Environmental Protection Agency

§ 63.1322 Batch process vents—reference control technology.

(a) Batch process vents. The owner or operator of a Group 1 batch process vent, as determined using the procedures in §63.1323, shall comply with the requirements of either paragraph (a)(1) or (a)(2) of this section, except as provided for in paragraph (a)(3) of this section. Compliance may be based on either organic HAP or TOC.

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

(i) The owner or operator shall comply with the requirements of §63.1333(e) for the flare.

(ii) Halogenated batch process vents, as defined in §63.1312, shall not be vented to a flare.

(2) For each batch 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 (a)(2) 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 §63.1325(c)(2).

(3) The owner or operator of a new affected source producing SAN using a batch process shall reduce organic HAP emissions from the collection of batch process vents, aggregate batch vent streams, and continuous process vents by 84 weight percent. Compliance with this paragraph (a)(3) shall be demonstrated using the procedures specified in §63.1333(c).

(b) Aggregate batch vent streams. The owner or operator of an aggregate batch vent stream that contains one or more Group 1 batch process vents shall comply with the requirements of either paragraph (b)(1) or (b)(2) of this section, except as provided for in paragraph (b)(3) 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 shall comply with the requirements of §63.1333(e) for the flare.

(ii) Halogenated aggregate batch vent streams, as defined in §63.1312, 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 parts per million by volume, whichever is less stringent, on a continuous basis using a control device. For purposes of complying with the 20 parts per million by volume outlet concentration standard, the outlet concentration shall be calculated on a dry basis. When a combustion device is used for purposes of complying with the 20 parts per million by volume outlet concentration standard, the outlet 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.

(3) The owner or operator of a new affected source producing SAN using a batch process shall comply with paragraph (a)(3) of this section.

(c) Halogenated emissions. Halogenated Group 1 batch process vents, halogenated aggregate batch vent streams, and halogenated continuous process vents that are combusted as part of complying with paragraph (a)(2), (a)(3), (b)(2), or (b)(3) of this section, as appropriate, 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), (a)(3), (b)(2), or (b)(3) of this section for a halogenated batch process vent, halogenated aggregate batch vent stream, or halogenated continuous process vent, said 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 of said emissions to less than 3,750 kg/yr for batch process vents or aggregate batch vent streams and to less than 0.45 kilograms per hour for continuous process vents prior to venting to any combustion control device, and thus make the batch process vent, aggregate batch vent stream, or continuous process vent nonhalogenated. The nonhalogenated batch process vent, aggregate batch vent stream, or continuous process vent 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), (a)(3), (b)(2), or (b)(3) of this section, the batch process vent, aggregate batch vent stream, or continuous process vent shall be introduced into the flame zone of such a device.

(e) Combination of batch process vents or aggregate batch vent streams with continuous process vents. If a batch process vent or aggregate batch vent stream is combined with a continuous process vent, the owner or operator shall determine whether the combined vent stream is subject to the provisions of §§63.1321 through 63.1327 according to paragraphs (e)(1) and (e)(2) of this section.

(1) A batch process vent or aggregate batch vent stream combined with a continuous process vent is not subject to the provisions of §§63.1321 through 63.1327, 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 process vent or aggregate batch vent stream prior to being combined with the continuous process vent are from equipment subject to §63.1331.

(ii) The batch process vent or aggregate batch vent stream is combined with a Group 1 continuous process vent 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 process vents shall be used. Furthermore, the combined vent stream discussed in this paragraph (e)(1)(ii) shall be subject to §63.1315(a)(13)(i).

(iii) The batch process vent or aggregate batch vent stream is combined with a continuous process vent prior to being routed to a recovery device. In this paragraph (e)(1)(iii), the definition of recovery device as it relates to continuous process vents shall be used. Furthermore, the combined vent stream discussed in this paragraph (e)(1)(iii) shall be subject to §63.1315(a)(13)(ii).

(2) If the batch process vent or aggregate batch vent stream is combined with a Group 2 continuous process vent, the group status of the batch process vent shall be determined prior to its combination with the Group 2 continuous process vent. In accordance with §63.1323, and the combined vent stream shall be subject to the requirements for aggregate batch vent streams in §§63.1321 through 63.1327.

(f) Group 2 batch process vents with annual emissions greater than or equal to the level specified in §63.1323(d). The owner or operator of a Group 2 batch process vent with annual emissions greater than or equal to the level specified in §63.1323(d) shall comply with the provisions of paragraph (f)(1), (f)(2), or (h) of this section.

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

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

(ii) Over the course of the affected source’s “year,” as reported in the Notification of Compliance Status in accordance with §63.1335(e)(5)(viii), 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 shall comply with the recordkeeping requirements in §63.1326(d)(2), and the reporting requirements in §63.1327(a)(3), (b), and (c).

(iv) The owner or operator shall comply with §63.1323(d) when process changes are made.
§ 63.1323 Batch process vents—methods and procedures for group determination.

(a) General requirements. Except as provided in paragraph (a)(3) of this section and in §63.1321(b)(1), the owner or operator of batch process vents at affected sources shall determine the group status of each batch process vent. This determination may be made in accordance with either paragraph (a)(1)(i) or (a)(1)(ii) of this section.

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

(ii) An owner or operator may choose to determine the group status of a batch process vent based on annualized production 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 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).