use of Method 25A, 40 CFR part 60, appendix A shall conform with the requirements in paragraphs (t)(1) and (t)(2) of this section.

(1) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A shall be the single organic HAP representing the largest percent by volume of the emissions.

(2) The use of Method 25A, 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.

(u) In §63.116(a), instead of the reference to §63.11(b), the requirements in §63.504(c) shall apply.

(v) When a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in §63.113(a)(2), the correction to 3 percent oxygen is only required when supplemental combustion air is used to combat the emissions, for the purposes of this subpart. In addition, the correction to 3 percent oxygen specified in §63.116(c)(3) and (c)(3)(iii) is only required when supplemental combustion air is used to combust the emissions, for the purposes of this subpart. Finally, when a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in §63.113(a)(2), an owner or operator shall record and report the outlet concentration required in §63.117(a)(4)(ii) and (a)(4)(iv) corrected to 3 percent oxygen when supplemental combustion air is not used to combat the emissions, for the purposes of this subpart.

(w) Shutdown. (1) During periods of shutdown, a Group 1 continuous front-end process vent at an existing affected source producing butyl rubber or ethylene propylene rubber using a solution process must be routed to a flare until either the organic HAP concentration in the vent is less than 50 ppmv, or the vent pressure is below 103.421 kPa.

[65 FR 38049, June 19, 2000, as amended at 66 FR 36928, July 16, 2001; 76 FR 22588, Apr. 21, 2011]

§63.486 Batch front-end process vent provisions.

(a) Batch front-end process vents. Except as specified in paragraph (b) of this section, owners and operators of new and existing affected sources with batch front-end process vents shall comply with the requirements in §§63.487 through 63.492. The batch front-end process vent group status shall be determined in accordance with §63.488. Owners or operators of affected sources with batch front-end process vents classified as Group 1 shall comply with the reference control technology requirements for Group 1 batch front-end process vents in §63.487, the monitoring requirements in §63.489, the performance test methods and procedures to determine compliance in §63.490, the recordkeeping requirements in §63.491, and the reporting requirements in §63.492. Owners and operators of all Group 2 batch front-end process vents shall comply with the applicable reference control technology requirements in §63.487, the applicable recordkeeping requirements in §63.491, and the applicable reporting requirements in §63.492.

(b) Aggregate batch vent streams. Aggregate batch vent streams, as defined in §63.482, are subject to the control requirements specified in §63.487(b), as well as the monitoring, testing, recordkeeping, and reporting requirements specified in §§63.489 through 63.492 for aggregate batch vent streams.

[65 FR 38052, June 19, 2000]

§63.487 Batch front-end process vents—reference control technology.

(a) Batch front-end process vents. The owner or operator of an affected source with a Group 1 batch front-end process vent, as determined using the procedures in §63.488, shall comply with the requirements of either paragraph (a)(1) or (a)(2) of this section. Compliance may be based on either organic HAP or TOC.
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(1) For each batch front-end process vent, reduce organic HAP emissions using a flare.

(i) The owner or operator of the affected sources shall comply with the requirements of §63.504(c) for the flare.

(ii) Halogenated batch front-end process vents, as defined in §63.482, shall not be vented to a flare.

(2) For each batch front-end process vent, reduce organic HAP emissions for the batch cycle by 90 weight percent using a control device. Owners or operators may achieve compliance with this paragraph through the control of selected batch emission episodes or the control of portions of selected batch emission episodes. Documentation demonstrating how the 90 weight percent emission reduction is achieved is required by §63.490(c)(2).

(b) Aggregate batch vent streams. The owner or operator of an aggregate batch vent stream that contains one or more Group 1 batch front-end process vents shall comply with the requirements of either paragraph (b)(1) or (b)(2) of this section. Compliance may be based on either organic HAP or TOC.

(1) For each aggregate batch vent stream, reduce organic HAP emissions using a flare.

(i) The owner or operator of the affected source shall comply with the requirements of §63.504(c) for the flare.

(ii) Halogenated aggregate batch vent streams, as defined in §63.482, shall not be vented to a flare.

(2) For each aggregate batch vent stream, reduce organic HAP emissions by 90 weight percent or to a concentration of 20 ppmv, whichever is less stringent, on a continuous basis using a control device. For purposes of complying with the 20 ppmv outlet concentration standard, the concentration shall be calculated on a dry basis. When a combustion device is used for purposes of complying with the 20 ppmv outlet concentration standard, the concentration shall be corrected to 3 percent oxygen if supplemental combustion air is used to combust the emissions. If supplemental combustion air is not used, a correction to 3 percent oxygen is not required.

(c) Halogenated emissions. Halogenated Group 1 batch front-end process vents, halogenated aggregate batch vent streams, and halogenated continuous front-end process vents that are combusted as part of complying with paragraph (a)(2) or (b)(2) of this section, shall be controlled according to either paragraph (c)(1) or (c)(2) of this section.

(1) If a combustion device is used to comply with paragraph (a)(2) or (b)(2) of this section for a halogenated batch front-end process vent or halogenated aggregate batch vent stream, the emissions exiting the combustion device shall be ducted to a halogen reduction device that reduces overall emissions of hydrogen halides and halogens by at least 99 percent before discharge to the atmosphere.

(2) A halogen reduction device may be used to reduce the halogen atom mass emission rate to less than 3,750 kg/yr for batch front-end process vents or aggregate batch vent streams and thus make the batch front-end process vent or aggregate batch vent stream nonhalogenated. The nonhalogenated batch front-end process vent or aggregate batch vent stream shall then comply with the requirements of either paragraph (a) or (b) of this section, as appropriate.

(d) If a boiler or process heater is used to comply with the percent reduction requirement specified in paragraph (a)(2) or (b)(2) of this section, the batch front-end process vent or aggregate batch vent stream shall be introduced into the flame zone of such a device.

(e) Combination of batch front-end process vents or aggregate batch vent streams with continuous front-end process vents. If a batch front-end process vent or aggregate batch vent stream is combined with a continuous front-end process vent, the owner or operator shall determine whether the combined vent stream is subject to the provisions of §§63.486 through 63.492 according to paragraphs (e)(1) and (e)(2) of this section.

(1) A batch front-end process vent or aggregate batch vent stream combined with a continuous front-end process vent stream is not subject to the provisions of §§63.486 through 63.492, if the
requirements in paragraph (e)(1)(i) and in either paragraph (e)(1)(ii) or (e)(1)(iii) are met.

(i) The only emissions to the atmosphere from the batch front-end process vent or aggregate batch vent stream prior to being combined with the continuous front-end process vent are from equipment subject to §63.502.

(ii) The batch front-end vent stream or aggregate batch vent stream is combined with a Group 1 continuous front-end process vent stream prior to the combined vent stream being routed to a control device. In this paragraph (e)(1)(ii), the definition of control device as it relates to continuous front-end process vents shall be used. Furthermore, the combined vent stream discussed in this paragraph (e)(1)(ii) shall be subject to §63.485(o)(1).

(iii) The batch front-end process vent or aggregate batch vent stream is combined with a continuous front-end process vent stream prior to being routed to a recovery device. In this paragraph (e)(1)(iii), the definition of recovery device as it relates to continuous front-end process vents shall be used. Furthermore, the combined vent stream discussed in this paragraph (e)(1)(iii) shall be subject to §63.485(o)(2).

(2) If the batch front-end process vent or aggregate batch vent stream is combined with a Group 2 continuous front-end process vent, the group status of the batch front-end process vent shall be determined prior to its combination with the Group 2 continuous front-end process vent, in accordance with §63.488, and the combined vent stream shall be subject to the requirements for aggregate batch vent streams in §§63.486 through 63.492.

(f) Group 2 batch front-end process vents with annual emissions greater than or equal to the level specified in §63.488(d). The owner or operator of a Group 2 batch front-end process vent with annual emissions greater than or equal to the level specified in §63.488(d) shall comply with the provisions of paragraph (f)(1), (f)(2), or (f)(4) of this section.

(i) The owner or operator shall establish a batch mass input limitation that ensures that the Group 2 batch front-end process vent does not become a Group 1 batch front-end process vent.

(ii) Over the course of the affected source’s “year,” as reported in the Notification of Compliance Status in accordance with §63.506(e)(5)(ix), the owner or operator shall not charge a mass of HAP or material to the batch unit operation that is greater than the level established as the batch mass input limitation.

(iii) The owner or operator of an affected source shall comply with the recordkeeping requirements in §63.491(d)(2), and the reporting requirements in §63.492(a)(3), (b) and (c).

(iv) The owner or operator of an affected source shall comply with §63.488(i) when process changes are made.

(2) Comply with the requirements of this subpart for Group 1 batch front-end process vents.

(g) Group 2 batch front-end process vents with annual emissions less than the level specified in §63.488(d). The owner or operator of a Group 2 batch front-end process vent with annual organic HAP emissions less than the level specified in §63.488(d), shall comply with paragraph (g)(1), (g)(2), (g)(3), or (g)(4) of this section.

(1) The owner or operator of the affected source shall comply with the requirements in paragraphs (g)(1)(i) through (g)(1)(iv) of this section.

(i) The owner or operator shall establish a batch mass input limitation that ensures emissions do not exceed the appropriate level specified in §63.488(d).

(ii) Over the course of the affected source’s “year,” as reported in the Notification of Compliance Status in accordance with §63.506(e)(5)(ix), the owner or operator shall not charge a mass of HAP or material to the batch unit operation that is greater than the level established as the batch mass input limitation.

(iii) The owner or operator of the affected source shall comply with the recordkeeping requirements in §63.491(d)(1), and the reporting requirements in §63.492(a)(2), (b), and (c).

(iv) The owner or operator of the affected source shall comply with
§ 63.488 Methods and procedures for batch front-end process vent group determination.

(a) General requirements. Except as provided in paragraph (a)(3) of this section, the owner or operator of batch front-end process vents at affected sources shall determine the group status of each batch front-end process vent in accordance with the provisions of this section. This determination may be based on either organic HAP or TOC emissions.

(1) The procedures specified in paragraphs (b) through (g) shall be followed to determine the group status of each batch front-end process vent. This determination shall be made in accordance with either paragraph (a)(1)(i) or (a)(1)(ii) of this section.

(i) An owner or operator may choose to determine the group status of a batch front-end process vent based on the expected mix of products. For each product, emission characteristics of the single highest-HAP recipe, as defined in paragraph (a)(1)(iii) of this section, for that product, shall be used in the procedures in paragraphs (b) through (i) of this section.

(ii) An owner or operator may choose to determine the group status of a batch front-end process vent based on annualized production of the single highest-HAP recipe, as defined in paragraph (a)(1)(iii) of this section, considering all products produced or processed in the batch unit operation. The annualized production of the highest-HAP recipe shall be based exclusively on the production of the single highest-HAP recipe of all products produced or processed in the batch unit operation for a 12 month period. The production level used may be the actual production rate. It is not necessary to assume a maximum production rate (i.e., 8,760 hours per year at maximum design production).

(2) The annual uncontrolled organic HAP or TOC emissions and annual average batch vent flow rate shall be determined at the exit from the batch unit operation. For the purposes of these determinations, the primary condenser operating as a reflux condenser on a reactor or distillation column, the primary condenser recovering monomer, reaction products, by-products, or solvent from a stripper operated in batch mode, and the primary condenser recovering monomer, reaction products, by-products, or solvent from a distillation operation operated in batch mode shall be considered part of the batch unit operation. All other devices that recover or oxidize organic HAP or TOC vapors shall be considered control devices as defined in § 63.482.

(3) The owner or operator of a batch front-end process vent complying with the flare provisions in §63.487(a)(1) or §63.487(b)(1) or routing the batch front-end process vent to a control device to comply with the requirements in §63.487(a)(2) or §63.487(b)(2) is not required to perform the batch front-end