Environmental Protection Agency

§ 63.1431 Process vent annual epoxides emission factor plan requirements.

(a) Applicability of emission factor plan requirements. An owner or operator electing to comply with an annual epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv) shall develop and implement an epoxides emission factor plan in accordance with the provisions of this section.

(b) Emission factor plan requirements. The owner or operator shall develop an epoxides emission factor plan.

(1) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of a combustion, recovery, or recapture device (without extended cookout), the owner or operator shall develop and implement the plan in accordance with paragraph (c) of this section.

(2) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of extended cookout (without a combustion, recovery, or recapture device), the owner or operator shall develop and implement the plan in accordance with paragraph (d) of this section.

(3) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of extended cookout in conjunction with a combustion, recovery, or recapture device, the owner or operator shall develop and implement the plan in accordance with paragraph (e) of this section.

(c) Compliance with epoxide emission factor limitation using a combustion, recovery, or recapture device. (1) The owner or operator shall notify the Agency of the intent to use a combustion, recovery, or recapture device to comply with the epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv). The owner or operator shall prepare an estimate of the annual epoxide emissions and the actual production rate in accordance with paragraphs (c)(1)(i) through (iv) of this section. This notification and emission estimate shall be submitted in the Precompliance Report as specified in § 63.1439(e)(4), or in the operating permit application, as allowed in § 63.1439(e)(8).

(i) Annual uncontrolled epoxide emissions. These emission estimates shall be determined in accordance with the batch process vent group determination procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U, § 63.488(b)) and shall be based on anticipated production.
The expected annual emissions after control shall be determined using Equation 15.

\[ AE_{\text{control}} = \left( AE_{\text{uncontrolled}} \right) \left[ 1 - \frac{R}{100} \right] \]  

Where:
- \( AE_{\text{control}} \) = Annual epoxide emissions after control, \( \text{kg/yr} \).
- \( AE_{\text{uncontrolled}} \) = Annual uncontrolled epoxide emissions, determined in accordance with paragraph (c)(1)(i) of this section, \( \text{kg/yr} \).
- \( R \) = Expected control efficiency of the combustion, recovery, or recapture device, percent, as determined in §63.1426(c).

(iv) The actual annual production rate means the annual mass of polyether polyol product produced from the applicable PMPU. This production rate shall be for the same annual time period as the annual emission estimate as calculated in accordance with paragraph (c)(1)(iii) of this section.

(2) The owner or operator shall conduct a performance test in accordance with §63.1426(c) to determine the epoxide control efficiency of the combustion, recovery, or recapture device. The owner or operator shall then recalculate the annual epoxide emissions after control using Equation 15, except that the control efficiency, \( R \), shall be the measured control efficiency. This information shall be submitted as part of the Notification of Compliance Status, as provided in §63.1439(e)(5).

(3) The owner or operator shall comply with the ECO monitoring provisions in §63.1427(i).

(4) The owner or operator shall comply with the process vent record-keeping and reporting requirements in §63.1430.

(e) Compliance with the epoxide emission factor limitation through the use of extended cookout in conjunction with one or more combustion, recovery, and/or recapture device.

(1) The owner or operator shall notify the Agency of the intent to use extended cookout to comply with the annual epoxide emission factor limitation in §63.1425(b)(1)(iii) or (b)(2)(iv). The owner or operator shall prepare an estimate of the annual epoxide emissions after the extended cookout. This notification and emission estimate shall be submitted in the Precompliance Report as specified in §63.1439(e)(4), or in the operating permit application, as allowed in §63.1439(e)(8).

(2) The owner or operator shall determine the annual epoxide emissions in accordance with §63.1427(d), based on anticipated production. This information shall be submitted as part of the Notification of Compliance Status, as provided in §63.1439(e)(5).

(3) The owner or operator shall comply with the ECO monitoring provisions in §63.1427(i).

(4) The owner or operator shall comply with the process vent record-keeping and reporting requirements in §63.1430.
Compliance Status, as provided in §63.1439(e)(5).

(3) The owner or operator shall comply with the ECO monitoring provisions in §63.1427(i).

(4) The owner or operator shall comply with the ECO recordkeeping and reporting requirements in §63.1427(j) and (k).

(f) Compliance with epoxide emission factor limitation without using extended cookout or a combustion, recovery, or recapture device. (1) The owner or operator shall notify the Agency of the intent to comply with the epoxide emission factor limitation in §63.1425(b)(1)(iii) or (b)(2)(iv) without the use of ECO or a combustion, recovery, or recapture device. The owner or operator shall prepare an estimate of the annual epoxide emissions. This notification and emission estimate shall be submitted in the Precompliance Report as specified in §63.1439(e)(4), or in the operating permit application, as allowed in §63.1439(e)(8).

(2) Each year after the compliance date, the owner or operator shall calculate the epoxides emission factor for the previous year. This information shall be submitted in the second Periodic Report submitted each year, as specified in §63.1439(e)(6).

§ 63.1432 Storage vessel provisions.

(a) For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.

(b) When the term “storage vessel” is used in the HON storage vessel requirements in §§63.119 through 63.123, the definition of this term in §63.1423 shall apply for the purposes of this subpart.

(c) When the term “Group 1 storage vessel” is used in the HON storage vessel requirements in §§63.119 through 63.123, the definition of this term in §63.1423 shall apply for the purposes of this subpart.

(d) When the term “Group 2 storage vessel” is used in the HON storage vessel requirements in §§63.119 through 63.123, the definition of this term in §63.1423 shall apply for the purposes of this subpart.

(e) When the HON storage vessel requirements in §63.119 refer to “December 31, 1992,” the phrase “September 4, 1997” shall apply instead, for the purposes of this subpart.

(f) When the HON storage vessel requirements in §63.119 refer to “April 22, 1994,” the phrase “June 1, 1999,” shall apply instead, for the purposes of this subpart.

(g) The owner or operator of an affected source shall comply with this paragraph instead of §63.120(d)(1)(i) for the purposes of this subpart. If the combustion, recovery, or recapture device used to comply with §63.119(e) is also used to comply with any of the requirements found in §§63.1425 through 63.1431 and/or §63.1433, the performance test required in or accepted by §§63.1425 through 63.1431 and/or §63.1433 is acceptable for demonstrating compliance with the HON storage vessel requirements in §63.119(e), for the purposes of this subpart. The owner or operator will not be required to prepare a design evaluation for the combustion, recovery, or recapture device as described in §63.120(d)(1)(i), if the performance test meets the criteria specified in paragraphs (g)(1) and (2) of this section.

(1) The performance test demonstrates that the combustion, recovery, or recapture device achieves greater than or equal to the required control efficiency specified in the HON storage vessel requirements in §63.119(e)(1) or (2), as applicable; and

(2) The performance test is submitted as part of the Notification of Compliance Status required by §63.1439(e)(5).

(h) When the HON storage vessel requirements in §§63.120(d)(3)(i), 63.120(d)(5), and 63.122(g)(2) use the term “range,” the term “level” shall apply instead for the purposes of this subpart.

(i) For purposes of this subpart, the monitoring plan required by the HON storage vessel requirements in §63.120(d)(2) shall specify for which combustion, recovery, or recapture device the owner or operator has selected to follow the procedures for continuous monitoring specified in §63.1438. For the combustion, recovery, or recapture