

## Environmental Protection Agency

## § 63.8192

emissions from by-product hydrogen streams, end box ventilation system vents, and fugitive emission sources associated with cell rooms, hydrogen systems, caustic systems, and storage areas for mercury-containing wastes.

(2) The mercury recovery facility designates an affected source consisting of all processes and associated operations needed for mercury recovery from wastes at a plant site. This subpart covers mercury emissions from mercury thermal recovery unit vents and fugitive emission sources associated with storage areas for mercury-containing wastes.

(b) An affected source at your mercury cell chlor-alkali plant is existing if you commenced construction of the affected source before July 3, 2002.

(c) A mercury recovery facility is a new affected source if you commence construction or reconstruction of the affected source after July 3, 2002. An affected source is reconstructed if it meets the definition of "reconstruction" in § 63.2.

### § 63.8186 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and recordkeeping and reporting requirement in this subpart that applies to you no later than December 19, 2006.

(b) If you have a new or reconstructed mercury recovery facility and its initial startup date is on or before December 19, 2003, you must comply with each emission limitation, work practice standard, and recordkeeping and reporting requirement in this subpart that applies to you by December 19, 2003.

(c) If you have a new or reconstructed mercury recovery facility and its initial startup date is after December 19, 2003, you must comply with each emission limitation, work practice standard, and recordkeeping and reporting requirement in this subpart that applies to you upon initial startup.

(d) You must meet the notification and schedule requirements in § 63.8252. Several of these notifications must be

submitted before the compliance date for your affected source(s).

### EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

#### § 63.8190 What emission limitations must I meet?

(a) *Emission limits.* You must meet each emission limit in paragraphs (a)(1) through (3) of this section that applies to you.

(1) New or reconstructed mercury cell chlor-alkali production facility. Emissions of mercury are prohibited from a new or reconstructed mercury cell chlor-alkali production facility.

(2) Existing mercury cell chlor-alkali production facility. During any consecutive 52-week period, you must not discharge to the atmosphere total mercury emissions in excess of the applicable limit in paragraph (a)(2)(i) or (ii) of this section calculated using the procedures in § 63.8243(a).

(i) 0.076 grams of mercury per megagram of chlorine produced ( $1.5 \times 10^{-4}$  pounds of mercury per ton of chlorine produced) from all by-product hydrogen streams and all end box ventilation system vents when both types of emission points are present.

(ii) 0.033 grams of mercury per megagram of chlorine produced ( $6.59 \times 10^{-5}$  pounds of mercury per ton of chlorine produced) from all by-product hydrogen streams when end box ventilation systems are not present.

(3) New, reconstructed, or existing mercury recovery facility. You must not discharge to the atmosphere mercury emissions in excess of the applicable limit in paragraph (a)(3)(i) or (ii) of this section.

(i) 23 milligrams per dry standard cubic meter from each oven type mercury thermal recovery unit vent.

(ii) 4 milligrams per dry standard cubic meter from each non-oven type mercury thermal recovery unit vent.

(b) [Reserved]

#### § 63.8192 What work practice standards must I meet?

You must meet the work practice requirements specified in paragraphs (a) through (f) of this section. As an alternative to the requirements specified in

paragraphs (a) through (d) of this section, you may choose to comply with paragraph (g) of this section.

(a) You must meet the work practice standards in Tables 1 through 4 to this subpart, except as specified in paragraph (g) of this section.

(b) You must adhere to the response intervals specified in Tables 1 through 4 to this subpart at all times. Non-adherence to the intervals in Tables 1 through 4 to this subpart constitutes a deviation and must be documented and reported in the compliance report, as required by §63.8254(b), with the date and time of the deviation, cause of the deviation, a description of the conditions, and time actual compliance was achieved.

(c) As provided in §63.6(g), you may request to use an alternative to the work practice standards in Tables 1 through 4 to this subpart.

(d) You must institute a floor-level mercury vapor measurement program to limit the amount of mercury vapor in the cell room environment through periodic measurement of mercury vapor levels and actions to be taken when a floor-level mercury concentration action level is exceeded. The program must meet the requirements listed in paragraphs (d)(1) through (4) of this section. As specified in §63.8252(e)(1)(i) to implement this program, you must prepare and submit to the Administrator a floor-level mercury vapor measurement plan which must contain the elements listed in Table 5 to this subpart.

(1) You must utilize a mercury measurement device described in of Table 6 to this subpart to measure the level of mercury vapor in the cell room at floor-level.

(2) You must conduct at least one floor-level mercury vapor measurement evaluation each half day. This evaluation must include three measurements of the mercury concentration at locations representative of the entire cell room floor area. The average of these measurements must be recorded as specified in §63.8156(c)(1). At a minimum, you must measure the level of mercury vapor above mercury-containing cell room equipment, as well as areas around the cells,

decomposers, or other mercury-containing equipment.

(3) You must establish a floor-level mercury concentration action level that is no higher than 0.05 milligrams per cubic meter (mg/m<sup>3</sup>).

(4) If a mercury concentration greater than the action level is measured during any floor-level mercury vapor measurement evaluation, you must meet the requirements in either paragraph (d)(4)(i) or (ii) of this section.

(i) If you determine that the cause of the elevated mercury concentration is an open electrolyzer, decomposer, or other maintenance activity, you must record the information specified in paragraphs (d)(4)(i)(A) through (C) of this section.

(A) A description of the maintenance activity resulting in elevated mercury concentration;

(B) The time the maintenance activity was initiated and completed; and

(C) A detailed explanation how all the applicable requirements of Table 1 to this subpart were met during the maintenance activity.

(ii) If you determine that the cause of the elevated mercury concentration is not an open electrolyzer, decomposer, or other maintenance activity, you must follow the procedures specified in paragraphs (d)(4)(ii)(A) and (B) of this section until the floor-level mercury concentration falls below the floor-level mercury concentration action level. You must also keep all the associated records for these procedures as specified in Table 9 to this subpart.

(A) Within 1 hour of the time the floor-level mercury concentration action level was exceeded, you must conduct each inspection specified in Table 2 to this subpart in the area where the concentration higher than the floor-level mercury concentration action level was measured, with the exception of the cell room floor and the pillars and beam inspections. (B) You must also inspect all decomposers, hydrogen system piping up to the hydrogen header, and other potential locations of mercury vapor leaks in the area using a technique specified in Table 6 to this subpart. You must correct any problem identified during these inspections according to the requirements in Tables 2 and 3 to this subpart.

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(e) You must prepare, submit, and operate according to a written washdown plan designed to minimize fugitive mercury emissions through routine washing of surfaces where liquid mercury could accumulate. The written plan must address the elements contained in Table 7 to this subpart.

(f) You must keep records of the mass of all virgin mercury added to cells on an annual basis.

(g) As an alternative to the work practice standards in paragraphs (a) through (d) of this section, you may institute a cell room monitoring program to continuously monitor the mercury vapor concentration in the upper portion of each cell room and to take corrective actions as quickly as possible when elevated mercury vapor levels are detected. As specified in § 63.8252(e)(1)(iv), if you choose this option, you must prepare and submit to the Administrator, a cell room monitoring plan containing the elements listed in Table 5 to this subpart and meet the requirements in paragraphs (g)(1) through (4) of this section.

(1) You must utilize mercury monitoring systems that meet the requirements of Table 8 to this subpart.

(2) You must establish an action level according to the requirements in paragraphs (g)(2)(i) through (iii) of this section.

(i) Beginning on the compliance date specified for your affected source in § 63.8186, measure and record the mercury concentration for at least 30 days using a system that meets the requirements of paragraph (g)(1) of this section.

(ii) Using the monitoring data collected according to paragraph (g)(1)(i) of this section, establish your action level at the 75th percentile of the data set.

(iii) Submit your action level as part of your Notification of Compliance Status report according to § 63.8252(e)(1).

(3) Beginning on the compliance date specified for your affected source in § 63.8186, you must continuously monitor the mercury concentration in the cell room. Failure to monitor and record the data according to § 63.8256(c)(4)(ii) for 75 percent of the time in any 6-month period constitutes a deviation.

(4) If the average mercury concentration for any 1-hour period exceeds the action level established according to paragraph (g)(2) of this section, you must meet the requirements in either paragraph (g)(4)(i) or (ii) of this section.

(i) If you determine that the cause of the elevated mercury concentration is an open electrolyzer, decomposer, or other maintenance activity, you must record the information specified in paragraphs (g)(4)(i)(A) through (C) of this section.

(A) A description of the maintenance activity resulting in elevated mercury concentration;

(B) The time the maintenance activity was initiated and completed; and

(C) A detailed explanation how all the applicable requirements of Table 1 to this subpart were met during the maintenance activity.

(ii) If you determine that the cause of the elevated mercury concentration is not an open electrolyzer, decomposer, or other maintenance activity, you must follow the procedures specified in paragraphs (g)(4)(ii)(A) and (B) of this section until the mercury concentration falls below the action level. You must also keep all the associated records for these procedures as specified in Table 9 to this subpart.

(A) Within 1 hour of the time the action level was exceeded, you must conduct each inspection specified in Table 2 to this subpart, with the exception of the cell room floor and the pillars and beam inspections. You must correct any problem identified during these inspections in accordance with the requirements in Table 2 and 3 to this subpart.

(B) If the Table 2 inspections and subsequent corrective actions do not reduce the mercury concentration below the action level, you must inspect all decomposers, hydrogen system piping up to the hydrogen header, and other potential locations of mercury vapor leaks using a technique specified in Table 6 to this subpart. If a mercury vapor leak is identified, you must take the appropriate action specified in Table 3 to this subpart.

**§ 63.8222**

**40 CFR Ch. I (7–1–04 Edition)**

OPERATION AND MAINTENANCE  
REQUIREMENTS

**§ 63.8222 What are my operation and maintenance requirements?**

As required by § 63.6(e)(1)(i), you must always operate and maintain your affected source(s), including air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

GENERAL COMPLIANCE REQUIREMENTS

**§ 63.8226 What are my general requirements for complying with this subpart?**

(a) You must be in compliance with the applicable emission limitations for by-product hydrogen streams, end box ventilation system vents, and mercury thermal recovery unit vents in § 63.8190 at all times, except during periods of startup, shutdown, and malfunction. You must be in compliance with the applicable work practice standards in § 63.8192 at all times, except during periods of startup, shutdown, and malfunction.

(b) You must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3).

INITIAL COMPLIANCE REQUIREMENTS

**§ 63.8230 By what date must I conduct performance tests or other initial compliance demonstrations?**

(a) You must conduct a performance test no later than the compliance date that is specified in § 63.8186 for your affected source to demonstrate initial compliance with the applicable emission limit in § 63.8190(a)(2) for by-product hydrogen streams and end box ventilation system vents and the applicable emission limit in § 63.8190(a)(3) for mercury thermal recovery unit vents.

(b) For the applicable work practice standards in § 63.8192, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in § 63.8186.

**§ 63.8232 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits?**

You must conduct a performance test for each by-product hydrogen stream, end box ventilation system vent, and mercury thermal recovery unit vent according to the requirements in § 63.7(e)(1) and the conditions detailed in paragraphs (a) through (d) of this section.

(a) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(b) For each performance test, you must develop a site-specific test plan in accordance with § 63.7(c)(2).

(c) You must conduct at least three test runs to comprise a performance test, as specified in § 63.7(e)(3) and in either paragraph (c)(1) or (2) of this section.

(1) The sampling time and sampling volume for each run must be at least 2 hours and 1.70 dry standard cubic meters (dscm). Mercury results below the analytical laboratory's detection limit must be reported using the reported analytical detection limit to calculate the sample concentration value and, in turn, the emission rate in the units of the standard; or

(2) The sampling time for each test run must be at least 2 hours and the mercury concentration in each field sample analyzed must be at least two times the reported analytical detection limit.

(d) You must use the test methods specified in paragraphs (d)(1) through (4) of this section and the applicable test methods in paragraphs (d)(5) through (7) of this section.

(1) Method 1 or 1A in appendix A of 40 CFR part 60 to determine the sampling port locations and the location and required number of sampling traverse points.

(2) Method 2, 2A, 2C, or 2D in appendix A of 40 CFR part 60 to determine the stack gas velocity and volumetric flow rate.

(3) Method 3, 3A, or 3B in appendix A of 40 CFR part 60 to determine the stack gas molecular weight.