is considered to be process and/or maintenance wastewater. Vents from process and maintenance wastewater operations are not wet-end process vents.

(3) *Requirements.* Table 9 to this section specifies the cyanide chemicals manufacturing standards applicable to existing and new sources. Applicability assessment procedures and methods are specified in §63.1104. An owner or operator of an affected source is not required to perform applicability tests or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Before [DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], minimization of emissions from startup, shutdown, and malfunctions must be addressed in the startup, shutdown, and malfunction plan required by §63.1111; the plan must also establish reporting and recordkeeping of such events. A startup, shutdown, and malfunction plan is not required on and after [DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER] and the requirements specified in § 63.1111 no longer apply; however, for historical compliance purposes, a copy of the plan must be retained and available on-site for five years after [DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]. Procedures for approval of alternative means of emission limitations are specified in §63.1113.

(4) *Determination of overall HAP emission reduction for a process unit.* (i) The owner or operator shall determine the overall HAP emission reduction for process vents in a process unit using Equation 1 of this section. The overall organic HAP emission reduction shall be determined for all process vents in the process unit.

$$RED_{CCMPU} = \left(\frac{\sum_{i=1}^{n} \left(E_{unc,i} \right) \left(\frac{R_i}{100} \right)}{\sum_{i=1}^{n} \left(E_{unc,i} \right) + \sum_{j=1}^{m} \left(E_{unc,j} \right)} \right) * 100 \qquad \text{[Equation 1]}$$

Where:

RED_{CCMPU} = Overall HAP emission reduction for the group of process vents in the CCMPU, percent.

E_{unc},i = Uncontrolled HAP emissions from process vent i that is controlled by using a combustion, recovery, or recapture device, kg/yr.

n = Number of process vents in the process unit that are controlled by using a combustion, recovery, or recapture device.

R_i = Control efficiency of the combustion, recovery, or recapture device used to control HAP emissions from vent i, determined in accordance with paragraph (g)(4)(ii) of this section.

E_{unc},j = Uncontrolled HAP emissions from process vent j that is not controlled by using a combustion, recovery, or recapture device, kg/yr.

m = Number of process vents in the process unit that are not controlled by using a combustion, recovery, or recapture device.

(ii) The control efficiency shall be assigned as specified in paragraph (g)(4)(ii) (A) or (B) of this section.

(A) If the process vent is controlled using a flare in accordance with the provisions of §63.987, or a combustion device in accordance with the provisions of §63.988(b)(2), for which a performance test has not been conducted, the control efficiency shall be assumed to be 98 weight-percent. For hydrogen-fueled flares, an owner or operator may use a control efficiency greater than 98 weight-percent if they can provide engineering calculations and supporting information demonstrating a greater control efficiency.

(B) If the process vent is controlled using a combustion, recovery, or recapture device for which a performance test has been conducted in accordance with the provisions of §63.997, the control efficiency shall be the efficiency determined by the performance test.

(5) *Source category specific modifications to testing procedures.* (i) When identifying equipment subject to any equipment leak requirements, an owner or operator is allowed to designate specific components of such equipment as never being safe to monitor with their Notification of Compliance Status report and periodic compliance reports. In order for an owner or operator to designate such equipment as never being safe to monitor, they must certify that monitoring such equipment at any time the CCMPU is operating is never safe (e.g., monitoring this equipment would present an unreasonable hazard or preclude testing personnel from meeting

emergency evacuation requirements). If it is demonstrated to the Administrator's satisfaction that equipment designated by the owner or operator as never safe to monitor is appropriately designated, an owner or operator will not be required to monitor such equipment.

(ii) For process vent hydrogen cyanide emissions that are vented to a control device other than a flare during startup, shutdown, and malfunction, the design evaluation must include documentation that the control device being used achieves the required control efficiency during the reasonably expected maximum flow rate and emission rate during startup, shutdown, and malfunction.

(iii) If a facility controls process vent emissions during startup, shutdown, and malfunction by using a flare, an owner or operator is not required to perform flow rate and heat content testing as specified in §63.987(b)(3)(ii) and (iii). In lieu of performing flow rate and heat content testing, an owner or operator is required to submit engineering calculations that substantiate that a flare meets the applicable heat content or flow rates, or provide data from a compliance assessment that the flare is in compliance under worst case conditions (e.g., maximum operating conditions).

(iv) If flare velocity and net heating value testing, as specified in §63.11(b)(6)(ii) and (b)(7)(i), would create an unreasonable hazard for testing personnel, an owner or operator is allowed to submit engineering calculations that substantiate vent stream velocity and heat content of a flare in lieu of test data. These calculations are required to be submitted with the facilities' compliance test notification report for approval by the Administrator.

(v) The data from any performance test method used to measure HCN concentrations must be validated using EPA Method 301 (40 CFR part 63, appendix A).

TABLE 9 TO §63.1103(g)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A CYANIDE CHEMICALS MANUFACTURING EXISTING OR NEW AFFECTED SOURCE?

If you own or operate . . .	And if . . .	Then you must . . .
(a) A storage vessel	(1) The storage vessel contains refined hydrogen cyanide	(i) Reduce emissions of hydrogen cyanide by using a flare meeting the requirements of §63.982(b); or (ii) Reduce emissions of hydrogen cyanide by 98 weight-percent, or to a concentration of 20 parts per million by volume, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of §63.982(c)(1) or (d).

(b) A process vent from a continuous unit operations in an Andrussow, BMA, or Sohio hydrogen cyanide process unit		(i) Reduce overall annual emissions of total HAP from the collection of process vents from continuous unit operations in the process by 98 weight-percent in accordance with paragraph (g)(4) of this section. Any control device used to reduce emissions from one or more process vents from continuous unit operations in the process unit must meet the applicable requirements specified in §63.982(a)(2); or
		(ii) Reduce emissions of total HAP from each process vent from a continuous unit operation in the process unit by using a flare meeting the requirements specified in §63.982(b); or
		(iii) Reduce emissions of total HAP from each process vent from a continuous unit operation in the process unit by 98 weight-percent or to a concentration of 20 parts per million by volume, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of §63.982(c)(2) or (d).
(c) One or more wet end process vents, as defined in paragraph (g)(2) of this section, in a sodium cyanide process unit		(i) Reduce overall annual emissions of total HAP from the collection of process vents from continuous unit operations in the process unit by 98 weight-percent in accordance with paragraph (g)(4) of this section. Any control device used to reduce emissions from one or more process vents from continuous unit operations in the process unit must meet the applicable requirements of §63.982(a)(2); or

		(ii) Reduce emissions of total HAP from each wet-end process vent in the process unit by using a flare meeting the requirements of §63.982(b); or
		(iii) Reduce emissions of total HAP from each wet-end process vent by 98 weight-percent, or to a concentration of 20 parts per million by volume, by venting emissions through a closed vent system and any combination of control devices meeting the requirements of §63.982(c)(2) or (d).
(d) One or more dry end process vents, as defined in paragraph (g)(2) of this section, in a sodium cyanide process unit		(i) Reduce overall annual emissions of sodium cyanide from the collection of process vents from continuous unit operations in the process unit by 98 weight-percent in accordance with paragraph (g)(4) of this section. Any control device used to reduce emissions from one or more process vents from continuous unit operations in the process unit must meet the applicable requirements of §63.982(a)(2); or
		(ii) Reduce emissions of sodium cyanide from each dry-end process vent in the process unit by 98 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of §63.982(c)(2) or (d).
(e) A transfer rack	(1) The transfer rack is used to load refined hydrogen cyanide into tank trucks and/or rail cars	(i) Reduce emissions of hydrogen cyanide by using a flare meeting the requirements of §63.982(b); or (ii) Reduce emissions of hydrogen cyanide by 98 weight-percent, or to a concentration of 20 parts per million by volume, whichever is

		less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements specified in §63.982(c)(1), (c)(2), or (d).
(f) A new cyanide chemicals manufacturing process unit that generates process wastewater	(1) The process wastewater is from HCN purification, ammonia purification, or flare blowdown	(i) Achieve a combined removal and control of HAP from wastewater of 93 weight-percent; and (ii) Beginning no later than the compliance dates specified in §63.1102(d), waste management units upstream of an open or closed biological treatment process shall meet the requirements of §63.133 through §63.137 of subpart G of this part, as applicable.
(g) An existing cyanide chemicals manufacturing process unit that generates process wastewater	(1) The process wastewater is from HCN purification, ammonia purification, or flare blowdown; and (2) the total annual average concentration of Table 9 of 40 CFR part 63, subpart G compounds (Table 9 compounds) and cyanide compounds are greater or equal to 10,000 ppmw at any flow rate, or the total annual average concentration of Table 9 compounds and cyanide compounds are greater or equal to 1,000 ppmw, and the annual average flow rate is greater or equal to 10 liters per minute, according to the procedures in §63.144(a)	(i) Beginning no later than the compliance dates specified in §63.1102(d), comply with the requirements of §63.138(a)(1).
(h) A cyanide chemicals manufacturing process unit that generates maintenance wastewater	(1) The maintenance wastewater contains hydrogen cyanide or acetonitrile	(i) Comply with the requirements of §63.1106(b).
(i) An item of equipment listed in §63.1106(c)(1) that transports or contains	(1) The item of equipment meets the criteria specified in §63.1106(c)(1) through (3) and either (c)(4)(i) or (ii)	(i) Comply with the requirements in Table 35 of subpart G of this part.

wastewater liquid streams from a cyanide chemicals manufacturing process unit		
(j) Equipment, as defined under §63.1101	(1) The equipment contains or contacts hydrogen cyanide and operates equal to or greater than 300 hours per year	(i) Comply with either subpart TT or UU of this part, and paragraph (g)(5) of this section, with the exception that open-ended lines that contain or contact hydrogen cyanide are exempt from any requirements to install a cap, plug, blind flange, or second valve to be capped.

(6) *Startup, shutdown, and malfunction referenced provisions.* Beginning no later than the compliance dates specified in §63.1102(d), the referenced provisions specified in paragraphs (g)(6)(i) through (xxiii) of this section do not apply when demonstrating compliance with paragraph (g)(3) of this section.

(i) The second/last sentence of §63.983(a)(5) (requirements for pressure relief devices in a transfer rack's closed vent system requirements) of subpart SS: "Pressure relief devices needed for safety purposes are not subject to this paragraph."

(ii) The phrase "except during periods of start-up, shutdown and malfunction as specified in the referencing subpart" in §63.984(a) of subpart SS (equipment and operating requirements for fuel gas systems and processes requirements).

(iii) The phrase "except during periods of start-up, shutdown and malfunction as specified in the referencing subpart" in §63.985(a) of subpart SS (nonflare control device equipment and operating requirements).

(iv) The phrase "other than start-ups, shutdowns, or malfunctions" in §63.994(c)(1)(ii)(D) of subpart SS (halogen scrubber and other halogen reduction device monitoring requirements).

(v) Section 63.996(c)(2)(ii) of subpart SS (operation and maintenance of continuous parameter monitoring systems)" "(ii) If under the referencing subpart, an owner or operator has developed a start-up, shutdown, and malfunction plan, the plan is followed, and the CPMS is repaired immediately, this action shall be recorded as specified in § 63.998(c)(1)(ii)(E)."

(vi) The last sentence of §63.997(e)(1)(i) (performance test procedures) of subpart SS (general procedures for continuous unit operations): "Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test."

(vii) Section 63.998(b)(2)(iii) (excluded data) of subpart SS: "(iii) Startups, shutdowns, and malfunctions, if the owner or operator operates the source during such periods in accordance with § 63.1111(a) and maintains the records specified in paragraph (d)(3) of this section.

(viii) The phrase "other than periods of startups, shutdowns, and malfunctions" from §63.998(b)(5)(i)(A) (alternative recordkeeping) of subpart SS.

(ix) The phrase "other than a start-up, shutdown, or malfunction" from §63.998(b)(5)(i)(B)(3) (alternate recordkeeping) of subpart SS.

(x) The phrase "other than periods of startups, shutdowns, and malfunctions" from §63.998(b)(5)(i)(C) (alternate recordkeeping) of subpart SS.

(xi) The phrase "other than a start-up, shutdown, or malfunction" from §63.998(b)(5)(ii)(C) (alternate recordkeeping) of subpart SS.

(xii) The phrase "except as provided in paragraphs (b)(6)(i)(A) and (B) of this section" from §63.998(b)(6)(i) (alternative recordkeeping) of subpart SS.

(xiii) The second sentence of §63.998(b)(6)(ii) (alternative recordkeeping) of subpart SS. "If a source has developed a startup, shutdown and malfunction plan, and a monitored parameter is outside its established range or monitoring data are not collected during periods of startup, shutdown, or malfunction (and the source is operated during such periods in accordance with §63.1111(a)) or during periods of nonoperation of the process unit or portion thereof (resulting in cessation of the emissions to which monitoring applies), then the excursion is not a violation and, in cases where continuous monitoring is required, the excursion does not count as the excused excursion for determining compliance."

(xiv) Section 63.998(c)(1)(ii)(D) through (G) (nonflare control and recovery device regulated source monitoring records) of subpart SS.

(xv) Section 63.998(d)(3) (regulated source and control equipment start-up, shutdown and malfunction records) of subpart SS.

(xvi)The phrase "may be included as part of the startup, shutdown, and malfunction plan, as required by the referencing subpart for the source, or" from §63.1005(e)(4)(i) (leak repair records written procedures) of subpart.

(xvii) The phrase "(except periods of startup, shutdown, or malfunction)" from §63.1007(e)(1)(ii)(A) (dual mechanical seal system special provisions for pumps) of subpart TT.

(xviii) The phrase "(except periods of startup, shutdown, or malfunction)" from §63.1009(e)(1)(i)(A) (dual mechanical seal system special provisions for agitators) of subpart TT.

(xix) The phrase "(except periods of startup, shutdown, or malfunction)" from §63.1012(b)(1) (compressor seal system standard) of subpart TT.

(xx) The phrase "may be included as part of the startup, shutdown, and malfunction plan, as required by the referencing subpart for the source, or" from §63.1024(f)(4)(i) (leak repair records written procedures) of subpart UU.

(xxi) The phrase "(except periods of startup, shutdown, or malfunction)" from §63.1026(e)(1)(ii)(A) (dual mechanical seal system special provisions for pumps) of subpart UU.

(xxii) The phrase "(except periods of startup, shutdown, or malfunction)" from §63.1028(e)(1)(i)(A) (dual mechanical seal system special provisions for agitators of subpart UU.

(xxiii) The phrase "(except periods of startup, shutdown, or malfunction)" from §63.1031(b)(1) (compressor seal system standard) of subpart UU.

(h) *Spandex production applicability, definitions, and requirements*—(1) *Applicability*—(i) *Affected source.* For the spandex production (as defined in paragraph (h)(2) of this section) source category, the affected source shall comprise all emission points listed in paragraphs (h)(1)(i)(A) through (C) of this section that are associated with a spandex production process unit located at a major source, as defined in section 112(a) of the Act.

(A) All process vents (as defined in §63.1101).

(B) All storage vessels (as defined in §63.1101) that store liquids containing organic HAP.

(C) All spandex fiber spinning lines using a spinning solution having organic HAP.

(ii) *Exceptions.* The emission points listed in paragraphs (h)(1)(ii)(A) and (B) of this section are in the spandex production source category but are not subject to the requirements of paragraph (h)(3) of this section.

(A) Equipment that is located within a spandex production process unit that is subject to this subpart but does not contain organic HAP.

(B) Vessels storing organic liquids that contain organic HAP as impurities.

(C) Emission points listed in paragraphs (h)(1)(i)(A) through (C) of this section that are associated with a dry spinning spandex production process unit.

(iii) *Compliance schedule.* The compliance schedule for affected sources, as defined in paragraph (h)(1)(i) of this section, is specified in paragraph (b) of §63.1102.

(2) *Definitions. Dry spinning* means a fiber-forming process where prepolymer is reacted with a chain-extender to generate polymer prior to spinning; the polymer is dissolved in a solvent and is extruded into a cell of hot gases for fiber formation.

Fiber spinning line means the group of equipment and process vents associated with spandex fiber spinning operations. The fiber spinning line includes the blending and dissolving tanks, spinning solution filters, spinning units, spin bath tanks, and the equipment used downstream of the spin bath to wash, draw, or dry on the wet belt the spun fiber.

Reaction spinning means a fiber-forming process where prepolymer is extruded into a spin bath that contains a chain-extender; the chemical reaction to make polymer occurs simultaneously with extrusion/fiber formation.

Spandex or spandex fiber means a manufactured synthetic fiber in which the fiber-forming substance is a long-chain polymer comprised of at least 85 percent by mass of a segmented polyurethane.

Spandex production means the production of synthetic spandex fibers.

Spandex production process unit means a process unit that is specifically used for the production of synthetic spandex fibers.

(3) *Requirements.* Table 10 to this section specifies the spandex production source category requirements for new and existing sources. An owner or operator must perform the applicability assessment procedures and methods for process vents specified in §63.1104, excluding paragraphs (b)(1), (d), (g), (h), (i), (j), (l)(1), and (n). General compliance, recordkeeping, and reporting requirements are specified in §§63.1108 through 63.1112. Minimization of emissions from startup, shutdown, and malfunctions must be addressed in the startup, shutdown, and malfunction plan required by §63.1111; the plan must also establish reporting and recordkeeping of such events. Procedures for approval of alternate means of emission limitations are specified in §63.1113.

TABLE 10 TO §63.1103(h)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A SPANDEX PRODUCTION PROCESS UNIT AT A NEW OR EXISTING SOURCE?

If you own or operate . . .	And if . . .	Then you must . . .
(a) A storage vessel (as defined in §63.1101) that stores liquid containing organic HAP	(1) The maximum true vapor pressure of the organic HAP is ≥3.4 kilopascals; and the capacity of the vessel is ≥47 cubic meters	(i) Comply with the requirements of subpart WW of this part; or (ii) Reduce emissions of organic HAP by 95 weight-percent by venting emissions in through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in §63.982(a)(1).

(b) A process vent		Reduce emissions of organic HAP by 95 weight-percent, or reduce organic HAP or TOC to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of §63.982(a)(2).
(c) A fiber spinning line		Operate the fiber spinning line such that emissions are captured and vented through a line closed vent system to a control device that complies with the requirements of §63.982(a)(2). If a control device other than a flare is used, HAP emissions must be reduced by 95 weight-percent, or total organic HAP or TOC must be reduced to a concentration of 20 parts per million by volume, whichever is less stringent.

§63.1104 Process vents from continuous unit operations: applicability assessment procedures and methods.

(a) *General.* The provisions of this section provide calculation and measurement methods for criteria that are required by §63.1103 to be used to determine applicability of the control requirements for process vents from continuous unit operations. The owner or operator of a process vent is not required to determine the criteria specified for a process vent that is being controlled (including control by flare) in accordance with the applicable weight-percent, TOC concentration, or organic HAP concentration requirement in §63.1103.

(b) *Sampling sites.* For purposes of determining process vent applicability criteria, the sampling site shall be located as specified in (b)(1) through (4) of this section, as applicable.

(1) *Sampling site location if TRE determination is required.* If the applicability criteria specified in the applicable table of §63.1103 includes a TRE index value, the sampling site for determining volumetric flow rate, regulated organic HAP concentration, total organic HAP or TOC concentration, heating value, and TRE index value, shall be after the final recovery device (if any recovery devices are present) but prior to the inlet of any control device that is present, and prior to release to the atmosphere.

(2) *Sampling site location if TRE determination is not required.* If the applicability criteria specified in the applicable table of §63.1103 does not include a TRE index value, the sampling site for determining volumetric flow rate, regulated organic HAP concentration, total organic HAP or TOC concentration, and any other specified parameter shall be at the exit from the unit operation before any control device.

(3) *Sampling site selection method.* Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling site. No traverse site selection method is needed for process vents smaller than 0.10 meter (0.33 foot) in nominal inside diameter.

(4) *Sampling site when a halogen reduction device is used prior to a combustion device.* An owner or operator using a scrubber to reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour (0.99 pound per hour) prior to a combustion control device in compliance with §63.1103 (as appropriate) shall determine the halogen atom mass emission rate prior to the combustion device according to the procedures in paragraph (i) of this section.

(c) *Applicability assessment requirement.* The TOC or organic HAP concentrations, process vent volumetric flow rates, process vent heating values, process vent TOC or organic HAP emission rates, halogenated process vent determinations, process vent TRE index values, and engineering assessments for process vent control applicability assessment requirements are to be determined during maximum representative operating conditions for the process, except as provided in paragraph (d) of this section, or unless the Administrator specifies or approves alternate operating conditions. For acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, polycarbonate production affected sources, and ethylene production affected sources, operations during periods of malfunction shall not constitute representative conditions for the purpose of an applicability test. For all other affected sources, operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of an applicability test.

(d) *Exceptions.* For a process vent stream that consists of at least one process vent from a batch unit operation manifolded with at least one process vent from a continuous unit operation, the TRE shall be calculated during periods when one or more batch emission episodes are occurring that result in the highest organic HAP emission rate (in the combined vent stream that is being routed to the recovery device) that is achievable during the 6-month period that begins 3 months before and ends 3 months after the TRE calculation, without causing any of the situations described in paragraphs (d)(1) through (3) to occur.

(1) Causing damage to equipment;

(2) Necessitating that the owner or operator make product that does not meet an existing specification for sale to a customer; or

(3) Necessitating that the owner or operator make product in excess of demand.

(e) *TOC or Organic HAP concentration.* The TOC or organic HAP concentrations shall be determined based on paragraph (e)(1), (e)(2), or (k) of this section, or any other method or data that have been validated according to the protocol in Method 301 of appendix A of 40 CFR part 63. For concentrations needed for comparison with the appropriate control applicability concentrations specified in §63.1103, TOC or organic HAP concentration shall be determined based on paragraph (e)(1), (e)(2), or (k) of this section or any other method or data that has been validated according to the protocol in method 301 of appendix A of this part. The owner or operator shall record the TOC or organic HAP concentration as specified in paragraph (l)(3) of this section.

(1) *Method 18.* The procedures specified in paragraph (e)(1)(i) and (ii) of this section shall be used to calculate parts per million by volume concentration using method 18 of 40 CFR part 60, appendix A:

(i) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15-minute intervals during the run.

(ii) The concentration of either TOC (minus methane and ethane) or regulated organic HAP emissions shall be calculated according to paragraph (e)(1)(ii)(A) or (B) of this section, as applicable.

(A) The TOC concentration (C_{TOC}) is the sum of the concentrations of the individual components and shall be computed for each run using Equation 1:

$$C_{TOC} = \frac{\sum_{i=1}^{x}\left(\sum_{j=1}^{n} C_{ji}\right)}{x} \qquad [Eq.\ 1]$$

Where:

C_{TOC} = Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.

C_{ji} = Concentration of sample component j of the sample i, dry basis, parts per million by volume.

n = Number of components in the sample.

x = Number of samples in the sample run.

(B) The regulated organic HAP or total organic HAP concentration (C_{HAP}) shall be computed according to Equation 1 in paragraph (e)(1)(ii)(A) of this section except that only the regulated or total organic HAP species shall be summed, as appropriate.

(2) *Method 25A.* The procedures specified in paragraphs (e)(2)(i) through (vi) of this section shall be used to calculate parts per million by volume concentration using Method 25A of 40 CFR part 60, appendix A.

(i) Method 25A of 40 CFR part 60, appendix A shall be used only if a single organic HAP compound comprises greater than 50 percent of total organic HAP or TOC, by volume, in the process vent.

(ii) The process vent composition may be determined by either process knowledge, test data collected using an appropriate Environmental Protection Agency method or a method or data validated according to the protocol in Method 301 of appendix A of part 63. Examples of information that could constitute process knowledge include calculations based on material

balances, process stoichiometry, or previous test results provided the results are still relevant to the current process vent conditions.

(iii) The organic compound used as the calibration gas for Method 25A of 40 CFR part 60, appendix A shall be the single organic HAP compound present at greater than 50 percent of the total organic HAP or TOC by volume.

(iv) The span value for Method 25A of 40 CFR part 60, appendix A shall be equal to the appropriate control applicability concentration value specified in the applicable table(s) presented in §63.1103 of this subpart.

(v) Use of Method 25A of 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(vi) The owner or operator shall demonstrate that the concentration of TOC including methane and ethane measured by Method 25A of 40 CFR part 60, appendix A is below one-half the appropriate control applicability concentration specified in the applicable table for a subject source category in §63.1103 in order to qualify for a low organic HAP concentration exclusion.

(f) *Volumetric flow rate.* The process vent volumetric flow rate (Q_S), in standard cubic meters per minute at 20 °C, shall be determined as specified in paragraph (f)(1) or (2) of this section and shall be recorded as specified in §63.1109(d).

(1) Use Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, as appropriate. If the process vent tested passes through a final steam jet ejector and is not condensed, the stream volumetric flow shall be corrected to 2.3 percent moisture; or

(2) The engineering assessment procedures in paragraph (k) of this section can be used for determining volumetric flow rates.

(g) *Heating value.* The net heating value shall be determined as specified in paragraphs (g)(1) and (2) of this section, or by using the engineering assessment procedures in paragraph (k) of this section.

(1) The net heating value of the process vent shall be calculated using Equation 2:

$$H_T = K_1\left(\sum_{j=1}^{n} D_j H_j\right) \qquad [Eq.\ 2]$$

Where:

H_T = Net heating value of the sample, megaJoule per standard cubic meter, where the net enthalpy per mole of process vent is based on combustion at 25 °C and 760 millimeters of mercury, but the standard temperature for determining the volume

corresponding to 1 mole is 20 °C, as in the definition of Q_s (process vent volumetric flow rate).

K_1 = Constant, 1.740×10^{-7} (parts per million)$^{-1}$ (gram-mole per standard cubic meter) (megaJoule per kilocalorie), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.

D_j = Concentration on a wet basis of compound j in parts per million, as measured by procedures indicated in paragraph (e)(2) of this section. For process vents that pass through a final steam jet and are not condensed, the moisture is assumed to be 2.3 percent by volume.

H_j = Net heat of combustion of compound j, kilocalorie per gram-mole, based on combustion at 25 °C and 760 millimeters mercury.

(2) The molar composition of the process vent (D_j) shall be determined using the methods specified in paragraphs (g)(2)(i) through (iii) of this section:

(i) Method 18 of 40 CFR part 60, appendix A to measure the concentration of each organic compound.

(ii) American Society for Testing and Materials D1946-90 to measure the concentration of carbon monoxide and hydrogen.

(iii) Method 4 of 40 CFR part 60, appendix A to measure the moisture content of the stack gas.

(h) *TOC or Organic HAP emission rate.* The emission rate of TOC (minus methane and ethane) (E_{TOC}) and the emission rate of the regulated organic HAP or total organic HAP (E_{HAP}) in the process vent, as required by the TRE index value equation specified in paragraph (j) of this section, shall be calculated using Equation 3:

$$E = K_2 \left(\sum_{j=1}^{n} C_j M_j \right) Q_s \qquad [Eq.\ 3]$$

Where:

E = Emission rate of TOC (minus methane and ethane) (E_{TOC}) or emission rate of the regulated organic HAP or total organic HAP (E_{HAP}) in the sample, kilograms per hour.

K_2 = Constant, 2.494×10^{-6} (parts per million)$^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.

n = Number of components in the sample.

C_j = Concentration on a dry basis of organic compound j in parts per million as measured by method 18 of 40 CFR part 60, appendix A as indicated in paragraph (e) of this section. If the TOC emission rate is being calculated, C_j includes all organic compounds measured minus methane and ethane; if the total organic HAP emission rate is being calculated, only organic HAP compounds are included; if the regulated organic HAP emission rate is being calculated, only regulated organic HAP compounds are included.

M_j = Molecular weight of organic compound j, gram/gram-mole.

Q_s = Process vent flow rate, dry standard cubic meter per minute, at a temperature of 20 °C.

(i) *Halogenated process vent determination.* In order to determine whether a process vent is halogenated, the mass emission rate of halogen atoms contained in organic compounds shall be calculated according to the procedures specified in paragraphs (i)(1) and (2) of this section. A process vent is considered halogenated if the mass emission rate of halogen atoms contained in the organic compounds is equal to or greater than 0.45 kilograms per hour.

(1) The process vent concentration of each organic compound containing halogen atoms (parts per million by volume, by compound) shall be determined based on one of the procedures specified in paragraphs (i)(1)(i) through (iv) of this section:

(i) Process knowledge that no halogen or hydrogen halides are present in the process vent, or

(ii) Applicable engineering assessment as discussed in paragraph (k) of this section, or

(iii) Concentration of organic compounds containing halogens or hydrogen halides as measured by Method 26 or 26A of 40 CFR part 60, appendix A, or

(iv) Any other method or data that have been validated according to the applicable procedures in method 301 of appendix A of this part.

(2) Equation 4 shall be used to calculate the mass emission rate of halogen atoms:

$$E = K_2 Q \left(\sum_{j=1}^{n} \sum_{i=1}^{m} C_j * L_{ji} * M_{ji} \right) \quad [Eq. 4]$$

Where:

E = Mass of halogen atoms, dry basis, kilogram per hour,

K_2 = Constant, 2.494×10^{-6} (parts per million)$^{-1}$ (kilogram-mole per standard cubic meter) (minute per hour), where standard temperature is 20 °C.

Q = Flow rate of gas stream, dry standard cubic meters per minute, determined according to paragraph (f)(1) or (f)(2) of this section.

n = Number of halogenated compounds j in the gas stream.

j = Halogenated compound j in the gas stream.

m = Number of different halogens i in each compound j of the gas stream.

i = Halogen atom i in compound j of the gas stream.

C_j = Concentration of halogenated compound j in the gas stream, dry basis, parts per million by volume.

L_{ji} = Number of atoms of halogen i in compound j of the gas stream.

M_{ji} = Molecular weight of halogen atom i in compound j of the gas stream, kilogram per kilogram-mole.

(j) *TRE index value.* The owner or operator shall calculate the TRE index value of the process vent using the equations and procedures in this paragraph, as applicable, and shall maintain records specified in paragraph (l)(1) or (m)(2) of this section, as applicable.

(1) *TRE index value equation.* The equation for calculating the TRE index value is Equation 5:

$$TRE = 1/E_{HAP}*[A + B(Q_S) + C(H_T) + D(E_{TOC})] \quad [Eq. 5]$$

Where:

TRE = TRE index value.

A, B, C, D = Coefficients presented in table 1 of this section.

E_{HAP} = Emission rate of total organic HAP, kilograms per hour, as calculated according to paragraph (h) or (k) of this section.

Q_S = process vent flow rate, standard cubic meters per minute, at a standard temperature of 20 °C, as calculated according to paragraph (f) or (k) of this section.

H_T = process vent net heating value, megaJoules per standard cubic meter, as calculated according to paragraph (g) or (k) of this section.

E_{TOC} = Emission rate of TOC (minus methane and ethane), kilograms per hour, as calculated according to paragraph (h) or (k) of this section.

TABLE 1 OF §63.1104(j)(1)—COEFFICIENTS FOR TOTAL RESOURCE EFFECTIVENESS[A]

		Control device basis	Values of coefficients

Existing or new?	Halogenated vent stream?		A	B	C	D
Existing	Yes	Thermal Incinerator and Scrubber	3.995	5.200×10^{-2}	-1.769×10^{-3}	9.700×10^{-4}
	No	Flare	1.935	3.660×10^{-1}	-7.687×10^{-3}	-7.333×10^{-4}
		Thermal Incinerator 0 Percent Recovery	1.492	6.267×10^{-2}	3.177×10^{-2}	-1.159×10^{-3}
		Thermal Incinerator 70 Percent Recovery	2.519	1.183×10^{-2}	1.300×10^{-2}	4.790×10^{-2}
New	Yes	Thermal Incinerator and Scrubber	1.0895	1.417×10^{-2}	-4.822×10^{-4}	2.645×10^{-4}
	No	Flare	5.276×10^{-1}	9.98×10^{-2}	-2.096×10^{-3}	2.000×10^{-4}
		Therman Incinerator 0 Percent Recovery	4.068×10^{-1}	1.71×10^{-2}	8.664×10^{-3}	-3.162×10^{-4}
		Thermal Incinerator 70 Percent Recovery	6.868×10^{-1}	3.209×10^{-3}	3.546×10^{-3}	1.306×10^{-2}

[a]Use according to procedures outlined in this section.
MJ/scm = Mega Joules per standard cubic meter.
scm/min = Standard cubic meters per minute.

(2) *Nonhalogenated process vents.* The owner or operator of a nonhalogenated process vent shall calculate the TRE index value by using the equation and appropriate nonhalogenated process vent parameters in table 1 of this section for process vents at existing and new sources. The lowest TRE index value is to be selected.

(3) *Halogenated process vents.* The owner or operator of a halogenated process vent stream, as determined according to procedures specified in paragraph (i) or (k) of this section, shall calculate the TRE index value using the appropriate halogenated process vent parameters in table 1 of this section for existing and new sources.

(k) *Engineering assessment.* For purposes of TRE index value determinations, engineering assessments may be used to determine process vent flow rate, net heating value, TOC emission rate, and total organic HAP emission rate for the representative operating condition expected to yield the lowest TRE index value. Engineering assessments shall meet the requirements of paragraphs (k)(1) through (4) of this section. If a process vent flow rate or process vent organic HAP or TOC concentration is being determined for comparison with the applicable flow rate or concentration value presented in the tables in §63.1103 to determine control requirement applicability, engineering assessment may be used to determine the flow rate

or concentration for the representative operating conditions expected to yield the highest flow rate or concentration.

(1) If the TRE index value calculated using such engineering assessment and the TRE index value equation in paragraph (j) of this section is greater than 4.0, then the owner or operator is not required to perform the measurements specified in paragraphs (e) through (i) of this section.

(2) If the TRE index value calculated using such engineering assessment and the TRE index value equation in paragraph (j) of this section is less than or equal to 4.0, then the owner or operator is required either to perform the measurements specified in paragraphs (e) through (i) of this section for control applicability assessment or comply with the requirements (or standards) specified in the tables presented in §63.1103 (as applicable).

(3) Engineering assessment includes, but is not limited to, the examples specified in paragraphs (k)(3)(i) through (iv) of this section:

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

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

(iii) Maximum flow rate, TOC emission rate, organic HAP emission rate, organic HAP or TOC concentration, or net heating value limit specified or implied within a permit limit applicable to the process vent.

(iv) 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 those specified in paragraphs (k)(3)(iv)(A) through (k)(3)(iv)(D) of this section:

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

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

(C) Estimation of TOC or organic HAP concentrations based on saturation conditions, and

(D) Estimation of maximum expected net heating value based on the stream concentration of each organic compound or, alternatively, as if all TOC in the stream were the compound with the highest heating value.

(4) All data, assumptions, and procedures used in the engineering assessment shall be documented. The owner or operator shall maintain the records specified in paragraphs (l)(1) through (4) of this section, as applicable.

(l) *Applicability assessment recordkeeping requirements*—(1) *TRE index value records.* The owner or operator shall maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the process vent according to the procedures of paragraph (j) of this section, including those records associated with halogen vent stream determination. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified in paragraph (k) of this section. As specified in paragraph (m) of this section, the owner or operator shall include this information in the Notification of Compliance Status report required by §63.1110(a)(4) .

(2) *Flow rate records.* The owner or operator shall record the flow rate as measured using the sampling site and flow rate determination procedures (if applicable) specified in paragraphs (b) and (f) of this section or determined through engineering assessment as specified in paragraph (k) of this section. As specified in paragraph (m) of this section, the owner or operator shall include this information in the Notification of Compliance Status report required by §63.1110(a)(4).

(3) *Concentration records.* The owner or operator shall record the regulated organic HAP or TOC concentration (if applicable) as measured using the sampling site and regulated organic HAP or TOC concentration determination procedures specified in paragraphs (e)(1) and (2) of this section, or determined through engineering assessment as specified in paragraph (k) of this section. As specified in paragraph (m) of this section, the owner or operator shall include this information in the Notification of Compliance Status report required by §63.1110(a)(4).

(4) *Process change records.* The owner or operator shall keep up-to-date, readily accessible records of any process changes that change the control applicability for a process vent. Records are to include any recalculation or measurement of the flow rate, regulated organic HAP or TOC concentration, and TRE index value.

(m) *Applicability assessment reporting requirements*—(1) *Notification of Compliance Status.* The owner or operator shall submit, as part of the Notification of Compliance Status report required by §63.1110(a)(4), the information recorded in paragraph (l)(1) through (3) of this section.

(2) *Process change.* (i) Whenever a process vent becomes subject to control requirements under this subpart as a result of a process change, the owner or operator shall submit a report within 60 days after the performance test or applicability assessment, whichever is sooner. The report may be submitted as part of the next Periodic Report required by §63.1110(a)(5). The report shall include the information specified in paragraphs (m)(2)(i)(A) through (C) of this section.

(A) A description of the process change;

(B) The results of the recalculation of the TOC or organic HAP concentration, flow rate, and/or TRE index value required under paragraphs (e), (f), and (j), and recorded under paragraph (l); and

(C) A statement that the owner or operator will comply with the requirements specified in §63.1103 by the schedules specified in that section for the affected source.

(ii) If a performance test is required as a result of a process change, the owner or operator shall specify that the performance test has become necessary due to a process change. This specification shall be made in the performance test notification to the Administrator, as specified in §63.999(a)(1).

(iii) If a process change does not result in additional applicable requirements, then the owner or operator shall include a statement documenting this in the next Periodic Report required by §63.1110(a)(5) after the process change was made.

(n) *Parameter monitoring of certain process vents.* An owner or operator who maintains a TRE index value (if applicable) in the applicable TRE index value monitoring range as specified in an applicable table presented in §63.1103 of this subpart without using a recovery device shall report a description of the parameter(s) to be monitored to ensure the process vent is operated in conformance with its design or process and achieves and maintains the TRE index value above the specified level, and an explanation of the criteria used to select parameter(s). An owner or operator who maintains a TRE index value (if applicable) in the applicable TRE index monitoring range as specified in an applicable table presented in §63.1103 of this subpart by using a recovery device shall comply with the requirements of §63.993(c).

§63.1105 Transfer racks.

(a) *Design requirements.* Except as specified in paragraph (a)(5) of this section, the owner or operator shall equip each transfer rack with one of the control options listed in paragraphs (a)(1) through (5) of this section.

(1) A closed vent system designed to collect HAP-containing vapors displaced from tank trucks or railcars during loading and to route the collected vapors to a flare. The owner or operator must meet the requirements of §63.982(a)(3).

(2) A closed vent system designed to collect HAP-containing vapors displaced from tank trucks or railcars during loading and to route the collected vapors to a control device other than a flare. The owner or operator must meet the requirements of §63.982(a)(3).

(3) Process piping designed to collect the HAP vapors displaced from tank trucks or railcars during loading and to route the collected vapors to a process where the HAP vapors shall predominantly meet one of, or a combination of, the ends specified in paragraphs (a)(3)(i) through (iv) of this section or to a fuel gas system. The owner or operator must meet the requirements of §63.982(a)(3).

(i) Recycled and/or consumed in the same manner as a material that fulfills the same function in that process;

(ii) Transformed by chemical reaction into materials that are not HAP;

(iii) Incorporated into a product; and/or

(iv) Recovered.

(4) Process piping designed to collect the HAP vapors displaced from tank trucks or railcars during loading and to route the collected vapors to a vapor balance system. The vapor balance system must be designed to route the collected HAP vapors to the storage vessel from which the liquid being loaded originated, or to another storage vessel connected to a common header, or to compress and route collected HAP vapors to a process.

(5) Beginning no later than the compliance dates specified in §63.1102(c), if emissions are vented through a closed vent system to a flare at an ethylene production affected source, then the owner or operator must comply with the requirements specified in §63.1103(e)(4) instead of the requirements in §63.987 and the provisions regarding flare compliance assessments at §63.997(a) through (c).

(b) *Operating requirements.* An owner or operator of a transfer rack shall operate it in such a manner that emissions are routed through the equipment specified in paragraph (a) of this section.

(c) *Control device operation.* Whenever HAP emissions are vented to a control device used to comply with the provisions of this subpart, such control device shall be operating.

(d) *Tank trucks and railcars.* The owner or operator shall load HAP-containing materials only into tank trucks and railcars that meet the requirement in paragraph (d)(1) or (2) of this section and shall maintain the records specified in paragraph (i) of this section.

(1) Have a current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements of 49 CFR part 180 for tank trucks and 49 CFR 173.31 for railcars; or

(2) Have been demonstrated to be vapor-tight within the preceding 12 months as determined by the procedures in paragraph (h) of this section. Vapor-tight means that the pressure in a truck or railcar tank will not drop more than 750 pascals within 5 minutes after it is pressurized to a minimum of 4,500 pascals.

(e) *Pressure relief device.* The owner or operator of a transfer rack subject to the provisions of this subpart shall ensure that no pressure relief device in the loading equipment of each tank truck or railcar shall begin to open to the atmosphere during loading. Pressure relief devices needed for safety purposes are not subject to the requirements of this paragraph.

(f) *Compatible system.* The owner or operator of a transfer rack subject to the provisions of this subpart shall load HAP-containing materials only to tank trucks or railcars equipped with a vapor collection system that is compatible with the transfer rack's closed vent system or process piping.

(g) *Loading while systems connected.* The owner or operator of a transfer rack subject to this subpart shall load HAP-containing material only to tank trucks or railcars whose collection systems are connected to the transfer rack's closed vent system or process piping.

(h) *Vapor tightness procedures.* For the purposes of demonstrating vapor tightness to determine compliance with paragraph (d)(2) of this section, the procedures and equipment specified in paragraphs (h)(1) and (2) shall be used.

(1) The pressure test procedures specified in Method 27 of appendix A to 40 CFR part 60.

(2) A pressure measurement device that has a precision of ±2.5 millimeters of mercury or better and that is capable of measuring above the pressure at which the tank truck or railcar is to be tested for vapor tightness.

(i) *Recordkeeping.* The owner or operator of a transfer rack shall record that the verification of DOT tank certification or Method 27 of appendix A to 40 CFR part 60 testing required in §63.84(c) has been performed. Various methods for the record of verification can be used, such as a check-off on a log sheet, a list of DOT serial numbers or Method 27 data, or a position description for gate security showing that the security guard will not allow any trucks on-site that do not have the appropriate documentation.

§63.1106 Wastewater provisions.

(a) *Process wastewater.* Except as specified in paragraphs (a)(1) through (a)(16) and paragraph (d) of this section, the owner or operator of each affected source shall comply with the HON process wastewater requirements in §§63.132 through 63.148.

(1) When terms used in §§63.132 through 63.148 are defined in §63.1101, the definition in §63.1101 shall apply, for the purposes of this subpart. For terms used in §§63.132 through 63.148 that are not defined in §63.1101, the definitions in §§63.101 and 63.111 shall apply.

(2) When the term chemical manufacturing production process unit, or CMPU, is used in §§63.132 through 63.148, the phrase “a process unit whose primary product is a product produced by a source category subject to this subpart” shall apply, for the purposes of this subpart.

(3) Owners and operators of affected sources are not required to comply with §63.132(b)(1) and (d) and §63.138(c). Further, owners and operators are exempt from all requirements in §§63.132 through 63.148 that pertain solely and exclusively to organic HAP listed in Table 8 of subpart G of this part.

(4) When the determination of equivalence criteria in §63.102(b) is referred to in §§63.132, 63.133, and 63.137, the alternative nonopacity emission standard provisions in §63.6(g) shall apply, for the purposes of this subpart.

(5) When the HON storage vessel requirements for internal floating roofs contained in §63.119(b) are referred to in §63.133(a)(2)(ii), the requirements in §63.1063(a)(1)(i), (2), and (b) shall apply, for the purposes of this subpart.

(6) When the HON storage vessel requirements for external floating roofs in §§63.119(c) and 63.120(b)(5) and (6) are referred to in §63.133(a)(2)(iii) and (d), the requirements in §63.1063(a)(1)(ii), (2), and (b) shall apply, for the purposes of this subpart.

(7) For the purposes of this subpart, §63.1063(c)(2)(iv) shall apply instead of §63.133(e).

(8) When §§63.143(c), (d), (e)(3) and 63.146(a) require the submission of a request for approval to monitor alternative parameters according to the procedures specified in §63.151(f) or (g), the owner or operator requesting to monitor alternative parameters shall follow the procedures specified in §63.1108(c) or as specified in a referenced subpart.

(9) When §63.147(d) requires the owner or operator to keep records of the daily average value of each continuously monitored parameter for each operating day as specified in §63.152(f), the owner or operator shall keep records of each continuously monitored parameter for each operating day as specified in §63.998(b).

(10) When §63.132(a) and (b) refer to the "applicable dates specified in §63.100 of subpart F of this part," the applicable compliance dates specified in §63.1102 shall apply, for purposes of this subpart.

(11) Where §63.152(b) and/or the Notification of Compliance Status is referred to in §§63.132 through 63.148, the Notification of Compliance Status requirements contained in §63.1110(a)(4) shall apply, for purposes of this subpart.

(12) Where §63.152(c) and/or the Periodic Report requirements are referred to §§63.132 through 63.148, the Periodic Report requirements contained in §63.1110(a)(5) shall apply, for purposes of this subpart.

(13) When Method 18 of Appendix A to part 60 of this chapter is specified in §63.139(c)(1)(ii), §63.145(d)(4), or §63.145(i)(2), either Method 18 or Method 25A may be used. The use of Method 25A of appendix A to part 60 of this chapter shall comply with paragraphs (a)(13)(i) and (a)(13)(ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A of appendix A of part 60 of this chapter shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A of appendix A of part 60 of this chapter is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(14) When the HON recordkeeping requirements for by-pass lines in §63.118(a)(3) is referred to in §63.148(f), the requirements in §63.998(d)(1)(ii)(A) shall apply, for the purposes of this subpart.

(15) When the Initial Notification requirements in §63.182(b) are referred to in §63.148(j), the requirements in §63.1110(c) shall apply, for the purposes of this subpart.

(16) For the purposes of this subpart, §63.148(k) shall not apply.

(b) *Maintenance wastewater.* The owner or operator of each affected source shall comply with the HON maintenance wastewater requirements in §63.105. When terms used in §63.105 are defined in §63.1101, the definition in §63.1101 shall apply, for the purpose of this subpart. For terms used in §63.105 that are not defined in §63.1101, the definitions in §§63.101 and 63.111 shall apply.

(c) *Liquid streams in open systems.* The owner or operator shall comply with the provisions of Table 35 of subpart G of this part for each item of equipment meeting the criteria specified in paragraphs (c)(1) through (3) of this section and either paragraph (c)(4)(i) or (ii) of this section, with the exceptions provided in paragraphs (c)(5) and (6) of this section.

(1) The item of equipment is one of the types of equipment identified in paragraphs (c)(1)(i) through (vii) of this section.

(i) Drain or drain hub;

(ii) Manhole (including sumps and other points of access to a conveyance system);

(iii) Lift station;

(iv) Trench;

(v) Pipe;

(vi) Oil/water separator; and

(vii) Tanks with capacities of 38 m^3 or greater.

(2) The item of equipment is part of an affected source that is subject to this subpart.

(3) The item of equipment is controlled less stringently than in Table 35 of subpart G of this part, and the item of equipment is not otherwise exempt from the provisions of this subpart, or a referenced subpart.

(4) The item of equipment:

(i) Is a drain, drain hub, manhole, lift station, trench, pipe, or oil/water separator that conveys water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of Table 9 compounds (as defined under this subpart) at any flow rate; or a total annual average concentration greater than or equal to 1,000 parts per million by weight of Table 9 compounds (as defined under this subpart) at an annual average flow rate greater than or equal to 10 liters per minute.

(ii) Is a tank that receives one or more streams that contain water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of Table 9 compounds (as defined under this subpart) at an annual average flow rate greater than or equal to 10 liters per minute. The owner or operator shall determine the characteristics of the stream as specified in paragraphs (c)(4)(ii)(A) and (B) of this section.

(A) The characteristics of the stream being received shall be determined at the inlet to the tank.

(B) The characteristics shall be determined according to the procedures in §63.144(b) and (c).

(5) When terms used in Table 35 of subpart G of this part are defined in §63.1101, the definition in §63.1101 shall apply, for the purpose of this subpart. For terms used in Table 35 of subpart G of this part that are not defined in §63.1101, the definitions in §63.101 and §63.111 shall apply.

(6) When Table 35 of subpart G of this part refers to 40 CFR 63.119(e)(1) or (e)(2) in the requirements for tanks, the owner or operator shall reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements in §63.982(a)(1), for the purposes of this subpart.

(d) The compliance date for the affected sources subject to the provisions of this section is specified in §63.1102.

§63.1107 Equipment leaks.

(a) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless an owner or operator demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed the percent by weight control applicability criteria specified in §63.1103 for an affected source on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment for the ethylene production affected sources, the following methods shall

be used for equipment: For equipment in gas and vapor service, as that term is defined in Subpart UU of this part, shall use Method 18 of 40 CFR part 60, appendix A; for equipment in liquid service, as that term is defined in Subpart UU of this part, shall use a combination of Method 18 of 40 CFR part 60, appendix A, SW-846-8260B (incorporated by reference, see §63.14); and SW-846-8270D (incorporated by reference, see §63.14), as appropriate.

(b) An owner or operator may use good engineering judgment rather than the procedures in paragraph (a) of this section to determine that the percent organic HAP content does not exceed the percent by weight control applicability criteria specified in §63.1103 for an affected source. When an owner or operator and the Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in paragraph (a) of this section shall be used to resolve the disagreement.

(c) If an owner or operator determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in paragraph (a) of this section, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

(d) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

(e) *Requirements for pressure relief devices.* For acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, except as specified in paragraph (e)(4) of this section, the owner or operator must comply with the requirements specified in paragraphs (e)(1) and (2) of this section for pressure relief devices in organic HAP gas or vapor service. Except as specified in paragraph (e)(4) of this section, the owner or operator of an acrylic and modacrylic fiber production affected source or polycarbonate production affected source must also comply with the requirements specified in paragraph (e)(3) of this section for all pressure relief devices in organic HAP service.

(1) *Operating requirements.* Except during a pressure release event, operate each pressure relief device in organic HAP gas or vapor service with an instrument reading of less than 500 ppm above background as described in Method 21 of 40 CFR part 60, Appendix A.

(2) *Pressure release requirements.* For pressure relief devices in organic HAP gas or vapor service, the owner or operator must comply with either paragraph (e)(2)(i) or (ii) of this section following a pressure release, as applicable.

(i) If the pressure relief device does not consist of or include a rupture disk, conduct instrument monitoring, as described in Method 21 of 40 CFR part 60, Appendix A, no later than 5 calendar days after the pressure relief device returns to organic HAP service following a pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm above background, except as provided in §63.171 or §63.1024(d), as applicable.

(ii) If the pressure relief device consists of or includes a rupture disk, install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release, except as provided in §63.171 or §63.1024(d), as applicable.

(3) *Pressure release management.* Except as specified in paragraph (e)(4) of this section, emissions of organic HAP to the atmosphere from pressure relief devices in organic HAP service are prohibited, and the owner or operator must comply with the requirements specified in paragraphs (e)(3)(i) and (ii) of this section for all pressure relief devices in organic HAP service.

(i) The owner or operator must equip each pressure relief device in organic HAP service with a device(s) or parameter monitoring system that is capable of:

(A) Identifying the pressure release;

(B) Recording the time and duration of each pressure release; and

(C) Notifying operators immediately that a pressure release is occurring. The device or monitoring system may be either specific to the pressure relief device itself or may be associated with the process system or piping, sufficient to indicate a pressure release to the atmosphere. Examples of these types of devices and systems include, but are not limited to, a rupture disk indicator, magnetic sensor, motion detector on the pressure relief valve stem, flow monitor, or pressure monitor.

(ii) If any pressure relief device in organic HAP service releases to atmosphere as a result of a pressure release event, the owner or operator must calculate the quantity of organic HAP released during each pressure release event and report this quantity as required in paragraph (g) of this section. Calculations may be based on data from the pressure relief device monitoring alone or in combination with process parameter monitoring data and process knowledge.

(4) *Pressure relief devices routed to a control device, process, fuel gas system, or drain system.* If a pressure relief device in organic HAP service is designed and operated to route all HAP emissions from pressure releases through a closed vent system to a control device or to a process, fuel gas system, or drain system, the owner or operator is not required to comply with paragraphs (e)(1), (2), or (3) (if applicable) of this section for that pressure relief device. The fuel gas system or closed vent system and control device (if applicable) must meet the requirements of §63.172 or §63.1034, as applicable (except that the term “pressure relief devices” shall apply instead of the term “equipment leaks” in §63.1034). The drain system (if applicable) must meet the requirements of §63.136.

(f) *Recordkeeping requirements.* For acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, for pressure relief devices in organic HAP service, keep records of the information specified in paragraphs (f)(1) through (5) of this section, as applicable.

(1) A list of identification numbers for pressure relief devices that vent to a fuel gas system, process, drain system, or closed-vent system and control device, under the provisions in paragraph (e)(4) of this section.

(2) A list of identification numbers for pressure relief devices subject to the provisions in paragraph (e)(1) of this section.

(3) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions in paragraph (e)(2)(ii) of this section.

(4) The dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in paragraphs (e)(1) and (2) of this section. The results shall include:

(i) The background level measured during each compliance test.

(ii) The maximum instrument reading measured at each piece of equipment during each compliance test.

(5) For pressure relief devices in organic HAP service subject to paragraph (e)(3) of this section, keep records of each pressure release to the atmosphere, including the following information:

(i) The source, nature, and cause of the pressure release.

(ii) The date, time, and duration of the pressure release.

(iii) An estimate of the quantity of total HAP emitted during the pressure release and the calculations used for determining this quantity.

(iv) The actions taken to prevent this pressure release.

(v) The measures adopted to prevent future such pressure releases.

(g) *Periodic reports.* For owners or operators of an acrylic and modacrylic fiber production affected source or polycarbonate production affected source subject to paragraph (e) of this section, Periodic Reports must include the information specified in paragraphs (g)(1) through (3) of this section for pressure relief devices in organic HAP service.

(1) For pressure relief devices in organic HAP service subject to paragraph (e) of this section, report confirmation that all monitoring to show compliance was conducted within the reporting period.

(2) For pressure relief devices in organic HAP gas or vapor service subject to paragraph (e)(2) of this section, report any instrument reading of 500 ppm above background or greater,

more than 5 days after the relief device returns to organic HAP gas or vapor service after a pressure release.

(3) For pressure relief devices in organic HAP service subject to paragraph (e)(3) of this section, report each pressure release to the atmosphere, including the following information:

(i) The source, nature, and cause of the pressure release.

(ii) The date, time, and duration of the pressure release.

(iii) An estimate of the quantity of total HAP emitted during the pressure release and the method used for determining this quantity.

(iv) The actions taken to prevent this pressure release.

(v) The measures adopted to prevent future such pressure releases.

(h) *Ethylene production pressure release requirements.* Beginning no later than the compliance dates specified in §63.1102(c), except as specified in paragraph (h)(4) of this section, owners or operators of ethylene production affected sources must comply with the requirements specified in paragraphs (h)(1) and (2) of this section for pressure relief devices, such as relief valves or rupture disks, in organic HAP gas or vapor service instead of the pressure relief device requirements of §63.1030 of subpart UU or §63.165 of subpart H. Beginning no later than the compliance dates specified in §63.1102(c), except as specified in paragraphs (h)(4) and (5) of this section, the owner or operator must also comply with the requirements specified in paragraphs (h)(3) and (6) through (8) of this section for all pressure relief devices.

(1) *Operating requirements.* Except during a pressure release, operate each pressure relief device in organic HAP gas or vapor service with an instrument reading of less than 500 ppm above background as measured by the method in §63.1023(b) of subpart UU or §63.180(b) and (c) of subpart H.

(2) *Pressure release requirements.* For pressure relief devices in organic HAP gas or vapor service, the owner or operator must comply with the applicable requirements in paragraphs (h)(2)(i) through (iii) of this section following a pressure release.

(i) If the pressure relief device does not consist of or include a rupture disk, conduct instrument monitoring, as specified in §63.1023(b) of subpart UU or §63.180(b) and (c) of subpart H, no later than 5 calendar days after the pressure relief device returns to organic HAP gas or vapor service following a pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm.

(ii) If the pressure relief device includes a rupture disk, either comply with the requirements in paragraph (h)(2)(i) of this section (and do not replace the rupture disk) or install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release.

(iii) If the pressure relief device consists only of a rupture disk, install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release. The owner or operator must not initiate startup of the equipment served by the rupture disk until the rupture disc is replaced.

(3) *Pressure release management.* Except as specified in paragraphs (h)(4) and (5) of this section, the owner or operator must comply with the requirements specified in paragraphs (h)(3)(i) through (v) of this section for all pressure relief devices in organic HAP service.

(i) The owner or operator must equip each affected pressure relief device with a device(s) or use a monitoring system that is capable of:

(A) Identifying the pressure release;

(B) Recording the time and duration of each pressure release; and

(C) Notifying operators immediately that a pressure release is occurring. The device or monitoring system must be either specific to the pressure relief device itself or must be associated with the process system or piping, sufficient to indicate a pressure release to the atmosphere. Examples of these types of devices and systems include, but are not limited to, a rupture disk indicator, magnetic sensor, motion detector on the pressure relief valve stem, flow monitor, or pressure monitor.

(ii) The owner or operator must apply at least three redundant prevention measures to each affected pressure relief device and document these measures. Examples of prevention measures include:

(A) Flow, temperature, liquid level and pressure indicators with deadman switches, monitors, or automatic actuators. Independent, non-duplicative systems within this category count as separate redundant prevention measures.

(B) Documented routine inspection and maintenance programs and/or operator training (maintenance programs and operator training may count as only one redundant prevention measure).

(C) Inherently safer designs or safety instrumentation systems.

(D) Deluge systems.

(E) Staged relief system where the initial pressure relief device (with lower set release pressure) discharges to a flare or other closed vent system and control device.

(iii) If any affected pressure relief device releases to atmosphere as a result of a pressure release event, the owner or operator must perform root cause analysis and corrective action analysis according to the requirement in paragraph (h)(6) of this section and implement corrective actions according to the requirements in paragraph (h)(7) of this section. The owner or

operator must also calculate the quantity of organic HAP released during each pressure release event and report this quantity as required in §63.1110(e)(8)(iii). Calculations may be based on data from the pressure relief device monitoring alone or in combination with process parameter monitoring data and process knowledge.

(iv) The owner or operator must determine the total number of release events that occurred during the calendar year for each affected pressure relief device separately. The owner or operator must also determine the total number of release events for each pressure relief device for which the root cause analysis concluded that the root cause was a force majeure event, as defined in §63.1103(e)(2).

(v) Except for pressure relief devices described in paragraphs (h)(4) and (5) of this section, the following release events from an affected pressure relief device are a violation of the pressure release management work practice standards.

(A) Any release event for which the root cause of the event was determined to be operator error or poor maintenance.

(B) A second release event not including force majeure events from a single pressure relief device in a 3-calendar year period for the same root cause for the same equipment.

(C) A third release event not including force majeure events from a single pressure relief device in a 3-calendar year period for any reason.

(4) *Pressure relief devices routed to a control device, process, fuel gas system, or drain system.* (i) If all releases and potential leaks from a pressure relief device are routed through a closed vent system to a control device, back into the process, a fuel gas system, or drain system, then the owner or operator is not required to comply with paragraph (h)(1), (2), or (3) of this section.

(ii) Before the compliance dates specified in §63.1102(c), both the closed vent system and control device (if applicable) referenced in paragraph (h)(4)(i) of this section must meet the applicable requirements specified in §63.982(b) and (c)(2). Beginning no later than the compliance dates specified in §63.1102(c), both the closed vent system and control device (if applicable) referenced in paragraph (h)(4)(i) of this section must meet the applicable requirements specified in §§63.982(c)(2), 63.983, and 63.1103(e)(4). For purposes of compliance with this paragraph, the phrase “Except for equipment needed for safety purposes such as pressure relief devices” in §63.983(a)(3) does not apply.

(iii) The drain system (if applicable) referenced in paragraph (h)(4)(i) of this section must meet the applicable requirements specified in §61.346 or §63.136.

(5) *Pressure relief devices exempted from pressure release management requirements.* The following types of pressure relief devices are not subject to the pressure release management requirements in paragraph (h)(3) of this section.

(i) Pressure relief devices in heavy liquid service, as defined in §63.1020 of subpart UU.

(ii) Thermal expansion relief valves.

(iii) Pressure relief devices on mobile equipment.

(iv) Pilot-operated pressure relief devices where the primary release valve is routed through a closed vent system to a control device or back into the process, a fuel gas system, or drain system.

(v) Balanced bellows pressure relief devices where the primary release valve is routed through a closed vent system to a control device or back into the process, a fuel gas system, or drain system.

(6) *Root cause analysis and corrective action analysis.* A root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a release event. Special circumstances affecting the number of root cause analyses and/or corrective action analyses are provided in paragraphs (h)(6)(i) through (iv) of this section.

(i) You may conduct a single root cause analysis and corrective action analysis for a single emergency event that causes two or more pressure relief devices that are installed on the same equipment to release.

(ii) You may conduct a single root cause analysis and corrective action analysis for a single emergency event that causes two or more pressure relief devices to release, regardless of the equipment served, if the root cause is reasonably expected to be a *force majeure* event, as defined in §63.1103(e)(2).

(iii) Except as provided in paragraphs (h)(6)(i) and (ii) of this section, if more than one pressure relief device has a release during the same time period, an initial root cause analysis must be conducted separately for each pressure relief device that had a release. If the initial root cause analysis indicates that the release events have the same root cause(s), the initial separate root cause analyses may be recorded as a single root cause analysis and a single corrective action analysis may be conducted.

(7) *Corrective action implementation.* Each owner or operator required to conduct a root cause analysis and corrective action analysis as specified in paragraphs (h)(3)(iii) and (6) of this section, must implement the corrective action(s) identified in the corrective action analysis in accordance with the applicable requirements in paragraphs (h)(7)(i) through (iii) of this section.

(i) All corrective action(s) must be implemented within 45 days of the event for which the root cause and corrective action analyses were required or as soon thereafter as practicable. If an owner or operator concludes that no corrective action should be implemented, the owner or operator must record and explain the basis for that conclusion no later than 45 days following the event.

(ii) For corrective actions that cannot be fully implemented within 45 days following the event for which the root cause and corrective action analyses were required, the owner or operator must develop an implementation schedule to complete the corrective action(s) as soon as practicable.

(iii) No later than 45 days following the event for which a root cause and corrective action analyses were required, the owner or operator must record the corrective action(s) completed to date, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

(8) *Flowing pilot-operated pressure relief devices.* For ethylene production affected sources that commenced construction or reconstruction on or before October 9, 2019, owners or operators are prohibited from installing a flowing pilot-operated pressure relief device or replacing any pressure relief device with a flowing pilot-operated pressure relief device after July 6, 2023. For ethylene production affected sources that commenced construction or reconstruction after October 9, 2019, owners or operators are prohibited from installing and operating flowing pilot-operated pressure relief devices. For purpose of compliance with this paragraph, a flowing pilot-operated pressure relief device means the type of pilot-operated pressure relief device where the pilot discharge vent continuously releases emissions to the atmosphere when the pressure relief device is actuated.

§63.1108 Compliance with standards and operation and maintenance requirements.

(a) *Requirements.* The requirements of paragraphs (a)(1), (2), and (5) of this section apply to all affected sources except acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and specified in §63.1102(d) for cyanide chemicals manufacturing affected sources. The requirements of paragraph (a)(4) of this section apply only to acrylic and modacrylic fiber production affected sources, polycarbonate production affected sources and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and specified in §63.1102(d) for cyanide chemicals manufacturing affected sources. The requirements of paragraphs (a)(3), (6), and (7) of this section apply to all affected sources.

(1) Except as provided in paragraph (a)(2) of this section, the emission limitations and established parameter ranges of this part shall apply at all times except during periods of startup, shutdown, malfunction, or non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies. However, if a startup, shutdown, malfunction or period of non-operation of one portion of an affected source does not affect the ability of a particular emission point to comply with the specific provisions to which it is subject, then that emission point shall still be required to comply with the applicable provisions of this subpart and any of the subparts that are referenced by this subpart during startup, shutdown, malfunction, or period of non-operation.

(2) If equipment leak requirements are referenced by this subpart for a subject source category, such requirements shall apply at all times except during periods of startup, shutdown,

or malfunction, process unit shutdown (as defined in §63.1101), or non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which the equipment leak requirements apply.

(3) For batch unit operations, shutdown does not include the normal periods between batch cycles; and startup does not include the recharging of batch unit operations, or the transitional conditions due to changes in product.

(4)(i) For acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production and specified in §63.1102(d) for cyanide chemicals manufacturing affected sources, the emission limitations and established parameter ranges of this part shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies. Equipment leak requirements shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which the equipment leak requirements apply.

(ii) At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

(5) During startups, shutdowns, and malfunctions when the emission standards of this subpart and the subparts referenced by this subpart do not apply pursuant to paragraphs (a)(1) through (3) of this section, the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions. The measures to be taken shall be identified in the startup, shutdown, and malfunction plan (if applicable), and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the affected source. Back-up control devices are not required, but may be used if available. Compliance with an inadequate startup, shutdown, and malfunction plan developed pursuant to §63.1111 is not a shield for failing to comply with good operation and maintenance requirements.

(6) Malfunctions shall be corrected as soon as practical after their occurrence.

(7) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable, independent of emissions limitations or other requirements in relevant standards.

(b) *Compliance assessment procedures*—(1) *Parameter monitoring: compliance with operating conditions.* Compliance with the required operating conditions for the monitored control devices or recovery devices may be determined by, but is not limited to, the parameter monitoring data for emission points that are required to perform continuous monitoring. For each excursion, except as provided for in paragraphs (b)(1)(i) and (ii) of this section, the owner or operator shall be deemed to have failed to have applied the control in a manner that achieves the required operating conditions.

(i) An excursion that meets the requirements of paragraph (b)(2) of this section is not a violation.

(ii) Excused excursions are not allowed for acrylic and modacrylic fiber production affected sources, polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production and in §63.1102(d) for cyanide chemicals manufacturing affected sources. For all other affected sources, including ethylene production and cyanide chemicals manufacturing affected sources prior to the compliance dates specified in §63.1102(c) and (d), an excused excursion, as described in §63.998(b)(6)(ii), is not a violation.

(2) *Parameter monitoring: Excursions.* An excursion is not a violation in cases where continuous monitoring is required and the excursion does not count toward the number of excused excursions (as described in §63.998(b)(6)(ii)), if the conditions of paragraph (b)(2)(i) or (ii) of this section are met, except that the conditions of paragraph (b)(2)(i) of this section do not apply for acrylic and modacrylic fiber production affected sources, polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) and (d) for ethylene production and cyanide chemicals manufacturing affected sources. Nothing in this paragraph shall be construed to allow or excuse a monitoring parameter excursion caused by any activity that violates other applicable provisions of this subpart or a subpart referenced by this subpart.

(i) During periods of startup, shutdown, or malfunction (and the source is operated during such periods in accordance with §63.1111(a)), or

(ii) During periods of non-operation of the affected source or portion thereof (resulting in cessation of the emissions to which the monitoring applies).

(3) *Operation and maintenance procedures.* Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator. This information may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan under §63.1111, if applicable), review of operation and maintenance records, and inspection of the affected source, and alternatives approved as specified in §63.1113.

(4) *Applicability and compliance assessment procedures.* Applicability and compliance with standards shall be governed by, in part, but not limited to, the use of data, tests, and requirements according to paragraphs (b)(4)(i) through (iii) of this section. Compliance with

design, equipment, work practice, and operating standards, including those for equipment leaks, shall be determined according to paragraph (b)(5) of this section.

(i) *Applicability assessments.* Unless otherwise specified in a relevant test method required to assess control applicability, each test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in this subpart. The arithmetic mean of the results of the three runs shall apply when assessing applicability. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run if it meets the criteria specified in paragraphs (b)(4)(i)(A) through (D) of this section.

(A) A sample is accidentally lost after the testing team leaves the site; or

(B) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or

(C) Extreme meteorological conditions occur;

(D) Other circumstances occur that are beyond the owner or operator's control.

(ii) *Performance test.* (A) The Administrator may determine compliance with emission limitations of this subpart based on, but not limited to, the results of performance tests conducted according to the procedures specified in §63.997, unless otherwise specified in this subpart or a subpart referenced by this subpart.

(B) For acrylic and modacrylic fiber production affected sources, polycarbonate production affected sources, and beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and in §63.1102(d) for cyanide chemicals manufacturing affected sources, performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown unless specified by the Administrator or an applicable subpart. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(iii) *Operation and maintenance requirements.* The Administrator may determine compliance with the operation and maintenance standards of this subpart by, but not limited to, evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in this subpart or a subpart referenced by this subpart.

(5) *Design, equipment, work practice, or operational standards.* The Administrator may determine compliance with design, equipment, work practice, or operational requirements by, but is not limited to, review of records, inspection of the affected source, and by evaluation of an owner or operator's conformance with operation and maintenance requirements as specified in this subpart, and in the subparts referenced by this subpart.

(c) *Finding of compliance.* The Administrator may make a finding concerning an affected source's compliance with an emission standard or operating and maintenance requirement as specified in, but not limited to, paragraphs (a) and (b) of this section, upon obtaining all of the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable) and any information available to the Administrator to determine whether proper operation and maintenance practices are being used. Standards in this subpart and methods of determining compliance are in metric units followed by the equivalents in English units. The Administrator will make findings of compliance with the numerical standards of this subpart using metric units.

(d) *Compliance time.* All terms that define a period of time for completion of required tasks (e.g., weekly, monthly, quarterly, annually), unless specified otherwise in the section or subsection that imposes the requirement, refer to the standard calendar periods.

(1) Notwithstanding time periods specified for completion of required tasks, time periods may be changed by mutual agreement between the owner or operator and the Administrator, as specified in §63.1110(h). For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.

(2) When the period specified for compliance is a standard calendar period, if the initial compliance date occurs after the beginning of the period, compliance shall be required according to the schedule specified in paragraph (d)(2) (i) or (ii) of this section, as appropriate.

(i) Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or

(ii) In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(3) In all instances where a provision requires completion of a task during each of multiple successive periods, an owner or operator may perform the required task at any time during the specified period, provided the task is conducted at a reasonable interval after completion of the task during the previous period.

§63.1109 Recordkeeping requirements.

(a) *Maintaining notifications, records, and reports.* Except as provided in paragraph (b) of this section, the owner or operator of each affected source subject to this subpart shall keep copies of notifications, reports and records required by this subpart and subparts referenced by this subpart for at least 5 years, unless otherwise specified under this subpart.

(b) *Copies of reports.* If the Administrator has waived the requirement of §63.1110(g)(1) for submittal of copies of reports, the owner or operator is not required to maintain copies of the waived reports. This paragraph applies only to reports and not the underlying records that must be maintained as specified in this subpart and the subparts referenced by this subpart.

(c) *Availability of records.* All records required to be maintained by this subpart or a subpart referenced by this subpart shall be maintained in such a manner that they can be readily accessed and are suitable for inspection. The records of the remaining 3 years, where required, may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, computer disk, magnetic tape, or microfiche.

(d) *Control applicability records.* Owners or operators shall maintain records containing information developed and used to assess control applicability under §63.1103 (e.g., combined total annual emissions of regulated organic HAP).

(e) *Ethylene production flare records.* For each flare subject to the requirements in §63.1103(e)(4), owners or operators must keep records specified in paragraphs (e)(1) through (15) of this section in lieu of the information required in §63.998(a)(1) of subpart SS.

(1) Retain records of the output of the monitoring device used to detect the presence of a pilot flame or flare flame as required in §63.670(b) of subpart CC and the presence of a pilot flame as required in §63.1103(e)(4)(vii)(D) for a minimum of 2 years. Retain records of each 15-minute block during which there was at least one minute that no pilot flame or flare flame is present when regulated material is routed to a flare for a minimum of 5 years. For each pressure-assisted multi-point flare that uses cross-lighting, retain records of each 15-minute block during which there was at least one minute that no pilot flame is present on each stage when regulated material is routed to a flare for a minimum of 5 years. You may reduce the collected minute-by-minute data to a 15-minute block basis with an indication of whether there was at least one minute where no pilot flame or flare flame was present.

(2) Retain records of daily visible emissions observations as specified in paragraphs (e)(2)(i) through (iv) of this section, as applicable, for a minimum of 3 years.

(i) To determine when visible emissions observations are required, the record must identify all periods when regulated material is vented to the flare.

(ii) If visible emissions observations are performed using Method 22 of 40 CFR part 60, appendix A-7, then the record must identify whether the visible emissions observation was

performed, the results of each observation, total duration of observed visible emissions, and whether it was a 5-minute or 2-hour observation. Record the date and start time of each visible emissions observation.

(iii) If a video surveillance camera is used pursuant to §63.670(h)(2) of subpart CC, then the record must include all video surveillance images recorded, with time and date stamps.

(iv) For each 2-hour period for which visible emissions are observed for more than 5 minutes in 2 consecutive hours, then the record must include the date and start and end time of the 2-hour period and an estimate of the cumulative number of minutes in the 2-hour period for which emissions were visible.

(3) The 15-minute block average cumulative flows for flare vent gas and, if applicable, total steam, perimeter assist air, and premix assist air specified to be monitored under §63.670(i) of subpart CC, along with the date and time interval for the 15-minute block. If multiple monitoring locations are used to determine cumulative vent gas flow, total steam, perimeter assist air, and premix assist air, then retain records of the 15-minute block average flows for each monitoring location for a minimum of 2 years, and retain records of the 15-minute block average cumulative flows that are used in subsequent calculations for a minimum of 5 years. If pressure and temperature monitoring is used, then retain records of the 15-minute block average temperature, pressure, and molecular weight of the flare vent gas or assist gas stream for each measurement location used to determine the 15-minute block average cumulative flows for a minimum of 2 years, and retain records of the 15-minute block average cumulative flows that are used in subsequent calculations for a minimum of 5 years.

(4) The flare vent gas compositions specified to be monitored under §63.670(j) of subpart CC. Retain records of individual component concentrations from each compositional analysis for a minimum of 2 years. If an NHVvg analyzer is used, retain records of the 15-minute block average values for a minimum of 5 years.

(5) Each 15-minute block average operating parameter calculated following the methods specified in §63.670(k) through (n) of subpart CC, as applicable.

(6) All periods during which operating values are outside of the applicable operating limits specified in §63.670(d) through (f) of subpart CC and §63.1103(e)(4)(vii) when regulated material is being routed to the flare.

(7) All periods during which the owner or operator does not perform flare monitoring according to the procedures in §63.670(g) through (j) of subpart CC.

(8) For pressure-assisted multi-point flares, if a stage of burners on the flare uses cross-lighting, then a record of any changes made to the distance between burners.

(9) For pressure-assisted multi-point flares, all periods when the pressure monitor(s) on the main flare header show burners are operating outside the range of the manufacturer's

specifications. Indicate the date and time for each period, the pressure measurement, the stage(s) and number of burners affected, and the range of manufacturer's specifications.

(10) For pressure-assisted multi-point flares, all periods when the staging valve position indicator monitoring system indicates a stage of the pressure-assisted multi-point flare should not be in operation and when a stage of the pressure-assisted multi-point flare should be in operation and is not. Indicate the date and time for each period, whether the stage was supposed to be open, but was closed or vice versa, and the stage(s) and number of burners affected.

(11) Records of periods when there is flow of vent gas to the flare, but when there is no flow of regulated material to the flare, including the start and stop time and dates of periods of no regulated material flow.

(12) Records when the flow of vent gas exceeds the smokeless capacity of the flare, including start and stop time and dates of the flaring event.

(13) Records of the root cause analysis and corrective action analysis conducted as required in §63.670(o)(3) of subpart CC and §63.1103(e)(4)(iv), including an identification of the affected flare, the date and duration of the event, a statement noting whether the event resulted from the same root cause(s) identified in a previous analysis and either a description of the recommended corrective action(s) or an explanation of why corrective action is not necessary under §63.670(o)(5)(i) of subpart CC.

(14) For any corrective action analysis for which implementation of corrective actions are required in §63.670(o)(5) of subpart CC, a description of the corrective action(s) completed within the first 45 days following the discharge and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

(15) Records described in §63.10(b)(2)(vi).

(f) *Ethylene production maintenance vent records.* For each maintenance vent opening subject to the requirements in §63.1103(e)(5), the owner or operator must keep the applicable records specified in (f)(1) through (5) of this section.

(1) The owner or operator must maintain standard site procedures used to deinventory equipment for safety purposes (*e.g.,* hot work or vessel entry procedures) to document the procedures used to meet the requirements in §63.1103(e)(5). The current copy of the procedures must be retained and available on-site at all times. Previous versions of the standard site procedures, as applicable, must be retained for 5 years.

(2) If complying with the requirements of §63.1103(e)(5)(i)(A) and the LEL at the time of the vessel opening exceeds 10 percent, records that identify the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, and the LEL at the time of the vessel opening.

(3) If complying with the requirements of §63.1103(e)(5)(i)(B) and either the vessel pressure at the time of the vessel opening exceeds 5 psig or the LEL at the time of the active purging was initiated exceeds 10 percent, records that identify the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, the pressure of the vessel or equipment at the time of discharge to the atmosphere and, if applicable, the LEL of the vapors in the equipment when active purging was initiated.

(4) If complying with the requirements of §63.1103(e)(5)(i)(C), records of the estimating procedures used to determine the total quantity of VOC in equipment and the type and size limits of equipment that contain less than 50 pounds of VOC at the time of maintenance vent opening. For each maintenance vent opening of equipment that contains greater than 50 pounds of VOC for which the deinventory procedures specified in paragraph (f)(1) of this section are not followed or for which the equipment opened exceeds the type and size limits established in the records specified in this paragraph, records that identify the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, and records used to estimate the total quantity of VOC in the equipment at the time the maintenance vent was opened to the atmosphere.

(5) If complying with the requirements of §63.1103(e)(5)(i)(D), identification of the maintenance vent, the process units or equipment associated with the maintenance vent, records documenting actions taken to comply with other applicable alternatives and why utilization of this alternative was required, the date of maintenance vent opening, the equipment pressure and LEL of the vapors in the equipment at the time of discharge, an indication of whether active purging was performed and the pressure of the equipment during the installation or removal of the blind if active purging was used, the duration the maintenance vent was open during the blind installation or removal process, and records used to estimate the total quantity of VOC in the equipment at the time the maintenance vent was opened to the atmosphere for each applicable maintenance vent opening.

(g) *Ethylene production bypass line records.* For each flow event from a bypass line subject to the requirements in §63.1103(e)(6), the owner or operator must maintain records sufficient to determine whether or not the detected flow included flow requiring control. For each flow event from a bypass line requiring control that is released either directly to the atmosphere or to a control device not meeting the requirements specified in Table 7 to §63.1103(e), the owner or operator must include an estimate of the volume of gas, the concentration of organic HAP in the gas and the resulting emissions of organic HAP that bypassed the control device using process knowledge and engineering estimates.

(h) *Decoking operation of ethylene cracking furnace records.* For each decoking operation of an ethylene cracking furnace subject to the standards in §63.1103(e)(7) and (8), the owner or operator must keep the records specified in paragraphs (h)(1) through (6) of this section.

(1) Records that document the day and time each inspection specified in §63.1103(e)(7)(i) took place, the results of each inspection, and any repairs made to correct the

flame impingement; and for any repair that is delayed beyond 1 calendar day, the records specified in paragraphs (h)(1)(i) through (iii) of this section.

(i) The reason for the delay.

(ii) An estimate of the emissions from shutdown for repair and an estimate of the emissions likely to result from delay of repair, and whether the requirements at §63.1103(e)(7)(i)(A) or (B) were met.

(iii) The date the repair was completed or, if the repair has not been completed, a schedule for completing the repair.

(2) If the owner or operator chooses to monitor the CO_2 concentration during decoking as specified in §63.1103(e)(7)(ii), then for each decoking cycle, records must be kept for all measured CO_2 concentration values beginning before the expected end of the air-in decoke time, the criterion used to begin the CO_2 monitoring, and the target used to indicate combustion is complete. The target record should identify any time period the site routinely extends air addition beyond the specified CO_2 concentration and any decoke completion assurance procedures used to confirm all coke has been removed prior to stopping air addition that occurs after the CO_2 target is reached.

(3) If the owner or operator chooses to monitor the temperature at the radiant tube(s) outlet during decoking as specified in §63.1103(e)(7)(iii), then for each decoking cycle, records must be kept for all measured temperature values and the target used to indicate a reduction in temperature of the inside of the radiant tube(s) is necessary.

(4) If the owner or operator chooses to comply with §63.1103(e)(7)(iv), then records must be kept that document that decoke air is no longer being added after each decoking cycle.

(5) If the owner or operator chooses to treat steam or feed to reduce coke formation as specified in §63.1103(e)(7)(v), then records must be kept that document that the planned treatment occurred.

(6) For each decoking operation of an ethylene cracking furnace subject to the requirements in §63.1103(e)(8), the owner or operator must keep records that document the day each inspection took place and the results of each inspection where an isolation problem was identified including any repairs made to correct the problem.

(i) *Ethylene production pressure relief devices records.* For each pressure relief device subject to the pressure release management work practice standards in §63.1107(h)(3), the owner or operator must keep the records specified in paragraphs (i)(1) through (3) of this section.

(1) Records of the prevention measures implemented as required in §63.1107(h)(3)(ii).

(2) Records of the number of releases during each calendar year and the number of those releases for which the root cause was determined to be a force majeure event. Keep these records for the current calendar year and the past five calendar years.

(3) For each release to the atmosphere, the owner or operator must keep the records specified in paragraphs (i)(3)(i) through (iv) of this section.

(i) The start and end time and date of each pressure release to the atmosphere.

(ii) Records of any data, assumptions, and calculations used to estimate of the mass quantity of each organic HAP released during the event.

(iii) Records of the root cause analysis and corrective action analysis conducted as required in §63.1107(h)(3)(iii), including an identification of the affected pressure relief device, a statement noting whether the event resulted from the same root cause(s) identified in a previous analysis and either a description of the recommended corrective action(s) or an explanation of why corrective action is not necessary under §63.1107(h)(7)(i).

(iv) For any corrective action analysis for which implementation of corrective actions are required in §63.1107(h)(7), a description of the corrective action(s) completed within the first 45 days following the discharge and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

§63.1110 Reporting requirements.

(a) *Required reports.* Each owner or operator of an affected source subject to this subpart shall submit the reports listed in paragraphs (a)(1) through (8) of this section, as applicable. Each owner or operator of an acrylic and modacrylic fiber production affected source or polycarbonate production affected source subject to this subpart shall also submit the reports listed in paragraph (a)(9) of this section in addition to the reports listed in paragraphs (a)(1) through (8) of this section, as applicable. Beginning no later than the compliance dates specified in §63.1102(c) for ethylene production affected sources and no later than the compliance dates specified in §63.1102(d) for cyanide chemicals manufacturing, each owner or operator of an ethylene production affected source or cyanide chemicals manufacturing affected source subject to this subpart shall also submit the reports listed in paragraph (a)(10) of this section in addition to the reports listed in paragraphs (a)(1) through (8) of this section, as applicable.

(1) A Notification of Initial Startup described in paragraph (b) of this section, as applicable.

(2) An Initial Notification described in paragraph (c) of this section.

(3) [Reserved]

(4) A Notification of Compliance Status report described in paragraph (d) of this section.

(5) Periodic Reports described in paragraph (e) of this section.

(6) Application for approval of construction or reconstruction described in §63.5(d) of subpart A of this part.

(7) Startup, Shutdown, and Malfunction Reports described in §63.1111 (except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, ethylene production affected sources, and polycarbonate production affected sources).

(8) Other reports. Other reports shall be submitted as specified elsewhere in this subpart and subparts referenced by this subpart.

(9) Within 60 days after the date of completing each performance test (as defined in §63.2), the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by this subpart according to the methods specified in paragraph (a)(9)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA-provided software, the owner or operator shall submit the results of the performance test to the EPA by direct computer-to-computer electronic transfer via EPA-provided software, unless otherwise approved by the Administrator. Owners or operators, who claim that some of the information being submitted for performance tests is confidential business information (CBI), must submit a complete file using EPA-provided software that includes information claimed to be CBI on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA by direct computer-to-computer electronic transfer via EPA-provided software.

(ii) For any performance test conducted using test methods that are not compatible with the EPA-provided software, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in §60.4.

(10)(i) Beginning no later than the compliance dates specified in §63.1102(c) and (d), within 60 days after the date of completing each performance test required by this subpart, the owner or operator must submit the results of the performance test following the procedures specified in paragraphs (a)(10)(i)(A) through (C) of this section.

(A) *Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test.* Submit the results of the performance test to the EPA via CEDRI, which can be accessed through the EPA's CDX (*https://cdx.epa.gov/*). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(B) *Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.* The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(C) *CBI.* Do not use CEDRI to submit information you claim as CBI. Anything submitted ot CEDRI cannot later be claimed CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraph (a)(10)(i)(A) or (B) of this section is CBI, then the owner or operator must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via EPA's CDX as described in paragraphs (a)(10)(i)(A) and (B) of this section. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(ii) Beginning no later than the compliance dates specified in §63.1102(c) and (d), the owner or operator must submit all subsequent Notification of Compliance Status reports required under paragraph (a)(4) of this section in PDF format to the EPA via CEDRI, which can be accessed through EPA's CDX (*https://cdx.epa.gov/*). All subsequent Periodic Reports required under paragraph (a)(5) of this section must be submitted to the EPA via CEDRI using the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*) for this subpart beginning no later than the compliance dates specified in §63.1102(c) and (d) or once the report template has been available on the CEDRI website for one year, whichever date is later. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, then submit a complete report, including information claimed to be CBI, to the EPA. Periodic Reports must be generated using the appropriate template on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, U.S. EPA Mailroom (C404-02), 4930 Old Page Road, Durham NC 27703 to the attention of the applicable person specified in paragraphs (A) through (B) of this section. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(A) Ethylene Production Sector Lead

(B) Cyanide Chemicals Manufacturing Sector Lead

(iii) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, the owner or operator must meet the requirements outlined in paragraphs (a)(10)(iii)(A) through (G) of this section.

(A) The owner or operator must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(B) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(C) The outage may be planned or unplanned.

(D) The owner or operator must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(E) The owner or operator must provide to the Administrator a written description identifying:

(*1*) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(*2*) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(*3*) Measures taken or to be taken to minimize the delay in reporting; and

(*4*) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(F) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(G) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(iv) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, the owner or operator must meet the requirements outlined in paragraphs (a)(10)(iv)(A) through (E) of this section.

(A) You may submit a claim if a *force majeure* event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this paragraph, a *force majeure* event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(B) The owner or operator must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(C) The owner or operator must provide to the Administrator:

(*1*) A written description of the force majeure event;

(*2*) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(*3*) Measures taken or to be taken to minimize the delay in reporting; and

(*4*) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(D) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(E) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

(b) *Notification of initial startup*—(1) *Contents.* An owner or operator of an affected source for which a notice of initial startup has not been submitted under §63.5, shall send the Administrator written notification of the actual date of initial startup of an affected source. This paragraph does not apply to an affected source in existence on the effective date of this rule.

(2) *Due date.* The notification of the actual date of initial startup shall be postmarked within 15 days after such date.

(c) *Initial Notification.* Owners or operators of affected sources who are subject to this subpart shall notify the Administrator of the applicability of this subpart by submitting an Initial Notification according to the schedule described in paragraph (c)(1) of this section. The notice shall include the information specified in paragraphs (c)(2) through (7) of this section, as applicable. An application for approval of construction or reconstruction required under §63.5(d) of subpart A of this part may be used to fulfill the initial notification requirements.

(1) The initial notification shall be postmarked within 1 year after the source becomes subject to this subpart.

(2) Identification of the storage vessels subject to this subpart.

(3) Identification of the process vents subject to this subpart.

(4) Identification of the transfer racks subject to this subpart.

(5) For equipment leaks, identification of the process units subject to this subpart.

(6) Identification of other equipment or emission points subject to this subpart.

(7) As an alternative to the requirements specified in paragraphs (c)(1) through (3) and (c)(5) of this section, process units can be identified instead of individual pieces of equipment. For this alternative, the kind of emission point in the process unit that will comply must also be identified.

(d) *Notification of Compliance Status*—(1) *Contents.* The owner or operator shall submit a Notification of Compliance Status for each affected source subject to this subpart containing the information specified in paragraphs (d)(1)(i) and (ii) of this section. For pressure relief devices subject to the requirements of §63.1107(e)(3), the owner or operator of an acrylic and modacrylic fiber production affected source or polycarbonate production affected source shall also submit the information listed in paragraph (d)(1)(iii) of this section in a supplement to the Notification of Compliance Status within 150 days after the first applicable compliance date for pressure relief device monitoring. For flares subject to the requirements of §63.1103(e)(4), the owner or operator of an ethylene production affected source shall also submit the information listed in paragraph (d)(1)(iv) of this section in a supplement to the Notification of Compliance Status within 150 days after the first applicable compliance date for flare monitoring. For pressure relief devices subject to the pressure release management work practice standards in §63.1107(h)(3), the owner or operator of an ethylene production affected source shall also submit the information listed in paragraph (d)(1)(v) of this section in a supplement to the Notification of Compliance Status within 150 days after the first applicable compliance date for pressure relief device monitoring.

(i) Except as specified in paragraphs (d)(1)(iv) and (v) of this section, the Notification of Compliance Status shall include the information specified in this subpart and the subparts referenced by this subpart. Alternatively, this information can be submitted as part of a title V permit application or amendment.

(ii) The Notification of Compliance Status shall include a statement from the owner or operator identifying which subpart he or she has elected to comply with, where given a choice, as provided for in §63.1100(g).

(iii) For pressure relief devices in organic HAP service, a description of the device or monitoring system to be implemented, including the pressure relief devices and process

parameters to be monitored (if applicable), and a description of the alarms or other methods by which operators will be notified of a pressure release.

(iv) For each flare subject to the requirements in §63.1103(e)(4), in lieu of the information required in §63.987(b) of subpart SS, the Notification of Compliance Status shall include flare design (*e.g.,* steam-assisted, air-assisted, non-assisted, or pressure-assisted multi-point); all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the initial visible emissions demonstration required by §63.670(h) of subpart CC, as applicable; and all periods during the compliance determination when the pilot flame or flare flame is absent.

(v) For pressure relief devices subject to the requirements of §63.1107(h), the Notification of Compliance Status shall include the information specified in paragraphs (d)(1)(v)(A) and (B) of this section.

(A) A description of the monitoring system to be implemented, including the relief devices and process parameters to be monitored, and a description of the alarms or other methods by which operators will be notified of a pressure release.

(B) A description of the prevention measures to be implemented for each affected pressure relief device.

(2) *Due date.* The owner or operator shall submit the Notification of Compliance Status for each affected source 240 days after the compliance date specified for the affected source under this subpart, or 60 days after completion of the initial performance test or initial compliance assessment, whichever is earlier. Notification of Compliance Status reports may be combined for multiple affected sources as long as the due date requirements for all sources covered in the combined report are met.

(e) *Periodic Reports.* The owner or operator of an affected source subject to monitoring requirements of this subpart, or to other requirements of this subpart or subparts referenced by this subpart, where periodic reporting is specified, shall submit a Periodic Report.

(1) *Contents.* Except as specified in paragraphs (e)(4) through (8) of this section, Periodic Reports shall include all information specified in this subpart and subparts referenced by this subpart.

(2) *Due date.* The Periodic Report shall be submitted no later than 60 days after the end of each 6-month period. The first report shall cover the 6-month period after the Notification of Compliance Status report is due. The first report shall be submitted no later than the last day of the month that includes the date 8 months (6 months and 60 days) after the Notification of Compliance Status report is due.

(3) *Overlap with title V reports.* Information required by this subpart, which is submitted with a title V periodic report, need not also be included in a subsequent Periodic Report required

by this subpart or subpart referenced by this subpart. The title V report shall be referenced in the Periodic Report required by this subpart.

(4) *Ethylene production flare reports.* For each flare subject to the requirements in §63.1103(e)(4), the Periodic Report shall include the items specified in paragraphs (e)(4)(i) through (vi) of this section in lieu of the information required in §63.999(c)(3) of subpart SS.

(i) Records as specified in §63.1109(e)(1) for each 15-minute block during which there was at least one minute when regulated material is routed to a flare and no pilot flame or flare flame is present. Include the start and stop time and date of each 15-minute block.

(ii) Visible emission records as specified in §63.1109(e)(2)(iv) for each period of 2 consecutive hours during which visible emissions exceeded a total of 5 minutes.

(iii) The periods specified in §63.1109(e)(7). Indicate the date and start time for the period, and the net heating value operating parameter(s) determined following the methods in §63.670(k) through (n) of subpart CC as applicable.

(iv) For flaring events meeting the criteria in §63.670(o)(3) of subpart CC and §63.1103(e)(4)(iv):

(A) The start and stop time and date of the flaring event.

(B) The length of time that emissions were visible from the flare during the event.

(C) Results of the root cause and corrective actions analysis completed during the reporting period, including the corrective actions implemented during the reporting period and, if applicable, the implementation schedule for planned corrective actions to be implemented subsequent to the reporting period.

(v) For pressure-assisted multi-point flares, the periods of time when the pressure monitor(s) on the main flare header show the burners operating outside the range of the manufacturer's specifications.

(vi) For pressure-assisted multi-point flares, the periods of time when the staging valve position indicator monitoring system indicates a stage should not be in operation and is or when a stage should be in operation and is not.

(5) *Ethylene production maintenance vent reports.* For maintenance vents subject to the requirements §63.1103(e)(5), Periodic Reports must include the information specified in paragraphs (e)(5)(i) through (iv) of this section for any release exceeding the applicable limits in §63.1103(e)(5)(i). For the purposes of this reporting requirement, owners or operators complying with §63.1103(e)(5)(i)(D) must report each venting event conducted under those provisions and include an explanation for each event as to why utilization of this alternative was required.

(i) Identification of the maintenance vent and the equipment served by the maintenance vent.

(ii) The date and time the maintenance vent was opened to the atmosphere.

(iii) The LEL, vessel pressure, or mass of VOC in the equipment, as applicable, at the start of atmospheric venting. If the 5 psig vessel pressure option in §63.1103(e)(5)(i)(B) was used and active purging was initiated while the LEL was 10 percent or greater, also include the LEL of the vapors at the time active purging was initiated.

(iv) An estimate of the mass of organic HAP released during the entire atmospheric venting event.

(6) *Bypass line reports.* For bypass lines subject to the requirements in §63.1103(e)(6), Periodic Reports must include the date, time, duration, estimate of the volume of gas, the concentration of organic HAP in the gas and the resulting mass emissions of organic HAP that bypass a control device. For periods when the flow indicator is not operating, report the date, time, and duration.

(7) *Decoking operation reports.* For decoking operations of an ethylene cracking furnace subject to the requirements in §63.1103(e)(7) and (8), Periodic Reports must include the information specified in paragraphs (e)(7)(i) through (iii) of this section.

(i) For each control measure selected to minimize coke combustion emissions as specified in §63.1103(e)(7)(ii) through (v), report instances where the control measures were not followed.

(ii) Report instances where an isolation valve inspection was not conducted according to the procedures specified in §63.1103(e)(8).

(iii) For instances where repair was delayed beyond 1 calendar day as specified in §63.1103(e)(7)(i), report the information specified in §63.1109(h)(1).

(8) *Ethylene production pressure relief devices reports.* For pressure relief devices subject to the requirements of §63.1107(h), Periodic Reports must include the information specified in paragraphs (e)(8)(i) through (iii) of this section.

(i) For pressure relief devices in organic HAP gas or vapor service, pursuant to §63.1107(h)(1), report any instrument reading of 500 ppm or greater.

(ii) For pressure relief devices in organic HAP gas or vapor service subject to §63.1107(h)(2), report confirmation that any monitoring required to be done during the reporting period to show compliance was conducted.

(iii) For pressure relief devices in organic HAP service subject to §63.1107(h)(3), report each pressure release to the atmosphere, including duration of the pressure release and estimate

of the mass quantity of each organic HAP released; the results of any root cause analysis and corrective action analysis completed during the reporting period, including the corrective actions implemented during the reporting period; and, if applicable, the implementation schedule for planned corrective actions to be implemented subsequent to the reporting period.

(f) *General report content.* All reports and notifications submitted pursuant to this subpart, including reports that combine information required under this subpart and a subpart referenced by this subpart, shall include the information specified in paragraphs (f)(1) through (4) of this section.

(1) The name, address and telephone number (fax number may also be provided) of the owner or operator.

(2) The name, address and telephone number of the person to whom inquiries should be addressed, if different than the owner or operator.

(3) The address (physical location) of the reporting facility.

(4) Identification of each affected source covered in the submission and identification of the subparts (this subpart and the subparts referenced in this subpart) that are applicable to that affected source. Summaries and groupings of this information are permitted.

(g) *Report and notification submission*—(1) *Submission to the Environmental Protection Agency.* All reports and notifications required under this subpart shall be sent to the appropriate EPA Regional Office and to the delegated State authority, except that request for permission to use an alternative means of emission limitation as provided for in §63.1113 shall be submitted to the Director of the EPA Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, MD-10, Research Triangle Park, North Carolina, 27711. The EPA Regional Office may waive the requirement to submit a copy of any reports or notifications at its discretion, except that electronic reporting to CEDRI cannot be waived, and as such, compliance with the provisions of this paragraph does not relieve owners or operators of affected facilities of the requirement to submit electronic reports required in this subpart to the EPA.

(2) *Submission of copies.* If any State requires a notice that contains all the information required in a report or notification listed in this subpart, an owner or operator may send the appropriate EPA Regional Office a copy of the report or notification sent to the State to satisfy the requirements of this subpart for that report or notification, except that performance test reports and performance evaluation reports required under paragraph (a)(10) of this section must be submitted to CEDRI in the format specified in that paragraph.

(3) *Method of submission.* Wherever this subpart specifies “postmark” dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent on or before the specified date.

(4) *Submission by electronic media.* If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media.

(h) *Adjustment to timing of submittals and review of required communications—*
(1) *Alignment with title V submission.* An owner or operator may submit Periodic Reports required by this subpart on the same schedule as the title V periodic report for the facility. The owner or operator using this option need not obtain prior approval, but must ensure that no reporting gaps occur. The owner or operator shall clearly identify the change in reporting schedule in the first report filed under this paragraph. The requirements of paragraph (f) of this section are not waived when implementing this change.

(2) *Establishment of a common schedule.* An owner or operator may arrange by mutual agreement (which may be a standing agreement) with the Administrator a common schedule on which periodic reports required by this subpart shall be submitted throughout the year as long as the reporting period is not extended. Procedures governing the implementation of this provision are specified in paragraphs (h)(3) through (7) of this section.

(3) *Submission requirements.* Except as allowed by paragraph (h)(1) of this section, until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (h)(5) and (6) of this section, the owner or operator of an affected source remains strictly subject to the required submittal deadlines specified in this subpart and subparts referenced by this subpart.

(4) *Request for adjustment of reporting schedule.* Except as allowed by paragraph (h)(1) of this section, an owner or operator shall request the adjustment provided for in paragraphs (h)(5) and (6) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this subpart or subparts referenced by this subpart. A request for a change to the periodic reporting schedule need only be made once for every schedule change and not once for every semiannual report submitted.

(5) *Alteration of time periods or deadlines.* Notwithstanding time periods or postmark deadlines specified in this subpart for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practical before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(6) *Approval of request for adjustment.* If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(7) *Notification of delay.* If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

§63.1111 Startup, shutdown, and malfunction.

(a) *Startup, shutdown, and malfunction plan.*

Before [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], the requirements of this paragraph (a) apply to all affected sources except for acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources. On and after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], the requirements of this paragraph (a) apply to all affected sources except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, and polycarbonate production affected sources. On and after July 6, 2023, the requirements of this paragraph (a) apply to all affected sources except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, ethylene production affected sources, and polycarbonate production affected sources.

(1) *Description and purpose of plan.* The owner or operator of an affected source shall develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the affected source during periods of startup, shutdown, and malfunction. This plan shall also include a program of corrective action for malfunctioning process and air pollution control equipment used to comply with relevant standards under this subpart. The plan shall also address routine or otherwise predictable CPMS malfunctions. This plan shall be developed by the owner or operator by the affected source's compliance date under this subpart. The requirement to develop this plan shall be incorporated into the source's title V permit. This requirement is optional for equipment that must comply with subparts TT or UU under this subpart. It is not optional for equipment equipped with a closed vent system and control device subject to this subpart and subpart SS of this part. The purpose of the startup, shutdown, and malfunction plan is described in paragraphs (a)(1)(i) and (ii) of this section.

(i) To ensure that owners or operators are prepared to correct malfunctions as soon as practical after their occurrence, in order to minimize excess emissions of regulated organic HAP; and

(ii) To reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(2) Operation of source. During periods of startup, shutdown, and malfunction, the owner or operator of an affected source subject to this subpart YY shall operate and maintain such affected source (including associated air pollution control equipment and CPMS) in a manner consistent with safety and good air pollution control practices for minimizing emissions to the extent practical. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.

Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required by this section), review of operation and maintenance records, and inspection of the source.

(3) *Use of additional procedures.* To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator of an affected source may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Administrator.

(4) *Revisions to the plan.* Based on the results of a determination made under §63.1108(b)(3), the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan if the Administrator finds that the plan is inadequate as specified in paragraphs (a)(4)(i) through (iv) of this section:

(i) Does not address a startup, shutdown, and malfunction event of the CPMS, the air pollution control equipment, or the affected source that has occurred; or

(ii) Fails to provide for the operation of the affected source (including associated air pollution control equipment and CPMS) during a startup, shutdown, and malfunction event in a manner consistent with good air pollution control practices for minimizing emissions to the extent practical; or

(iii) Does not provide adequate procedures for correcting malfunctioning process and air pollution control equipment as quickly as practicable; or

(iv) Does not provide adequate measures to prevent or minimize excess emissions to the extent practical as specified in §63.1108(a)(5).

(5) *Additional malfunction plan requirements.* If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator shall revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the affected source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control equipment or CPMS.

(b) *Startup, shutdown, and malfunction reporting requirements.*

Before [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], the requirements of this paragraph (b) apply to all affected sources

except for acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources. On and after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], the requirements of this paragraph (b) apply to all affected sources except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, and polycarbonate production affected sources. On and after July 6, 2023, the requirements of this paragraph (b) apply to all affected sources except for acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, ethylene production affected sources, and polycarbonate production affected sources.

(1) *Periodic startup, shutdown, and malfunction reporting requirements.* If actions taken by an owner or operator during a startup, shutdown, and malfunction of an affected source, or of a control device or monitoring system required for compliance (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's plan, then the owner or operator shall state such information in a startup, shutdown, and malfunction report. During the reporting period, reports shall only be required for startups, shutdowns, and malfunctions during which excess emissions, as defined in §63.1108(a)(5), occur during the reporting period. A startup, shutdown, and malfunction report can be submitted as part of a Periodic Report required under §63.1110(a)(5), or on a more frequent basis if specified otherwise under this subpart or a subpart referenced by this subpart or as established otherwise by the permitting authority in the affected source's title V permit. The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate), unless the information is submitted with the Periodic Report. The report shall include the information specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section.

(i) The name, title, and signature of the owner or operator or other responsible official certifying its accuracy.

(ii) The number of startup, shutdown, and malfunction events and the total duration of all periods of startup, shutdown, and malfunction for the reporting period if the total duration amounts to either of the durations in paragraphs (b)(1)(ii)(A) or (B) of this section. Records of the number of CPMS startup, shutdown, and malfunction events and the total duration of all periods of startup, shutdown, and malfunction for the reporting period are required under §63.998(c)(1)(ii)(C) and (D) of this section.

(A) Total duration of periods of malfunctioning of a CPMS equal to or greater than 5 percent of that CPMS operating time for the reporting period; or

(B) Total duration of periods of startup, shutdown, and malfunction for an affected source equal to or greater than 1 percent of that affected source's operating time for the reporting period.

(iii) Records documenting each startup, shutdown and malfunction event as required under §63.998(c)(1)(ii)(F).

(iv) Records documenting the total duration of operating time as required under §63.998(c)(1)(ii)(H).

(2) *Immediate startup, shutdown, and malfunction reports.* Notwithstanding the allowance to reduce the frequency of reporting for startup, shutdown, and malfunction reports under paragraph (b)(1) of this section, any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) during which excess emissions occur is not consistent with the procedures specified in the affected source's plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, followed by a letter delivered or postmarked within 7 working days after the end of the event. The immediate report required under this paragraph shall contain the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph are specified in §63.1110(h).

(c) *Malfunction recordkeeping and reporting.* Before [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], the requirements of this paragraph (c) apply only to acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources. On and after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], the requirements of this paragraph (c) apply only to acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, and polycarbonate production affected sources. On and after July 6, 2023, the requirements of this paragraph (c) apply only to acrylic and modacrylic fiber production affected sources, cyanide chemicals manufacturing affected sources, ethylene production affected sources, and polycarbonate production affected sources.

(1) *Records of malfunctions.* The owner or operator shall keep the records specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time, and duration of each failure.

(ii) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(iii) Record actions taken to minimize emissions in accordance with §63.1108(a)(4)(ii), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(2) *Reports of malfunctions.* If a source fails to meet an applicable standard, report such events in the Periodic Report. Report the number of failures to meet an applicable standard. For each instance, report the date, time and duration of each failure. For each failure the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

§63.1112 Extension of compliance, and performance test, monitoring, recordkeeping and reporting waivers and alternatives.

(a) *Extension of compliance*—(1) *Extension of compliance with emission standards.* Until an extension of compliance has been granted by the Administrator under this paragraph, the owner or operator of an affected source subject to the requirements of this subpart shall comply with all applicable requirements of this subpart.

(2) *Extension of compliance for early reductions and other reductions.* (i) *Early reductions.* Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D of this part.

(ii) *Other reductions.* Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) (as defined in section 169(3) of the Act) or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

(3) *Request for extension of compliance.* Paragraphs (a)(4) through (7) of this section concern requests for an extension of compliance with a relevant standard under this part (except requests for an extension of compliance under paragraph (a)(2)(i) of this section will be handled through procedures specified in subpart D of this part).

(4) *Requests for extensions of compliance for section 112 standards.* (i) *Section 112(d) standards.* (A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be

incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) Any request under this paragraph for an extension of compliance with a relevant standard shall be submitted in writing to the appropriate authority not later than 12 months before the affected source's compliance date (as specified in §63.1102) for sources that are not including emission points in an emissions average, or not later than 18 months before the affected source's compliance date (as specified in §63.1102) for sources that are including emission points in an emissions average. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards, e.g., a compliance date specified by the standard is less than 12 (or 18) months after the standard's effective date.

(ii) *Section 112(f) standards.* The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 15 days after the effective date of the relevant standard.

(5) *Requests for extensions of compliance for BACT or LAER.* The owner or operator of an existing source who has installed BACT or technology required to meet LAER (as specified in paragraph (a)(2)(ii) of this section) prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(6) *Contents of request.* (i) The request for a compliance extension under paragraph (a)(4) of this section shall include the following information:

(A) A description of the controls to be installed to comply with the standard;

(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(*1*) The date by which contracts for emission control systems or process changes for emission control will be awarded, or the date by which orders will be issued for the purchase of component parts to accomplish emission control or process changes;

(*2*) The date by which on-site construction, installation of emission control equipment, or a process change is to be initiated;

(*3*) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

(*4*) The date by which final compliance is to be achieved.

(C) A description of interim emission control steps, that will be taken during the extension period, including milestones to assure proper operation and maintenance of emission control and process equipment; and

(D) Whether the owner or operator is also requesting an extension of other applicable requirements (e.g., performance testing requirements).

(ii) The request for a compliance extension under paragraph (a)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(7) *Additional advice.* Advice on requesting an extension of compliance may be obtained from the Administrator.

(8) *Approval of request for extension of compliance.* Paragraphs (a)(9) through (14) of this section concern approval of an extension of compliance requested under paragraphs (a)(4) through (6) of this section.

(9) *General.* Based on the information provided in any request made under paragraphs (a)(4) through (6) of this section, or other information, the Administrator may grant an extension of compliance with an emission standard, as specified in paragraphs (a)(4) and (5) of this section.

(10) *Contents of extension.* The extension will be in writing and will—

(i) Identify each affected source covered by the extension;

(ii) Specify the termination date of the extension;

(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;

(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and

(v)(A) Under paragraph (a)(4) of this section, specify any additional conditions that the Administrator deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or

(B) Under paragraph (a)(5)of this section, specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.

(11) *Progress reports.* The owner or operator of an existing source that has been granted an extension of compliance under paragraph (a)(10) of this section may be required to submit to the Administrator progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (a)(9) of this section.

(12) *Notifications to owners and operators regarding compliance extensions for section 112(d) standards.* (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 days after receipt of sufficient information to evaluate a request submitted under paragraph (a)(4)(i) or (a)(5) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 days after receipt of the original application and within 30 days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with—

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

(iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 days after presentation of additional information or

argument (if the application is complete), or within 30 days after the final date specified for the presentation if no presentation is made.

(13) *Notifications to owners and operators regarding compliance extensions for section 112(f) standards.* (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 days after receipt of sufficient information to evaluate a request submitted under paragraph (a)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 15 days after receipt of the original application and within 15 days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with—

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

(iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 days after presentation of additional information or argument (if the application is complete), or within 30 days after the final date specified for the presentation if no presentation is made.

(14) *Termination of extension.* The Administrator may terminate an extension of compliance at an earlier date than specified if any specification under paragraphs (a)(10)(iii) or (iv) of this section is not met.

(15) [Reserved]

(16) *Administrator's authority.* The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.

(b) *Waiver of performance tests*—(1) *Applicability of this section.* Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) *General.* Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) *Request to waive a performance test.* (i) If a request is made for an extension of compliance under paragraph (a) of this section, the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if a site-specific test plan is not submitted.

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report, but it shall be submitted at least 60 days before the performance test if a site-specific test plan is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

(4) *Approval of request to waive performance test.* The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (b)(3) of this section when he/she—

(i) Approves or denies an extension of compliance under paragraph (a) of this section; or

(ii) Approves or disapproves a site-specific test plan; or

(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) *Administrator's authority.* Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

(c) *Use of an alternative monitoring method*—(1) *General.* Until permission to use an alternative monitoring method has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) *Alternatives to monitoring methods.* After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:

(i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;

(ii) Alternative monitoring requirements when the affected source is infrequently operated;

(iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;

(iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;

(v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;

(vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;

(vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;

(viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or

(ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.

(3) *Conflicts between alternative and required methods.* If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and

alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.

(4)(i) *Request to use alternative monitoring method.* An owner or operator who wishes to use an alternative monitoring method shall submit an application to the Administrator as described in paragraph (c)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring method is not used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring method is to be used to demonstrate compliance with a relevant standard, the application shall be submitted not later than with the site-specific test plan required, or with the site-specific performance evaluation plan (if requested), or at least 60 days before the performance evaluation is scheduled to begin.

(ii) The application shall contain a description of the proposed alternative monitoring system and a performance evaluation test plan, if required. In addition, the application shall include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (c)(4)(i) of this section to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

(5) *Approval of request to use alternative monitoring method.* (i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 days after receipt of the original request and within 30 days after receipt of any supplementary information that is submitted. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with—

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (c)(5)(i) of this section.

(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (c)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the

Administrator to use another monitoring method as allowed by this subpart or a subpart referenced by this subpart.

(6) *Alternative to the relative accuracy test.* An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:

(i) *Criteria for approval of alternative procedures.* An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (c)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements specified in this subpart or subpart referenced by this subpart demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

(ii) *Petition to use alternative to relative accuracy test.* The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

(iii) *Rescission of approval to use alternative to relative accuracy test.* The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind

permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

(d) *Waiver of recordkeeping or reporting requirements.* (1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the recordkeeping and reporting requirements of this subpart and any subparts referenced by this subpart.

(2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request. Electronic reporting to the EPA cannot be waived, and as such, compliance with the provisions of this paragraph does not relieve owners or operators of affected facilities of the requirement to submit electronic reports required in this subpart to the EPA.

(3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under paragraph (a) of this section, any required compliance progress report or compliance status report required under this part or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under §63.999(c) or another subpart referenced by this subpart, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.

(4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she—

(i) Approves or denies an extension of compliance under paragraph (a) of this section; or

(ii) Makes a determination of compliance following the submission of a required Notification of Compliance Status report or excess emissions and continuous monitoring systems performance report; or

(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.

(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

§63.1113 Procedures for approval of alternative means of emission limitation.

(a) *Alternative means of emission limitation.* An owner or operator of an affected source may request a determination of alternative means of emission limitation to the requirements of design, equipment, work practice, or operational standards of this subpart or of a subpart referenced by this subpart. If, in the judgment of the Administrator, an alternative means of emission limitation will achieve a reduction in HAP emissions at least equivalent to the reduction in emissions from that source achieved under any design, equipment, work practice, or operational standards (but not performance standards) in this subpart, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(1) The notice may condition the permission on requirements related to the operation and maintenance of the alternative means.

(2) Any such notice shall be published only after public notice and an opportunity for public comment.

(b) *Content of submittal.* (1) In order to obtain approval, any person seeking permission to use an alternative means of compliance under this section shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions. An owner or operator of an affected source seeking permission to use an alternative means of compliance who has not previously performed testing shall also submit a proposed test plan. If the owner or operator seeks permission to use an alternative means of compliance based on previously performed testing, they shall submit the results of testing, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring.

(2) The owner or operator who requests an alternative means of emissions limitation shall submit a description of the proposed testing, monitoring, recordkeeping, and reporting that will be used and the proposed basis for demonstrating compliance.

(3) For storage vessels, the owner or operator shall include the results of actual emissions tests using full-size or scale-model storage vessels that accurately collect and measure all regulated HAP emissions using a given control technique, and that accurately simulate wind and account for other emission variables such as temperature and barometric pressure, or an engineering analysis that the Administrator determines to be an accurate method of determining equivalence.

(4) For proposed alternatives to equipment leak requirements referenced by this subpart, the owner or operator shall also submit the information specified in and meet the requirements for alternate means of emission limitation specified in the referenced subparts.

§63.1114 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. Environmental Protection Agency (EPA), or a delegated authority such as the applicable State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. Contact the applicable EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a state, local, or tribal agency under subpart E to this part, the authorities contained in paragraphs (b)(1) through (6) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(1) Approval of alternatives to the nonopacity emissions standards in §63.1103(a)(3), (b)(3) through (5), (c)(3), (d)(3), (e)(3), (f)(3), (g)(3) and (4), and (h)(3) under §63.6(g). Follow the requirements in §63.1113 to request permission to use an alternative means of emission limitation. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

(2) [Reserved]

(3) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(4) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(6) Approval of an alternative to any electronic reporting to EPA required by this subpart.