

§ 63.1080

- (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.

[67 FR 46279, July 12, 2002]

Subpart XX—National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations

SOURCE: 67 FR 46271, July 12, 2002, unless otherwise noted.

INTRODUCTION

§ 63.1080 What is the purpose of this subpart?

This subpart establishes requirements for controlling emissions of hazardous air pollutants (HAP) from heat exchange systems and waste streams at new and existing ethylene production units.

§ 63.1081 When must I comply with the requirements of this subpart?

You must comply with the requirements of this subpart according to the schedule specified in § 63.1102(a). Each heat exchange system which is part of an ethylene production affected source also must comply with paragraph (a) of this section. Each waste stream which is part of an ethylene production affected source also must comply with paragraph (b) of this section.

(a) Each heat exchange system that is part of an ethylene production affected source that commenced construction or reconstruction on or before October 9, 2019, must be in compliance with the heat exchange system requirements specified in §§ 63.1084(f), 63.1085(e) and (f), 63.1086(e), 63.1087(c) and (d), 63.1088(d), and 63.1089(d) and (e) upon initial startup or July 6, 2023, whichever is later. Each heat exchange system that is part of an ethylene production affected source that commences construction or reconstruction

40 CFR Ch. I (7–1–21 Edition)

after October 9, 2019, must be in compliance with the heat exchange system requirements specified in §§ 63.1084(f), 63.1085(e) and (f), 63.1086(e), 63.1087(c) and (d), 63.1088(d), and 63.1089(d) and (e) upon initial startup, or July 6, 2020, whichever is later.

(b) Each waste stream that is part of an ethylene production affected source that commenced construction or reconstruction on or before October 9, 2019, must be in compliance with the flare requirements specified in § 63.1095(a)(1)(vi) and (b)(3) upon initial startup or July 6, 2023, whichever is later. Each waste stream that is part of an ethylene production affected source that commences construction or reconstruction after October 9, 2019, must be in compliance with the flare requirements specified in § 63.1095(a)(1)(vi) and (b)(3) upon initial startup, or July 6, 2020, whichever is later.

[85 FR 40419, July 2, 2020]

DEFINITIONS

§ 63.1082 What definitions do I need to know?

(a) Unless defined in paragraph (b) of this section, definitions for terms used in this subpart are provided in the Clean Air Act, § 63.1103(e), and 40 CFR 61.341.

(b) The following definitions apply to terms used in this subpart:

Continuous butadiene waste stream means the continuously flowing process wastewater from the following equipment: The aqueous drain from the debutanizer reflux drum, water separators on the C4 crude butadiene transfer piping, and the C4 butadiene storage equipment; and spent wash water from the C4 crude butadiene carbonyl wash system. The continuous butadiene waste stream does not include butadiene streams generated from sampling, maintenance activities, or shutdown purges. The continuous butadiene waste stream does not include butadiene streams from equipment that is currently an affected source subject to the control requirements of another NESHAP. The continuous butadiene waste stream contains less than 10 parts per million by weight (ppmw) of benzene.

Environmental Protection Agency

§ 63.1084

Dilution steam blowdown waste stream means any continuously flowing process wastewater stream resulting from the quench and compression of cracked gas (the cracking furnace effluent) at an ethylene production unit and is discharged from the unit. This stream typically includes the aqueous or oily-water stream that results from condensation of dilution steam (in the cracking furnace quench system), blowdown from dilution steam generation systems, and aqueous streams separated from the process between the cracking furnace and the cracked gas dehydrators. The dilution steam blowdown waste stream does not include blowdown that has not contacted HAP-containing process materials. Before July 6, 2023, the dilution steam blowdown waste stream does not include dilution steam blowdown streams generated from sampling, maintenance activities, or shutdown purges. Beginning on July 6, 2023, the dilution steam blowdown streams generated from sampling, maintenance activities, or shutdown purges are included in the definition of dilution steam blowdown waste stream.

Heat exchange system means any cooling tower system or once-through cooling water system (e.g., river or pond water). A heat exchange system can include more than one heat exchanger and can include an entire recirculating or once-through cooling system.

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

Spent caustic waste stream means the continuously flowing process wastewater stream that results from the use of a caustic wash system in an ethylene production unit. A caustic wash system is commonly used at ethylene production units to remove acid gases and sulfur compounds from process streams, typically cracked gas. Before July 6, 2023, the spent caustic waste stream does not include spent caustic

streams generated from sampling, maintenance activities, or shutdown purges. Beginning on July 6, 2023, the spent caustic streams generated from sampling, maintenance activities, or shutdown purges are included in the definition of spent caustic waste stream.

[67 FR 46271, July 12, 2002, as amended at 85 FR 40419, July 6, 2020]

APPLICABILITY FOR HEAT EXCHANGE SYSTEMS

§ 63.1083 Does this subpart apply to my heat exchange system?

The provisions of this subpart apply to your heat exchange system if you own or operate an ethylene production unit expressly referenced to this subpart XX from subpart YY of this part. The provisions of subpart A (General Provisions) of this part do not apply to this subpart except as specified in subpart YY of this part.

§ 63.1084 What heat exchange systems are exempt from the requirements of this subpart?

Except as specified in paragraph (f) of this section, your heat exchange system is exempt from the requirements in §§ 63.1085 and 63.1086 if it meets any one of the criteria in paragraphs (a) through (e) of this section.

(a) Your heat exchange system operates with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

(b) Your heat exchange system contains an intervening cooling fluid, containing less than 5 percent by weight of total HAP listed in Table 1 to this subpart, between the process and the cooling water. This intervening fluid must serve to isolate the cooling water from the process fluid and must not be sent through a cooling tower or discharged. For purposes of this section, discharge does not include emptying for maintenance purposes.

(c) The once-through heat exchange system is subject to a National Pollution Discharge Elimination System (NPDES) permit with an allowable discharge limit of 1 part per million by volume (ppmv) or less above influent concentration, or 10 percent or less

§ 63.1085

40 CFR Ch. I (7–1–21 Edition)

above influent concentration, whichever is greater.

(d) Your once-through heat exchange system is subject to a NPDES permit that meets all of the conditions in paragraphs (d)(1) through (4) of this section.

(1) The permit requires monitoring of a parameter or condition to detect a leak of process fluids to cooling water.

(2) The permit specifies the normal range of the parameter or condition.

(3) The permit requires monthly or more frequent monitoring for the parameters selected as leak indicators.

(4) The permit requires you to report and correct leaks to the cooling water when the parameter or condition exceeds the normal range.

(e) Your recirculating or once-through heat exchange system cools process fluids that contain less than 5 percent by weight of total HAP listed in Table 1 to this subpart.

(f) Beginning no later than the compliance dates specified in § 63.1081(a), your heat exchange system is no longer exempt from the requirements in §§ 63.1085 and 63.1086 if it meets the criteria in paragraph (c) or (d) of this section; instead, your heat exchange system is exempt from the requirements in §§ 63.1085 and 63.1086 if it meets any one of the criteria in paragraph (a), (b), or (e) of this section.

[67 FR 46271, July 12, 2002, as amended at 85 FR 40419, July 6, 2020]

HEAT EXCHANGE SYSTEM REQUIREMENTS

§ 63.1085 What are the general requirements for heat exchange systems?

Unless you meet one of the requirements for exemptions in § 63.1084, you must meet the requirements in paragraphs (a) through (f) of this section.

(a) Except as specified in paragraph (e) of this section, you must monitor the cooling water for the presence of substances that indicate a leak according to § 63.1086(a) through (d).

(b) Except as specified in paragraph (f) of this section, if you detect a leak, then you must repair it according to § 63.1087(a) and (b) unless repair is delayed according to § 63.1088(a) through (c).

(c) Keep the records specified in § 63.1089.

(d) Submit the reports specified in § 63.1090.

(e) Beginning no later than the compliance dates specified in § 63.1081(a), the requirements specified in § 63.1086(a) through (d) no longer apply; instead, you must monitor the cooling water for the presence of total strippable hydrocarbons that indicate a leak according to § 63.1086(e). At any time before the compliance dates specified in § 63.1081(a), you may choose to comply with the requirements in this paragraph in lieu of the requirements in paragraph (a) of this section.

(f) Beginning no later than the compliance dates specified in § 63.1081(a), the requirements specified in §§ 63.1087(a) and (b) and 63.1088(a) through (c), no longer apply; instead, if you detect a leak, then you must repair it according to § 63.1087(c) and (d), unless repair is delayed according to § 63.1088(d). At any time before the compliance dates specified in § 63.1081(a), you may choose to comply with the requirements in this paragraph in lieu of the requirements in paragraph (b) of this section.

[67 FR 46271, July 12, 2002, as amended at 85 FR 40419, July 6, 2020]

MONITORING REQUIREMENTS FOR HEAT EXCHANGE SYSTEMS

§ 63.1086 How must I monitor for leaks to cooling water?

Except as specified in § 63.1085(e) and paragraph (e) of this section, you must monitor for leaks to cooling water by monitoring each heat exchange system according to the requirements of paragraph (a) of this section, monitoring each heat exchanger according to the requirements of paragraph (b) of this section, or monitoring a surrogate parameter according to the requirements of paragraph (c) of this section. Except as specified in § 63.1085(e) and paragraph (e) of this section, if you elect to comply with the requirements of paragraph (a) or (b) of this section, you may use alternatives in paragraph (d)(1) or (2) of this section for determining the mean entrance concentration.

(a) *Heat exchange system.* Monitor cooling water in each heat exchange system for the HAP listed in Table 1 to this subpart (either total or specified)

or other representative substances (e.g., total organic carbon or volatile organic compounds (VOC)) that indicate the presence of a leak according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) You define the equipment that comprises each heat exchange system. For the purposes of implementing paragraph (a) of this section, a heat exchange system may consist of an entire heat exchange system or any combinations of heat exchangers such that, based on the rate of cooling water at the entrance and exit to each heat exchange system and the sensitivity of the test method being used, a leak of 3.06 kg/hr or greater of the HAP in Table 1 to this subpart would be detected. For example, if the test you decide to use has a sensitivity of 1 ppmv for total HAP, you must define the heat exchange system so that the cooling water flow rate is 51,031 liters per minute or less so that a leak of 3.06 kg/hr can be detected.

(2) Monitoring periods. For existing sources, monitor cooling water as specified in paragraph (a)(2)(i) of this section. Monitor heat exchange systems at new sources according to the specifications in paragraph (a)(2)(ii) of this section.

(i) Monitor monthly for 6 months, both initially and following completion of a leak repair. Then monitor as provided in either paragraph (a)(2)(i)(A) or (a)(2)(i)(B) of this section, as appropriate.

(A) If no leaks are detected by monitoring monthly for a 6-month period, monitor quarterly thereafter until a leak is detected.

(B) If a leak is detected, monitor monthly until the leak has been repaired. Upon completion of repair, monitor according to the specifications in paragraph (a)(2)(i) of this section.

(ii) Monitor weekly for 6 months, both initially and following completion of a leak repair. Then monitor as provided in paragraph (a)(2)(ii)(A) or (B) of this section, as appropriate.

(A) If no leaks are detected by monitoring weekly for a 6-month period, monitor monthly thereafter until a leak is detected.

(B) If a leak is detected, monitor weekly until the leak has been re-

paired. Upon completion of the repair, monitor according to the specifications in paragraph (a)(2)(ii) of this section.

(3) Determine the concentration of the monitored substance in the heat exchange system cooling water using any method listed in 40 CFR part 136. Use the same method for both entrance and exit samples. You may validate 40 CFR part 136 methods for the HAP listed in Table 1 to this subpart according to the procedures in appendix D to this part. Alternative methods may be used upon approval by the Administrator.

(4) Take a minimum of three sets of samples at each entrance and exit.

(5) Calculate the average entrance and exit concentrations, correcting for the addition of make-up water and evaporative losses, if applicable. Using a one-sided statistical procedure at the 0.05 level of significance, if the exit mean concentration is at least 10 percent greater than the entrance mean of the HAP (total or speciated) in Table 1 to this subpart or other representative substance, and the leak is at least 3.06 kg/hr, you have detected a leak.

(b) *Individual heat exchangers.* Monitor the cooling water at the entrance and exit of each heat exchanger for the HAP in Table 1 to this subpart (either total or speciated) or other representative substances (e.g., total organic carbon or VOC) that indicate the presence of a leak in a heat exchanger according to the requirements in paragraphs (b)(1) through (4) of this section.

(1) Monitoring periods. For existing sources, monitor cooling water as specified in paragraph (b)(1)(i) of this section. Monitor each heat exchanger at new sources according to the specifications in paragraph (b)(1)(ii) of this section.

(i) Monitor monthly for 6 months, both initially and following completion of a leak repair. Then monitor as provided in paragraph (b)(1)(i)(A) or (b)(1)(i)(B) of this section, as appropriate.

(A) If no leaks are detected by monitoring monthly for a 6-month period, monitor quarterly thereafter until a leak is detected.

(B) If a leak is detected, monitor monthly until the leak has been repaired. Upon completion of repair,

monitor according to the specifications in paragraph (b)(1)(i) of this section.

(ii) Monitor weekly for 6 months, both initially and following completion of a leak repair. Then monitor as provided in paragraph (b)(1)(ii)(A) or (B) of this section, as appropriate.

(A) If no leaks are detected by monitoring weekly for a 6-month period, monitor monthly thereafter until a leak is detected.

(B) If a leak is detected, monitor weekly until the leak has been repaired. Upon completion of the repair, monitor according to the specifications in paragraph (b)(1)(ii) of this section.

(2) Determine the concentration of the monitored substance in the cooling water using any method listed in 40 CFR part 136, as long as the method is sensitive to concentrations as low as 10 ppmv. Use the same method for both entrance and exit samples. Validation of 40 CFR part 136 methods for the HAP listed in Table 1 to this subpart may be determined according to the provisions of appendix D to this part. Alternative methods may be used upon approval by the Administrator.

(3) Take a minimum of three sets of samples at each heat exchanger entrance and exit.

(4) Calculate the average entrance and exit concentrations, correcting for the addition of make-up water and evaporative losses, if applicable. Using a one-sided statistical procedure at the 0.05 level of significance, if the exit mean concentration is at least 1 ppmw or 10 percent greater than the entrance mean, whichever is greater, you have detected a leak.

(c) *Surrogate parameters.* You may elect to comply with the requirements of this section by monitoring using a surrogate indicator of leaks, provided that you comply with the requirements of paragraphs (c)(1) through (3) of this section. Surrogate indicators that could be used to develop an acceptable monitoring program are ion specific electrode monitoring, pH, conductivity, or other representative indicators.

(1) You shall prepare and implement a monitoring plan that documents the procedures that will be used to detect leaks of process fluids into cooling waters. The plan shall require monitoring

of one or more process parameters or other conditions that indicate a leak. Monitoring that is already being conducted for other purposes may be used to satisfy the requirements of this section. The plan shall include the information specified in paragraphs (c)(1)(i) through (iv) of this section.

(i) A description of the parameter or condition to be monitored and an explanation of how the selected parameter or condition will reliably indicate the presence of a leak.

(ii) The parameter level(s) or condition(s) that shall constitute a leak. This shall be documented by data or calculations showing that the selected levels or conditions will reliably identify leaks. The monitoring must be sufficiently sensitive to determine the range of parameter levels or conditions when the system is not leaking. When the selected parameter level or condition is outside that range, you have detected a leak.

(iii) Monitoring periods. For existing sources, monitor cooling water as specified in paragraph (c)(1)(iii)(A) of this section. Monitor heat exchange systems at new sources according to the specifications in paragraph (c)(1)(iii)(B) of this section.

(A) Monitor monthly for 6 months, both initially and following completion of a leak repair. Then monitor as provided in paragraph (c)(1)(iii)(A)(1) or (c)(1)(iii)(A)(2) of this section, as appropriate.

(1) If no leaks are detected, monitor quarterly thereafter until a leak is detected.

(2) If a leak is detected, monitor monthly until the leak has been repaired. Upon completion of repair, monitor according to the specifications in paragraph (c)(1)(iii)(A) of this section.

(B) Monitor the cooling water weekly for heat exchange systems at new sources.

(iv) The records that will be maintained to document compliance with the requirements of this section.

(2) If a leak is identified by audio, visual, or olfactory inspection, a method listed in 40 CFR part 136, or any other means other than those described

in the monitoring plan, and the method(s) specified in the plan could not detect the leak, you shall revise the plan and document the basis for the changes. You shall complete the revisions to the plan no later than 180 days after discovery of the leak.

(3) You shall maintain, at all times, the monitoring plan that is currently in use. The current plan shall be maintained on-site, or shall be accessible from a central location by computer or other means that provide access within 2 hours after a request. If the monitoring plan is changed, you must retain the most recent superseded plan for at least 5 years from the date of its creation. The superseded plan shall be retained on-site or accessible from a central location by computer or other means that provide access within 2 hours after a request.

(d) *Simplifying assumptions for entrance mean concentration.* If you are complying with paragraph (a) or (b) of this section, you may elect to determine the entrance mean concentration as specified in paragraph (d)(1) or (2) of this section.

(1) Assume that the entrance mean concentration of the monitored substance is zero; or,

(2) Determine the entrance mean concentration of a monitored substance at a sampling location anywhere upstream of the heat exchanger or heat exchange system, provided that there is not a reasonable opportunity for the concentration to change at the entrance to each heat exchanger or heat exchange system.

(e) Beginning no later than the compliance dates specified in § 63.1081(a), you must perform monitoring to identify leaks of total strippable hydrocarbons from each heat exchange system subject to the requirements of this subpart according to the procedures in paragraphs (e)(1) through (5) of this section.

(1) *Monitoring locations for closed-loop recirculation heat exchange systems.* For each closed loop recirculating heat exchange system, you must collect and analyze a sample from the location(s) described in either paragraph (e)(1)(i) or (ii) of this section.

(i) Each cooling tower return line or any representative riser within the

cooling tower prior to exposure to air for each heat exchange system.

(ii) Selected heat exchanger exit line(s), so that each heat exchanger or group of heat exchangers within a heat exchange system is covered by the selected monitoring location(s).

(2) *Monitoring locations for once-through heat exchange systems.* For each once-through heat exchange system, you must collect and analyze a sample from the location(s) described in paragraph (e)(2)(i) of this section. You may also elect to collect and analyze an additional sample from the location(s) described in paragraph (e)(2)(ii) of this section.

(i) Selected heat exchanger exit line(s), so that each heat exchanger or group of heat exchangers within a heat exchange system is covered by the selected monitoring location(s). The selected monitoring location may be at a point where discharges from multiple heat exchange systems are combined provided that the combined cooling water flow rate at the monitoring location does not exceed 165,000 gallons per minute.

(ii) The inlet water feed line for a once-through heat exchange system prior to any heat exchanger. If multiple heat exchange systems use the same water feed (*i.e.*, inlet water from the same primary water source), you may monitor at one representative location and use the monitoring results for that sampling location for all heat exchange systems that use that same water feed.

(3) *Monitoring method.* If you comply with the total strippable hydrocarbon concentration leak action level as specified in paragraph (e)(4) of this section, you must comply with the requirements in paragraph (e)(3)(i) of this section. If you comply with the total hydrocarbon mass emissions rate leak action level as specified in paragraph (e)(4) of this section, you must comply with the requirements in paragraphs (e)(3)(i) and (ii) of this section.

(i) You must determine the total strippable hydrocarbon concentration (in parts per million by volume (ppmv) as methane) at each monitoring location using the "Air Stripping Method

(Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources” (incorporated by reference, see § 63.14) using a flame ionization detector analyzer for on-site determination as described in Section 6.1 of the Modified El Paso Method.

(ii) You must convert the total strippable hydrocarbon concentration (in ppmv as methane) to a total hydrocarbon mass emissions rate (as methane) using the calculations in Section 7.0 of “Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources” (incorporated by reference—see § 63.14).

(4) *Monitoring frequency and leak action level.* For each heat exchange system, you must comply with the applicable monitoring frequency and leak action level, as defined in paragraphs (e)(4)(i) through (iii) of this section. The monitoring frequencies specified in paragraphs (e)(4)(i) through (iii) of this section also apply to the inlet water feed line for a once-through heat exchange system, if you elect to monitor the inlet water feed as provided in paragraph (e)(2)(ii) of this section.

(i) For each heat exchange system that is part of an ethylene production affected source that commenced construction or reconstruction on or before December 6, 2000, you must monitor quarterly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv or, for heat exchange systems with a recirculation rate of 10,000 gallons per minute or less, you may monitor quarterly using a leak action level defined as a total hydrocarbon mass emissions rate from the heat exchange system (as methane) of 0.18 kg/hr. If a leak is detected as specified in paragraph (e)(5) of this section, then you must monitor monthly until the leak has been repaired according to the requirements in § 63.1087(c) or (d). Once the leak has been repaired according to the requirements in § 63.1087(c) or (d), quarterly monitoring for the heat exchange system may resume.

(ii) For each heat exchange system that is part of an ethylene production affected source that commences con-

struction or reconstruction after December 6, 2000 and on or before October 9, 2019, you must monitor at the applicable frequency specified in paragraph (e)(4)(ii)(A) or (B) of this section using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv or, for heat exchange systems with a recirculation rate of 10,000 gallons per minute or less, you may monitor at the applicable frequency specified in paragraph (e)(4)(ii)(A) or (B) of this section using a leak action level defined as a total hydrocarbon mass emissions rate from the heat exchange system (as methane) of 0.18 kg/hr.

(A) If you have completed the initial weekly monitoring for 6-months of the heat exchange system as specified in § 63.1086(a)(2)(ii) or (b)(1)(ii) then you must monitor monthly. If a leak is detected as specified in paragraph (e)(5) of this section, then you must monitor weekly until the leak has been repaired according to the requirements in § 63.1087(c) or (d). Once the leak has been repaired according to the requirements in § 63.1087(c) or (d), monthly monitoring for the heat exchange system may resume.

(B) If you have not completed the initial weekly monitoring for 6-months of the heat exchange system as specified in § 63.1086(a)(2)(ii) or (b)(1)(ii), or if you elect to comply with paragraph (e) of this section rather than paragraphs (a) through (d) of this section upon startup, then you must initially monitor weekly for 6-months beginning upon startup and monitor monthly thereafter. If a leak is detected as specified in paragraph (e)(5) of this section, then you must monitor weekly until the leak has been repaired according to the requirements in § 63.1087(c) or (d). Once the leak has been repaired according to the requirements in § 63.1087(c) or (d), monthly monitoring for the heat exchange system may resume.

(iii) For each heat exchange system that is part of an ethylene production affected source that commences construction or reconstruction after October 9, 2019, you must initially monitor weekly for 6-months beginning upon startup and monitor monthly thereafter using a leak action level defined

as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv or, for heat exchange systems with a recirculation rate of 10,000 gallons per minute or less, you may use a leak action level defined as a total hydrocarbon mass emissions rate from the heat exchange system (as methane) of 0.18 kg/hr if the heat exchange system has a recirculation rate of 10,000 gallons per minute or less. If a leak is detected as specified in paragraph (e)(5) of this section, then you must monitor weekly until the leak has been repaired according to the requirements in § 63.1087(c) or (d). Once the leak has been repaired according to the requirements in § 63.1087(c) or (d), monthly monitoring for the heat exchange system may resume.

(5) *Leak definition.* A leak is defined as described in paragraph (e)(5)(i) or (ii) of this section, as applicable.

(i) For once-through heat exchange systems for which the inlet water feed is monitored as described in paragraph (e)(2)(ii) of this section, a leak is detected if the difference in the measurement value of the sample taken from a location specified in paragraph (e)(2)(i) of this section and the measurement value of the corresponding sample taken from the location specified in paragraph (e)(2)(ii) of this section equals or exceeds the leak action level.

(ii) For all other heat exchange systems, a leak is detected if a measurement value of the sample taken from a location specified in paragraph (e)(1)(i), (ii), or (e)(2)(i) of this section equals or exceeds the leak action level.

[67 FR 46271, July 12, 2002, as amended at 70 FR 19271, Apr. 13, 2005; 85 FR 40420, July 6, 2020]

REPAIR REQUIREMENTS FOR HEAT EXCHANGE SYSTEMS

§ 63.1087 What actions must I take if a leak is detected?

Except as specified in § 63.1085(f) and paragraphs (c) and (d) of this section, if a leak is detected, you must comply with the requirements in paragraphs (a) and (b) of this section unless repair is delayed according to § 63.1088.

(a) Repair the leak as soon as practical but not later than 45 calendar days after you received the results of

monitoring tests that indicated a leak. You must repair the leak unless you demonstrate that the results are due to a condition other than a leak.

(b) Once the leak has been repaired, use the monitoring requirements in § 63.1086 within 7 calendar days of the repair or startup, whichever is later, to confirm that the heat exchange system has been repaired.

(c) Beginning no later than the compliance dates specified in § 63.1081(a), if a leak is detected using the methods described in § 63.1086(e), you must repair the leak to reduce the concentration or mass emissions rate to below the applicable leak action level as soon as practicable, but no later than 45 days after identifying the leak, except as specified in § 63.1088(d). Repair must include re-monitoring at the monitoring location where the leak was identified according to the method specified in § 63.1086(e)(3) to verify that the total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate is below the applicable leak action level. Repair may also include performing the additional monitoring in paragraph (d) of this section to verify that the total strippable hydrocarbon concentration is below the applicable leak action level. Actions that can be taken to achieve repair include but are not limited to:

(1) Physical modifications to the leaking heat exchanger, such as welding the leak or replacing a tube;

(2) Blocking the leaking tube within the heat exchanger;

(3) Changing the pressure so that water flows into the process fluid;

(4) Replacing the heat exchanger or heat exchanger bundle; or

(5) Isolating, bypassing, or otherwise removing the leaking heat exchanger from service until it is otherwise repaired.

(d) Beginning no later than the compliance dates specified in § 63.1081(a), if you detect a leak when monitoring a cooling tower return line according to § 63.1086(e)(1)(i), you may conduct additional monitoring of each heat exchanger or group of heat exchangers associated with the heat exchange system for which the leak was detected, as provided in § 63.1086(e)(1)(ii). If no leaks

are detected when monitoring according to the requirements of § 63.1086(e)(1)(ii), the heat exchange system is considered to have met the repair requirements through re-monitoring of the heat exchange system, as provided in paragraph (c) of this section.

[67 FR 46271, July 12, 2002, as amended at 85 FR 40421, July 6, 2020]

§ 63.1088 In what situations may I delay leak repair, and what actions must I take for delay of repair?

You may delay the repair of heat exchange systems if the leaking equipment is isolated from the process. At any time before the compliance dates specified in § 63.1081(a), you may also delay repair if repair is technically infeasible without a shutdown, and you meet one of the conditions in paragraphs (a) through (c) of this section. Beginning no later than the compliance dates specified in § 63.1081(a), paragraphs (a) through (c) of this section no longer apply; instead, you may delay repair if the conditions in paragraph (d) of this section are met.

(a) If a shutdown is expected within the next 2 months of determining delay of repair is necessary, you are not required to have a special shutdown before that planned shutdown.

(b) If a shutdown is not expected within the next 2 months of determining delay of repair is necessary, you may delay repair if a shutdown for repair would cause greater emissions than the potential emissions from delaying repair until the next shutdown of the process equipment associated with the leaking heat exchanger. You must document the basis for the determination that a shutdown for repair would cause greater emissions than the emissions likely to result from delay of repair. The documentation process must include the activities in paragraphs (b)(1) through (4) of this section.

(1) State the reason(s) for delaying repair.

(2) Specify a schedule for completing the repair as soon as practical.

(3) Calculate the potential emissions from the leaking heat exchanger by multiplying the concentration of HAP listed in Table 1 to this subpart (or other monitored substances) in the

cooling water from the leaking heat exchanger by the flow rate of the cooling water from the leaking heat exchanger and by the expected duration of the delay.

(4) Determine emissions of HAP listed in Table 1 to this subpart (or other monitored substances) from purging and depressurizing the equipment that will result from the unscheduled shutdown for the repair.

(c) If repair is delayed because the necessary equipment, parts or personnel are not available, you may delay repair a maximum of 120 calendar days. You must demonstrate that the necessary equipment, parts or personnel were not available.

(d) Beginning no later than the compliance dates specified in § 63.1081(a), you may delay repair when one of the conditions in paragraph (d)(1) or (2) of this section is met and the leak is less than the delay of repair action level specified in paragraph (d)(3) of this section. You must determine if a delay of repair is necessary as soon as practicable, but no later than 45 days after first identifying the leak.

(1) If the repair is technically infeasible without a shutdown and the total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate is initially and remains less than the delay of repair action level for all monitoring periods during the delay of repair, then you may delay repair until the next scheduled shutdown of the heat exchange system. If, during subsequent monitoring, the delay of repair action level is exceeded, then you must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(2) If the necessary equipment, parts, or personnel are not available and the total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate is initially and remains less than the delay of repair action level for all monitoring periods during the delay of repair, then you may delay the repair for a maximum of 120 calendar days. You must demonstrate that the necessary equipment, parts, or personnel were not available. If, during subsequent monitoring, the delay of repair action level is exceeded, then you

Environmental Protection Agency

§ 63.1089

must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(3) The delay of repair action level is a total strippable hydrocarbon concentration (as methane) in the stripping gas of 62 ppmv or, for heat exchange systems with a recirculation rate of 10,000 gallons per minute or less, the delay of repair action level is a total hydrocarbon mass emissions rate (as methane) or 1.8 kg/hr. The delay of repair action level is assessed as described in paragraph (d)(3)(i) or (ii) of this section, as applicable.

(i) For once-through heat exchange systems for which the inlet water feed is monitored as described in §63.1086(e)(2)(ii), the delay of repair action level is exceeded if the difference in the measurement value of the sample taken from a location specified in §63.1086(e)(2)(i) and the measurement value of the corresponding sample taken from the location specified in §63.1086(e)(2)(ii) equals or exceeds the delay of repair action level.

(ii) For all other heat exchange systems, the delay of repair action level is exceeded if a measurement value of the sample taken from a location specified in §63.1086(e)(1)(i) and (ii) or §63.1086(e)(2)(i) equals or exceeds the delay of repair action level.

[67 FR 46271, July 12, 2002, as amended at 85 FR 40421, July 6, 2020]

RECORDKEEPING AND REPORTING REQUIREMENTS FOR HEAT EXCHANGE SYSTEMS

§ 63.1089 What records must I keep?

You must keep the records in paragraphs (a) through (e) of this section, according to the requirements of §63.1109(c).

(a) Monitoring data required by §63.1086 that indicate a leak, the date the leak was detected, or, if applicable, the basis for determining there is no leak.

(b) The dates of efforts to repair leaks.

(c) The method or procedures used to confirm repair of a leak and the date the repair was confirmed.

(d) At any time before the compliance dates specified in §63.1081(a), you

must keep documentation of delay of repair as specified in §63.1088(a) through (c). Beginning no later than the compliance dates specified in §63.1081(a), the requirement to keep documentation of delay of repair as specified in §63.1088(a) through (c) no longer applies; instead, you must keep documentation of delay of repair as specified in paragraphs (d)(1) through (4) of this section.

(1) The reason(s) for delaying repair.

(2) A schedule for completing the repair as soon as practical.

(3) The date and concentration or mass emissions rate of the leak as first identified and the results of all subsequent monitoring events during the delay of repair.

(4) An estimate of the potential total hydrocarbon emissions from the leaking heat exchange system or heat exchanger for each required delay of repair monitoring interval following the applicable procedures in paragraphs (d)(4)(i) through (iii) of this section.

(i) If you comply with the total strippable hydrocarbon concentration leak action level, as specified in §63.1086(e)(4), you must calculate the mass emissions rate by complying with the requirements of §63.1086(e)(3)(ii) or by determining the mass flow rate of the cooling water at the monitoring location where the leak was detected. If the monitoring location is an individual cooling tower riser, determine the total cooling water mass flow rate to the cooling tower. Cooling water mass flow rates may be determined using direct measurement, pump curves, heat balance calculations, or other engineering methods. If you determine the mass flow rate of the cooling water, calculate the mass emissions rate by converting the stripping gas leak concentration (in ppmv as methane) to an equivalent liquid concentration, in parts per million by weight (ppmw), using equation 7-1 from "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" (incorporated by reference—see §63.14) and multiply the equivalent liquid concentration by the mass flow rate of the cooling water.

(ii) For delay of repair monitoring intervals prior to repair of the leak, calculate the potential total hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the monitoring interval by multiplying the mass emissions rate, determined in § 63.1086(e)(3)(ii) or paragraph (d)(4)(i) of this section, by the duration of the delay of repair monitoring interval. The duration of the delay of repair monitoring interval is the time period starting at midnight on the day of the previous monitoring event or at midnight on the day the repair would have been completed if the repair had not been delayed, whichever is later, and ending at midnight of the day the of the current monitoring event.

(iii) For delay of repair monitoring intervals ending with a repaired leak, calculate the potential total hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the final delay of repair monitoring interval by multiplying the duration of the final delay of repair monitoring interval by the mass emissions rate determined for the last monitoring event prior to the re-monitoring event used to verify the leak was repaired. The duration of the final delay of repair monitoring interval is the time period starting at midnight of the day of the last monitoring event prior to re-monitoring to verify the leak was repaired and ending at the time of the re-monitoring event that verified that the leak was repaired.

(e) At any time before the compliance dates specified in § 63.1081(a), if you validate a 40 CFR part 136 method for the HAP listed in Table 1 to this subpart according to the procedures in appendix D to this part, then you must keep a record of the test data and calculations used in the validation. On the compliance dates specified in § 63.1081(a), this requirement no longer applies.

[67 FR 46271, July 12, 2002, as amended at 85 FR 40422, July 6, 2020]

§ 63.1090 What reports must I submit?

If you delay repair for your heat exchange system, you must report the delay of repair in the semiannual report required by § 63.1110(e). If the leak remains unrepaired, you must continue

to report the delay of repair in semiannual reports until you repair the leak. Except as provided in paragraph (f) of this section, you must include the information in paragraphs (a) through (e) of this section in the semiannual report.

(a) The fact that a leak was detected, and the date that the leak was detected.

(b) Whether or not the leak has been repaired.

(c) The reasons for delay of repair. If you delayed the repair as provided in § 63.1088(b), documentation of emissions estimates.

(d) If a leak remains unrepaired, the expected date of repair.

(e) If a leak is repaired, the date the leak was successfully repaired.

(f) For heat exchange systems subject to § 63.1085(e) and (f), Periodic Reports must include the information specified in paragraphs (f)(1) through (5) of this section, in lieu of the information specified in paragraphs (a) through (e) of this section.

(1) The number of heat exchange systems at the plant site subject to the monitoring requirements in § 63.1085(e) and (f) during the reporting period.

(2) The number of heat exchange systems subject to the monitoring requirements in § 63.1085(e) and (f) at the plant site found to be leaking during the reporting period.

(3) For each monitoring location where the total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate was determined to be equal to or greater than the applicable leak definitions specified in § 63.1086(e)(5) during the reporting period, identification of the monitoring location (*e.g.*, unique monitoring location or heat exchange system ID number), the measured total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate, the date the leak was first identified, and, if applicable, the date the source of the leak was identified;

(4) For leaks that were repaired during the reporting period (including delayed repairs), identification of the monitoring location associated with the repaired leak, the total strippable

Environmental Protection Agency

§ 63.1095

hydrocarbon concentration or total hydrocarbon mass emissions rate measured during re-monitoring to verify repair, and the re-monitoring date (*i.e.*, the effective date of repair); and

(5) For each delayed repair, identification of the monitoring location associated with the leak for which repair is delayed, the date when the delay of repair began, the date the repair is expected to be completed (if the leak is not repaired during the reporting period), the total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate and date of each monitoring event conducted on the delayed repair during the reporting period, and an estimate of the potential total hydrocarbon emissions over the reporting period associated with the delayed repair.

[67 FR 46271, July 12, 2002, as amended at 85 FR 40422, July 6, 2020]

BACKGROUND FOR WASTE REQUIREMENTS

§ 63.1091 What do the waste requirements do?

This subpart requires you to comply with 40 CFR part 61, subpart FF, National Emission Standards for Benzene Waste Operations. There are some differences between the ethylene production waste requirements and those of subpart FF.

§ 63.1092 What are the major differences between the requirements of 40 CFR part 61, subpart FF, and the waste requirements for ethylene production sources?

The major differences between the requirements of 40 CFR part 61, subpart FF, and the requirements for ethylene production sources are listed in paragraphs (a) through (d) of this section.

(a) The requirements for ethylene production sources apply to all ethylene production sources that are part of a major source. The requirements do not include a provision to exempt sources with a total annual benzene quantity less than 10 megagrams per year (Mg/yr) from control requirements.

(b) The requirements for ethylene production sources apply to continuous butadiene waste streams which do not contain benzene quantities that would

make them subject to the management and treatment requirements of 40 CFR part 61, subpart FF.

(c) The requirements for ethylene production sources do not include the compliance options at 40 CFR 61.342(c)(3)(ii), (d) and (e) for sources with a total annual benzene quantity less than 10 Mg/yr.

(d) If you transfer waste off-site, you must comply with the requirements in § 63.1096 rather than 40 CFR 61.342(f).

APPLICABILITY FOR WASTE REQUIREMENTS

§ 63.1093 Does this subpart apply to my waste streams?

The waste stream provisions of this subpart apply to your waste streams if you own or operate an ethylene production facility expressly referenced to this subpart XX from subpart YY of this part. The provisions of subpart A (General Provisions) of this part do not apply to this subpart except as specified in a referencing subpart.

§ 63.1094 What waste streams are exempt from the requirements of this subpart?

The types of waste described in paragraphs (a) and (b) of this section are exempt from this subpart.

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

(b) Waste that is contained in a segregated storm water sewer system.

WASTE REQUIREMENTS

§ 63.1095 What specific requirements must I comply with?

For waste that is not transferred off-site, you must comply with the requirements in paragraph (a) of this section for continuous butadiene waste streams and paragraph (b) of this section for benzene waste streams. If you transfer waste off-site, you must comply with the requirements of § 63.1096.

(a) *Continuous butadiene waste streams.* Manage and treat continuous butadiene waste streams that contain greater than or equal to 10 ppmw 1,3-butadiene and have a flow rate greater than or equal to 0.02 liters per minute, according to either paragraph (a)(1) or (2) of this section. If the total annual

benzene quantity from waste at your facility is less than 10 Mg/yr, as determined according to 40 CFR 61.342(a), the requirements of paragraph (a)(3) of this section apply also.

(1) Route the continuous butadiene stream to a treatment process or wastewater treatment system used to treat benzene waste streams that complies with the standards specified in 40 CFR 61.348. Comply with the requirements of 40 CFR part 61, subpart FF; with the changes in Table 2 to this subpart, and as specified in paragraphs (a)(1)(i) through (vi) of this section.

(i) Determine the butadiene concentration of the waste stream according to 40 CFR 61.355(c)(1) through (3), except substitute “1,3-butadiene” for each occurrence of “benzene.” You may validate 40 CFR part 136 methods for 1,3-butadiene according to the procedures in appendix D to this part. You do not need to determine the butadiene concentration of a waste stream if you designate that the stream must be controlled.

(ii) Comply with 40 CFR 61.342(c)(1)(ii) and (iii) for each waste management unit that receives or manages the waste stream prior to and during treatment or recycling of the waste stream.

(iii) Comply with the recordkeeping requirements in 40 CFR 61.356(b), (b)(1) and (b)(2), except substitute “1,3-butadiene” for each occurrence of “benzene” and “continuous butadiene waste stream” for each occurrence of “waste stream.”

(iv) Comply with the reporting requirements in 40 CFR 61.357(a), (a)(2), (a)(3), (a)(3)(iii) through (v), and (d)(1) and (2), except substitute “1,3-butadiene” for each occurrence of “benzene” and “continuous butadiene waste stream” for each occurrence of “waste stream.”

(v) Include only the information in 40 CFR 61.357(a)(2) and (a)(3)(iii) through (v) in the report required in 40 CFR 61.357(a) and (d)(2).

(vi) Beginning no later than the compliance dates specified in § 63.1081(b), if you use a steam-assisted, air-assisted, non-assisted, or pressure-assisted multi-point flare to comply with 40 CFR part 61, subpart FF, then you must comply with the requirements

§ 63.1103(e)(4) in lieu of 40 CFR 61.349(a)(2)(iii) and (d), 40 CFR 61.354(c)(3), 40 CFR 61.356(f)(2)(i)(D) and (j)(7), and 40 CFR 61.357(d)(7)(iv)(F).

(2) Comply with the process wastewater requirements of subpart G of this part. Submit the information required in § 63.146(b) in the Notification of Compliance Status required by § 63.1110(d). Submit the information required in § 63.146(c) through (e) in either the Periodic Reports required in § 63.152 or the Periodic Reports required in § 63.1110(e).

(3) Before July 6, 2023, if the total annual benzene quantity from waste at your facility is less than 10 Mg/yr, as determined according to 40 CFR 61.342(a), comply with the requirements of this section at all times except during periods of startup, shutdown, and malfunction, if the startup, shutdown, or malfunction precludes the ability of the affected source to comply with the requirements of this section and the owner or operator follows the provisions for periods of startup, shutdown, and malfunction, as specified in § 63.1111. Beginning on July 6, 2023, if the total annual benzene quantity from waste at your facility is less than 10 Mg/yr, as determined according to 40 CFR 61.342(a), you must comply with the requirements of this section at all times.

(b) *Waste streams that contain benzene.* For waste streams that contain benzene, you must comply with the requirements of 40 CFR part 61, subpart FF, except as specified in Table 2 to this subpart and paragraph (b)(3) of this section. You must manage and treat waste streams that contain benzene as specified in either paragraph (b)(1) or (2) of this section.

(1) If the total annual benzene quantity from waste at your facility is less than 10 Mg/yr, as determined according to 40 CFR 61.342(a), manage and treat spent caustic waste streams and dilution steam blowdown waste streams according to 40 CFR 61.342(c)(1) through (c)(3)(i). Before July 6, 2023, the requirements of this paragraph (b)(1) shall apply at all times except during periods of startup, shutdown, and malfunction, if the startup, shutdown, or malfunction precludes the ability of the affected source to comply with the requirements of this section and the

Environmental Protection Agency

§ 63.1097

owner or operator follows the provisions for periods of startup, shutdown, and malfunction, as specified in § 63.1111. Beginning on July 6, 2023, the requirements of this paragraph (b)(1) shall apply at all times.

(2) If the total annual benzene quantity from waste at your facility is greater than or equal to 10 Mg/yr, as determined according to 40 CFR 61.342(a), you must manage and treat waste streams according to any of the options in 40 CFR 61.342(c)(1) through (e) or transfer waste off-site. If you elect to transfer waste off-site, then you must comply with the requirements of § 63.1096.

(3) Beginning no later than the compliance dates specified in § 63.1081(b), if you use a steam-assisted, air-assisted, non-assisted, or pressure-assisted multi-point flare to comply with 40 CFR part 61, subpart FF, then you must comply with the requirements of § 63.1103(e)(4) in lieu of 40 CFR 61.349(a)(2)(iii) and (d), 40 CFR 61.354(c)(3), 40 CFR 61.356(f)(2)(i)(D) and (j)(7), and 40 CFR 61.357(d)(7)(iv)(F).

[67 FR 46271, July 12, 2002, as amended at 70 FR 19272, Apr. 13, 2005; 85 FR 40423, July 6, 2020]

§ 63.1096 What requirements must I comply with if I transfer waste off-site?

If you elect to transfer waste off-site, you must comply with the requirements in paragraphs (a) through (d) of this section.

(a) Include a notice with the shipment or transport of each waste stream. The notice shall state that the waste stream contains organic HAP that are to be treated in accordance with the provisions of this subpart. When the transport is continuous or ongoing (for example, discharge to a publicly-owned treatment works), the notice shall be submitted to the treatment operator initially and whenever there is a change in the required treatment.

(b) You may not transfer the waste stream unless the transferee has submitted to the Administrator a written certification that the transferee will manage and treat any waste stream received from a source subject to the requirements of this subpart in accord-

ance with the requirements of this subpart.

(c) By providing this written certification to the Administrator, the certifying entity accepts responsibility for compliance with the regulatory provisions in this subpart with respect to any shipment of waste covered by the written certification. Failure to abide by any of those provisions with respect to such shipments may result in enforcement action by EPA against the certifying entity in accordance with the enforcement provisions applicable to violations of those provisions by owners or operators of sources.

(d) The certifying entity may revoke the written certification by sending a written statement to the Administrator and you. The notice of revocation must provide at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the regulatory provisions of this subpart. Upon expiration of the notice period, you may not transfer the waste stream to that off-site treatment operation. Written certifications and revocation statements to the Administrator from the transferees of waste shall be signed by the responsible official of the certifying entity, provide the name and address of the certifying entity, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the treater to other off-site waste treatment operators.

IMPLEMENTATION AND ENFORCEMENT

§ 63.1097 Who implements and enforces this subpart?

(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.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency

Pt. 63, Subpt. XX, Table 1

40 CFR Ch. I (7-1-21 Edition)

under 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (5) 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 §§63.1085, 63.1086 and 63.1095, under §63.6(g). 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.

TABLE 1 TO SUBPART XX OF PART 63—HAZARDOUS AIR POLLUTANTS

Hazardous air pollutant	CAS No.
Benzene	71432
1,3-Butadiene	106990
Cumene	98828
Ethyl benzene	100414
Hexane	110543
Naphthalene	91203
Styrene	100425
Toluene	108883
o-Xylene	95476
m-Xylene	108383
p-Xylene	106423

TABLE 2 TO SUBPART XX OF PART 63—REQUIREMENTS OF 40 CFR PART 61, SUBPART FF, NOT INCLUDED IN THE REQUIREMENTS FOR THIS SUBPART AND ALTERNATE REQUIREMENTS

If the total annual benzene quantity for waste from your facility is * * *	Do not comply with:	Instead, comply with:
1. Less than 10 Mg/yr	40 CFR 61.340	§ 63.1093.
	40 CFR 61.342(c)(3)(ii), (d), and (e)	There is no equivalent requirement.
	40 CFR 61.342(f)	§ 63.1096.
	40 CFR 61.355(j) and (k)	There is no equivalent requirement.
	40 CFR 61.356(b)(2)(ii), (b)(3) through (b)(5).	There is no equivalent requirement.
	The requirement to submit the information required in 40 CFR 61.357(a) to the Administrator within 90 days after January 7, 1993.	The requirement to submit the information required in 40 CFR 61.357(a) as part of the Initial Notification required in 40 CFR 63.1110(c).
	The requirement in 40 CFR 61.357(d) to submit the information in 40 CFR 61.357(d)(1) and (d)(2) if the TAB quantity from your facility is equal to or greater than 10 Mg/yr.	The requirement to submit the information in 40 CFR 61.357(d)(1) and (d)(2) for spent caustic, dilution steam blowdown, and continuous butadiene waste streams.
	The requirement in 40 CFR 61.357(d)(1) to submit the information required in 40 CFR 63.357(d)(1) to the Administrator within 90 days after January 7, 1993.	The requirement to submit the information required in 40 CFR 61.357(d)(1) as part of the Notification of Compliance Status required in 40 CFR 63.1110(d).
2. Greater than or equal to 10 Mg/yr	40 CFR 61.340	§ 63.1093.
	40 CFR 61.342(f)	§ 63.1096.

If the total annual benzene quantity for waste from your facility is * * *	Do not comply with:	Instead, comply with:
	The requirement to submit the information required in 40 CFR 61.357(a) to the Administrator within 90 days after January 7, 1993.	The requirement to submit the information required in 40 CFR 61.357(a) as part of the Initial Notification required in 40 CFR 63.1110(c).
	The requirement in 40 CFR 61.357(d) to submit the information in 40 CFR 61.357(d)(1) and (d)(2) if the TAB quantity from your facility is equal to or greater than 10 Mg/yr.	The requirement to submit the information in 40 CFR 61.357(d)(1) and (d)(2) as part of the Notification of Compliance Status required in 40 CFR 63.1110(d).

[67 FR 46271, July 12, 2002, as amended at 85 FR 40423, July 6, 2020]

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

SOURCE: 64 FR 34921, June 29, 1999, unless otherwise noted.

§ 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, record-keeping, and reporting requirements.

TABLE 1 TO § 63.1100(a)—SOURCE CATEGORY MACT^a APPLICABILITY

Source category	Storage vessels	Process vents	Transfer racks	Equipment leaks	Waste-water 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. For sources that reclassify from major source to area source status, the applicable provisions of § 63.9(j) and (k) apply. 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.