Environmental Protection Agency

§ 63.1329 Process contact cooling towers provisions.

(a) The owner or operator of each new affected source that manufactures PET is required to comply with paragraph (b) of this section. The owner or operator of each existing affected source that manufactures PET using a continuous terephthalic acid high viscosity multiple end finisher process that utilizes a process contact cooling tower shall comply with paragraph (c) of this section, and is not required to comply with paragraph (b) of this section. The compliance date for process contact cooling towers subject to the provisions of this section is specified in §63.1311.

(b) New affected source requirements.

The owner or operator of a new affected source subject to this section shall not send contact condenser effluent associated with a vacuum system to a process contact cooling tower.

(1) The owner or operator of a new affected source subject to this section shall comply with paragraphs (b)(1) through (b)(2) of this section.

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(c) Existing affected source requirements. The owner or operator of an existing affected source subject to this section who manufactures PET using a continuous terephthalic acid high viscosity multiple end finisher process, and who is subject or becomes subject to 40 CFR part 60, subpart DDD, shall maintain an ethylene glycol concentration in the process contact cooling tower at or below 4.0 percent by weight averaged on a daily basis over a rolling 14-day period of operating days. Compliance with this paragraph (c) shall be determined as specified in paragraphs (c)(1) through (c)(4) of this section. It should be noted that compliance with this paragraph (c) does not exempt owners or operators from complying with the provisions of §63.1330 for those process wastewater streams that are sent to the process contact cooling tower.

(1) To determine the ethylene glycol concentration, owners or operators shall follow the procedures specified in 40 CFR 60.564(j)(1), except as provided in paragraph (c)(2) of this section.

(i) At least one sample per operating day shall be collected using the procedures specified in 40 CFR 60.564(j)(1)(i).

Averaged across the 14-day period, the mean ethylene glycol concentration is calculated as the average of the daily ethylene glycol concentrations obtained during the 14-day period as specified in paragraph (c)(1)(i).

(ii) The owner or operator may elect to reduce the sampling program to any 14 consecutive operating day period once every two calendar months, if at least seventeen consecutive 14-day rolling average ethylene glycol concentrations immediately preceding the reduced sampling program are each less than 1.2 weight percent ethylene glycol. If the average concentration obtained over the 14 operating day sampling during the reduced test period exceeds the upper 95 percent confidence interval calculated from the most recent test results in which no one 14-day average exceeded 1.2 weight percent ethylene glycol, then the owner or operator shall reinstitute a daily sampling program.

The 95 percent confidence interval shall be calculated as specified in paragraph (c)(1)(iii) of this section. A reduced program may be reinstituted if the requirements specified in this paragraph (c)(1)(ii) are met.

(iii) The upper 95 percent confidence interval shall be calculated using the Equation 27 of this subpart:

\[
CI_{95} = \frac{\sum_{i=1}^{n} X_i}{n} + 2 \sqrt{\frac{n \sum_{i=1}^{n} (X_i^2) - (\sum_{i=1}^{n} X_i)^2}{n (n-1)}}
\]  

[Eq. 27]

Where:

- \( CI_{95} \) = 95 percent confidence interval
- \( X_i \) = daily ethylene glycol concentration for each operating day used to calculate each 14-day rolling average used in test results to justify implementing the reduced testing program.
- \( n \) = number of ethylene glycol concentrations.

(2) Measuring an alternative parameter, such as carbon oxygen demand or biological oxygen demand, that is demonstrated to be directly proportional to the ethylene glycol concentration shall be allowed. Such parameter shall be measured during the initial 14-day performance test during which the facility is shown to be in compliance with the ethylene glycol concentration standard whereby the ethylene glycol concentration is determined using the procedures described in paragraph (c)(1) of this section. The alternative parameter shall be measured on a daily basis and the average value of the alternative parameter shall be calculated on a daily basis over a rolling 14-day period of operating days. Each daily average value of the alternative parameter constitutes a performance test.
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(3) During each performance test, daily measurement and daily average 14-day rolling averages of the ethylene glycol concentration in the cooling tower water shall be recorded. For the initial performance test, these records shall be submitted in the Notification of Compliance Status report.

(4) All periods when the 14-day rolling average exceeds the standard shall be reported in the Periodic Report.

§ 63.1330 Wastewater provisions.

(a) Except as specified in paragraphs (d) and (e) of this section, the owner or operator of each affected source shall comply with paragraphs (b) and (c) of this section.

(b) The owner or operator of each affected source shall comply with the requirements of §§63.132 through 63.149, with the differences noted in paragraphs (b)(1) through (b)(22) of this section for the purposes of this subpart.

(1) When the determination of equivalence criteria in §63.102(b) is referred to in §§63.132, 63.133, and 63.137, the provisions in §63.6(g) shall apply for the purposes of this subpart.

(2) When the storage vessel requirements contained in §§63.119 through 63.123 are referred to in §§63.132 through 63.149, §§63.119 through 63.123 are applicable, with the exception of the differences referred to in §63.1314, for the purposes of this subpart.

(3) When §63.146(a) requires the submission of a request for approval to monitor alternative parameters according to the procedures specified in §63.1335(f) or (g), owners or operators requesting to monitor alternative parameters shall follow the procedures specified in §63.1335(f) for the purposes of this subpart.

(4) When §63.147(d) requires owners or operators to keep records of the daily average value of each continuously monitored parameter for each operating day as specified in §63.152(f), owners and operators shall instead keep records of the daily average value of each continuously monitored parameter as specified in §63.1335(d) for the purposes of this subpart.

(5) When §§63.132 through 63.149 refer to an “existing source,” the term “existing affected source,” as defined in §63.1310(a), shall apply for the purposes of this subpart.

(6) When §§63.132 through 63.149 refer to a “new source,” the term “new affected source,” as defined in §63.1310(a), shall apply for the purposes of this subpart.

(7) When §§63.132(a) and (b) refer to the “applicable dates specified in §63.100 of subpart F of this part,” the compliance dates specified in §63.1311 shall apply for the purposes of this subpart.

(8) The provisions of paragraphs (b)(8)(i), (b)(8)(ii), and (b)(8)(iii) of this section clarify the organic HAP that an owner or operator shall consider when complying with the requirements in §§63.132 through 63.149.

(i) When §§63.132 through 63.149 refer to table 8 compounds, the owner or operator is only required to consider 1,3-butadiene for purposes of this subpart.

(ii) When §§63.132 through 63.149 refer to table 9 compounds, the owner or operator is only required to consider compounds that meet the definition of organic HAP in §§63.1312 and that are listed on table 9 of 40 CFR part 63, subpart G, for the purposes of this subpart, except for ethylene glycol which need not be considered.

(iii) When §§63.132 through 63.149 refer to compounds in table 36 of 40 CFR part 63, subpart G, or compounds on List 1 and/or List 2, as listed on table 36 of 40 CFR part 63, subpart G, the owner or operator is only required to consider compounds that meet the definition of organic HAP in §§63.1312 and that are listed in table 36 of 40 CFR part 63, subpart G, for the purposes of this subpart.

(9) Whenever §§63.132 through 63.149 refer to a “chemical manufacturing process unit,” the term “thermoplastic product process unit,” (or TPPU) as defined in §§63.1312, shall apply for the purposes of this subpart.

(10) Whenever §§63.132 through 63.149 refer to a Group 1 wastewater stream or a Group 2 wastewater stream, the