§ 63.1425 Process vent control requirements.

(a) Applicability of process vent control requirements. For each process vent at an affected source, the owner or operator shall comply with the provisions of this section. Owners and operators of all affected sources using epoxides in the production of polyether polyols are subject to the requirements of paragraph (b) of this section. Owners or operators are subject to the requirements of paragraphs (c) and (d) of this section only if epoxides are used in the production of polyether polyols and organic HAP are used in catalyst extraction. The owner or operator of an affected source where polyether polyol products are produced using tetrahydrofuran shall comply with paragraph (f) of this section.

(b) Requirements for epoxide emissions. The owner or operator of an affected source where polyether polyol products are produced using epoxides shall reduce epoxide emissions from process vents from batch unit operations and continuous unit operations within each PMPU in accordance with either paragraph (b)(1) or (2) of this section.

(1) For new affected sources, the owner or operator shall comply with paragraph (b)(1)(i), (ii), or (iii) of this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(1)(i) and (ii) of this section. If the owner or operator chooses to comply with a combination of paragraphs (b)(1)(i) and (ii) of this section, each process vent not controlled in accordance with paragraph (b)(1)(i) of this section shall be part of the group of applicable process vents that shall then comply with paragraph (b)(1)(i) of this section.

(i) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 99.9 percent;

(ii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture, or recovery device of 20 ppmv or less; or

(iii) Maintain an emission factor of no greater than \(4.43 \times 10^{-3}\) kilogram epoxide emissions per megagram of product (4.43 pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

(2) For existing affected sources, the owner or operator shall comply with either paragraph (b)(2)(i), (ii), (iii), or (iv) of this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(ii) and (iii) of this section. If the owner or operator chooses to comply with a combination of paragraphs (b)(2)(ii) and (iii) of this section, each process vent that is not controlled in accordance with paragraph (b)(2)(ii) of this section shall be part of the group of applicable process vents that shall then comply with paragraph (b)(2)(ii) of this section.
section. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(i) and (ii) of this section.

(i) Reduce the total epoxide emissions from each process vent using a flare;

(ii) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent;

(iii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture or recovery devices of 20 ppmv or less; or

(iv) Maintain an emission factor of no greater than \(1.69 \times 10^{-2}\) kilogram epoxide emissions per megagram of product (1.69 \(\times 10^{-2}\) pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

(c) Requirements for nonepoxide organic HAP emissions from making or modifying the product. The owner or operator of a new or existing source where polyether polyols are produced using epoxides, and where nonepoxide organic HAP are used to make or modify the product, shall comply with this paragraph. For each process vent from a continuous unit operation that is associated with the use of a nonepoxide organic HAP to make or modify the product, the owner or operator shall determine if the process vent is a Group 1 continuous process vent, as defined in §63.1423. For the combination of process vents from batch unit operations that are associated with the use of a nonepoxide organic HAP to make or modify the product, the owner or operator shall determine if the combination of process vents is a Group 1 combination of batch process vents, as defined in §63.1423.

(1) Requirements for Group 1 combinations of batch process vents. For each Group 1 combination of batch process vents, as defined in §63.1423, the owner or operator shall comply with either paragraph (c)(1)(i) or (ii) of this section.

(i) Reduce nonepoxide organic HAP emissions using a flare.

(ii) Reduce nonepoxide organic HAP emissions by 98 percent using a combustion, recovery, or recapture device.

(2) Requirements for Group 2 combinations of batch process vents. For each Group 2 combination of batch process vents, as defined in §63.1423, the owner or operator reassess the group status when process changes occur, in accordance with the provisions of §63.1428(g). No control requirements apply to these process vents.

3. Requirements for Group 1 continuous process vents. For each Group 1 continuous process vent, as defined in §63.1423, the owner or operator shall comply with either paragraph (c)(3)(i) or (ii) of this section.

(i) Reduce nonepoxide organic HAP emissions using a flare.

(ii) Reduce nonepoxide organic HAP emissions by 98 percent using a combustion, recovery, or recapture device.

4. Requirements for Group 2 continuous process vents. For each Group 2 continuous process vent, as defined in §63.1423, the owner or operator shall comply with either paragraph (c)(4)(i) or (ii) of this section.

(1) If the TRE for the process vent is greater than 1.0 but less than 4.0, the owner or operator shall comply with the monitoring provisions in §63.1429, the recordkeeping provisions in §63.1430(d), and recalculate the TRE index value when process changes occur, in accordance with the provisions in §63.1428(h)(2).

(ii) If the TRE for the process vent is greater than 4.0, the owner or operator shall recalculate the TRE index value when process changes occur, in accordance with the provisions in §63.1428(h)(2).

(d) Requirements for nonepoxide organic HAP emissions from catalyst extraction. The owner or operator of a new or existing affected source where polyether polyol products are produced using epoxide compounds shall comply with either paragraph (d)(1) or (2) of this section. A PMPU that does not use any nonepoxide organic HAP in catalyst extraction is exempt from the requirements of this paragraph.

(1) Reduce emissions of nonepoxide organic HAP from all process vents associated with catalyst extraction using a flare; or

(ii) Reduce emissions of nonepoxide organic HAP from the sum total of all process vents associated with catalyst extraction by an aggregated 90 percent for each PMPU.
(e) [Reserved]

(f) Requirements for process vents at PMPUs that produce polyether polyol products using tetrahydrofuran. For each process vent in a PMPU that uses tetrahydrofuran (THF) to produce one or more polyether polyol products that is, or is part of, an affected source, the owner or operator shall comply with the HON process vent requirements in §§63.113 through 63.118, except as provided for in paragraphs (f)(1) through (10) of this section.

(1) When December 31, 1992 is referred to in the HON process vent requirements in §63.113, it shall be replaced with September 4, 1997, for the purposes of this subpart.

(2) When §63.151(f), alternative monitoring parameters, and §63.152(e), submission of an operating permit application, are referred to in §§63.114(c) and 63.117(e), §§63.1439(f), alternative monitoring parameters, and §§63.1439(e)(8), submission of an operating permit application, respectively, shall apply for the purposes of this subpart.

(3) When the Notification of Compliance Status requirements contained in §63.152(b) are referred to in §§63.114, 63.117, and 63.118, the Notification of Compliance Status requirements contained in §§63.1439(e)(5) shall apply for the purposes of this subpart.

(4) When the Periodic Report requirements contained in §63.152(c) are referred to in §§63.117 and 63.118, the Periodic Report requirements contained in §§63.1439(e)(6) shall apply for the purposes of this subpart.

(5) When the definition of excursion in §§63.152(c)(2)(ii)(A) is referred to in §63.118(f)(2), the definition of excursion in §§63.1438(f) shall apply for the purposes of this subpart.

(6) When §63.114(e) specifies that an owner or operator shall submit the information required in §63.152(b) in order to establish the parameter monitoring range, the owner or operator shall comply with the provisions of §§63.1438 for establishing the parameter monitoring level and shall comply with §§63.1439(e)(5)(ii) or §§63.1439(e)(8) for the purposes of reporting information related to the establishment of the parameter monitoring level, for the purposes of this subpart. Further, the term “range” is used in §§63.114, 63.117, and 63.118.

(7) When reports of process changes are required under §63.118(g), (h), (i), or (j), paragraphs (f)(7)(i) through (iv) of this section shall apply for the purposes of this subpart.

(i) For the purposes of this subpart, whenever a process change, as defined in §63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator. This report may be included in the next Periodic Report. A description of the process change shall be included in this report.

(ii) Whenever a process change, as defined in §63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator, unless the flow rate is less than 0.005 standard cubic meters per minute. This report may be included in the next Periodic Report. A description of the process change shall be included in this report.

(iii) Whenever a process change, as defined in §63.115(e), is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute (scmm) to become a Group 2 process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator, unless the organic HAP concentration is less than 50 ppmv. This report may be included in the next Periodic Report. A description of the process change shall be submitted with the report.

(iv) Whenever a process change, as defined in §63.115(e), is made that causes a Group 2 process vent with an organic HAP concentration less than 50 parts per million by volume (ppmv) to become a Group 2 process vent with an
organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator, unless the flow rate is less than 0.005 standard cubic meters per minute. This report may be included in the next Periodic Report. A description of the process change shall be submitted with this report.

(8) When §63.118 refers to §63.152(f), the recordkeeping requirements in §63.1439(d) shall apply for the purposes of this subpart.

(9) When §§63.115 and 63.116 refer to Table 2 of 40 CFR part 63, subpart F, the owner or operator shall only consider organic HAP as defined in this subpart.

(10) When the provisions of §63.116(c)(3) and (4) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A shall comply with paragraphs (f)(10)(i) and (ii) of this section.

(i) 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.

(ii) 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.

§ 63.1426 Process vent requirements for determining organic HAP concentration, control efficiency, and aggregated organic HAP emission reduction for a PMPU.

(a) Use of a flare. When a flare is used to comply with §63.1425(b)(1)(i) (in combination with other control techniques), (b)(2)(i), (c)(1)(i), (c)(3)(i), or (d)(1), the owner or operator shall comply with §63.1437(c), and is not required to demonstrate the control efficiency for the flare, if the owner or operator chooses to assume a 98 percent control efficiency for that flare, as allowed under paragraph (e)(2)(i) of this section. In order to use only a flare to comply with §63.1425(b)(1)(i), or to use a flare and apply a control efficiency greater than 98 percent, an owner or operator shall submit a request in accordance with §63.6(g) in either the Precompliance Report described in §63.1439(e)(4), or in a supplement to the precompliance report, as described in §63.1439(e)(4)(vii).

(b) Exceptions to performance tests. An owner or operator is not required to conduct a performance test when a combustion, recovery, or recapture device specified in paragraphs (b)(1) through (6) of this section is used to comply with §63.1425(b), (c), or (d).

(1) A boiler or process heater with a design heat input capacity of 44 megawatts or greater.

(2) A boiler or process heater where the process vent stream is introduced with the primary fuel or is used as the primary fuel.

(3) A combustion, recovery, or recapture device for which a performance test was conducted within the preceding 5-year period, using the same Methods specified in this section and either no deliberate process changes have been made since the test, or the owner or operator can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. The operating parameters reported under the previous performance test shall be sufficient to meet the parameter monitoring requirements in this subpart.

(4) A boiler or process heater burning hazardous waste for which the owner or operator:

(i) Has been issued a final hazardous waste permit under 40 CFR part 270 and complies with the requirements for hazardous waste burned in boilers and industrial furnaces in 40 CFR part 266, subpart H; or

(ii) Has certified compliance with the interim status requirements for hazardous waste burned in boilers and industrial furnaces in of 40 CFR part 266, subpart H.

(5) A hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements