(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.8266 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in §63.2, and in this section as follows:

Aqueous liquid means a liquid mixture in which water is the predominant component.

Brine means an aqueous solution of alkali metal chloride, as sodium chloride salt solution or potassium chloride salt solution, that is used in the electrolyzer as a raw material.

By-product hydrogen stream means the hydrogen gas from each decomposer that passes through the hydrogen system and is burned as fuel, transferred to another process as raw material, or discharged directly to the atmosphere.

Caustic means an aqueous solution of alkali metal hydroxide, as sodium hydroxide or potassium hydroxide, that is produced in the decomposer.

Caustic basket means a fixture adjacent to the decomposer that contains a serrated funnel over which the caustic from the decomposer passes, breaking into droplets such that electric current is interrupted.

Caustic system means all vessels, piping, and equipment that convey caustic and remove mercury from the caustic stream. The caustic system begins at the decomposer and ends after the primary filters.

Cell room means a building or other structure in which one or more mercury cells are located.

Continuous parameter monitoring system, or CPMS, means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of process of control system parameters.

Control device means a piece of equipment (such as condensers, coolers, chillers, heat exchangers, mist eliminators, absorption units, and adsorption units) that removes mercury from gaseous streams.

Decomposer means the component of a mercury cell in which mercury amalgam and water react in bed of graphite packing (within a cylindrical vessel), producing caustic and hydrogen gas and returning mercury to its elemental form for re-use in the process.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit) or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the title V operating permit for any affected source required to obtain such a permit;

(3) Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is allowed by this subpart; or

(4) Fails to take corrective actions within 48 hours that result in parameter monitoring values being within range.

Electrolyzer means the main component of the mercury cell that consists of an elongated, shallow steel trough that holds a layer of mercury as a flowing cathode. The electrolyzer is enclosed by side panels and a top that suspends metal anodes. In the electrolyzer, brine is fed between a flowing mercury cathode and metal anodes in the presence of electricity to produce chlorine gas and an alkali metal-mercury amalgam (mercury amalgam).

Emission limitation means any emission limit or operating limit.

End box means a component of a mercury cell for transferring materials between the electrolyzer and the decomposer. The inlet end box collects and combines raw materials at the inlet end of the cell, and the outlet end box separates and directs various materials either into the decomposer or out of the cell.

End box ventilation system means all vessels, piping, and equipment that evacuate the head space of each mercury cell end box (and possibly other

vessels and equipment) to the atmosphere. The end box ventilation system begins at the end box (and other vessel or equipment which is being evacuated) and terminates at the end box ventilation system vent. The end box ventilation system includes all control devices.

End box ventilation system vent means the discharge point of the end box ventilation system to the atmosphere after all control devices.

Hydrogen leak means hydrogen gas (containing mercury vapor) that is escaping from the decomposer or hydrogen system.

Hydrogen system means all vessels, piping, and equipment that convey a by-product hydrogen stream. The hydrogen system begins at the decomposer and ends at the point just downstream of the last control device. The hydrogen system includes all control devices.

In liquid mercury service means containing or coming in contact with liquid mercury.

Liquid mercury accumulation means one or more liquid mercury droplets, or a pool of liquid mercury, present on the floor or other surface exposed to the atmosphere.

Liquid mercury leak means the liquid mercury that is dripping or otherwise escaping from process equipment.

Liquid mercury spill means a liquid mercury accumulation resulting from a liquid mercury that leaked from process equipment or that dripped during maintenance or handling.

Mercury cell means a device consisting of an electrolyzer and decomposer, with one or more end boxes, a mercury pump, and other components linking the electrolyzer and decomposer.

Mercury cell amalgam seal pot means a compartment through which mercury amalgam passes from an outlet end box to a decomposer.

Mercury cell chlor-alkali plant means all contiguous or adjoining property that is under common control, where mercury cells are used to manufacture product chlorine, product caustic, and by-product hydrogen and where mercury may be recovered from wastes.

Mercury cell chlor-alkali production facility means an affected source consisting of all cell rooms and ancillary operations used in the manufacture of product chlorine, product caustic, and by-product hydrogen at a mercury cell chlor-alkali plant.

Mercury concentration CMS, or mercury concentration continuous monitoring system, means a CMS, as defined in §63.2, that continuously measures the concentration of mercury.

Mercury-containing wastes means waste materials containing mercury, which are typically classified under Resource Conservation and Recovery Act (RCRA) solid waste designations. K071 wastes are sludges from the brine system. K106 are wastewater treatment sludges. D009 wastes are non-specific mercury-containing wastes, further classified as either debris or nondebris (*i.e.,* cell room sludges and carbon from decomposes).

Mercury pump means a component of a mercury cell for conveying elemental mercury re-created in the decomposer to the beginning of the mercury cell. A mercury pump is typically found either as an in-line mercury pump (near a mercury suction pot or mercury seal pot) or submerged mercury pump (within a mercury pump tank or mercury pump seal).

Mercury recovery facility means an affected source consisting of all processes and associated operations needed for mercury recovery from wastes at a mercury cell chlor-alkali plant.

Mercury thermal recovery unit means the retort(s) where mercury-containing wastes are heated to volatilize mercury and the mercury recovery/control system (control devices and other equipment) where the retort off-gas is cooled, causing mercury to condense and liquid mercury to be recovered.

Mercury thermal recovery unit vent means the discharge point of the mercury thermal recovery unit to the atmosphere after all recovery/control devices. This term encompasses both oven type vents and non-oven type vents.

Mercury vacuum cleaner means a cleanup device used to draw a liquid mercury spill or accumulation (via suction pressure) into a closed compartment.

Non-oven type mercury thermal recovery unit vent means the discharge point

to the atmosphere after all recovery/control devices of a mercury thermal recovery unit in which the retort is either a rotary kiln or single hearth retort.

Open-top container means any container that does not have a tight-fitting cover that keeps its contents from being exposed to the atmosphere.

Oven type mercury thermal recovery unit vent means the discharge point to the atmosphere after all recovery/control devices of a mercury thermal recovery unit in which each retort is a batch oven retort.

Responsible official means responsible official as defined in 40 CFR 70.2.

Retort means a furnace where mercury-containing wastes are heated to drive mercury into the gas phase. The types of retorts used as part of mercury thermal recovery units at mercury cell chlor-alkali plants include batch oven retorts, rotary kilns, and single hearth retorts.

Spalling means fragmentation by chipping.

Sump means a large reservoir or pit for wastewaters (primarily washdown waters).

Trench means a narrow channel or depression built into the length of a cell room floor that leads washdown materials to a drain.

Vent hose means a connection for transporting gases from the mercury cell.

Virgin mercury means mercury that has not been processed in an onsite mercury thermal recovery unit or otherwise recovered from mercury-containing wastes onsite.

Washdown means the act of rinsing a floor or surface with a stream of aqueous liquid to cleanse it of a liquid mercury spill or accumulation, generally by driving it into a trench.

Week means any consecutive seven-day period.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

TABLE 1 TO SUBPART IIIII OF PART 63—WORK PRACTICE STANDARDS—DESIGN, OPERATION, AND MAINTENANCE REQUIREMENTS

As stated in §63.8192, you must meet the work practice standards in the following table:

For . . .	You must . . .
1. Cell rooms	a. For new or modified cell rooms, construct each cell room interior using materials that are resistant to absorption of mercury, resistant to corrosion, facilitate the detection of liquid mercury spills or accumulations, and are easy to clean. b. Limit access around and beneath mercury cells in each cell room to prevent liquid mercury from being tracked into other areas. c. Provide adequate lighting in each cell room to facilitate the detection of liquid mercury spills or accumulations. d. Minimize the number of items stored around and beneath cells in each cell room.
2. Mercury cells and electrolyzers.	a. Operate and maintain each electrolyzer, decomposer, end box, and mercury pump to minimize leakage of mercury. b. Prior to opening an electrolyzer for maintenance, do the following: (1) Complete work that can be done before opening the electrolyzer in order to minimize the time required to complete maintenance when the electrolyzer is open; (2) fill the electrolyzer with an aqueous liquid, when possible; (3) allow the electrolyzer to cool before opening; and (4) schedule and staff maintenance of the electrolyzer to minimize the time the electrolyzer is open. c. When the electrolyzer top is raised and before moving the top and anodes, thoroughly flush all visible mercury from the top and the anodes with an aqueous liquid, when possible. d. While an electrolyzer is open, keep the bottom covered with an aqueous liquid or maintain a continuous flow of aqueous liquid, when possible. e. During an electrolyzer side panel change, take measures to ensure an aqueous liquid covers or flows over the bottom, when possible. f. Each time an electrolyzer is opened, inspect and replace components, as appropriate. g. If you step into an electrolyzer bottom, either remove all visible mercury from your footwear or replace them immediately after stepping out of the electrolyzer. h. If an electrolyzer is disassembled for overhaul maintenance or for any other reason, chemically clean the bed plate or thoroughly flush it with an aqueous liquid. i. Before transporting each electrolyzer part to another work area, remove all visible mercury from the part or contain the part to prevent mercury from dripping during transport. j. After completing maintenance on an electrolyzer, check any mercury piping flanges that were opened for liquid mercury leaks.

For . . .	You must . . .
	k. If a liquid mercury spill occurs during any maintenance activity on an electrolyzer, clean it up in accordance with the requirements in Table 3 to this subpart.
3. Vessels in liquid mercury service.	If you replace a vessel containing mercury that is intended to trap and collect mercury after December 19, 2003, replace it with a vessel that has a cone shaped bottom with a drain valve or other design that readily facilitates mercury collection.
4. Piping and process lines in liquid mercury service.	a. To prevent mercury buildup after December 19, 2003, equip each new process line and piping system with smooth interiors and adequate low point drains or mercury knock-out pots to avoid liquid mercury buildup within the pipe and to facilitate mercury collection and recovery.
5. Cell room floors	a. Maintain a coating on cell room floors that is resistant to absorption of mercury and that facilitates the detection of liquid mercury spills or accumulations.
	b. Maintain cell room floors such that they are smooth and free of cracking and spalling.
	c. Maintain the cell room floor to prevent mercury accumulation in the corners.
	d. Maintain a layer of aqueous liquid on liquid mercury contained in trenches or drains and replenish the aqueous layer at least once per day.
	e. Keep the cell room floor clean and free of debris.
	f. If you step into a liquid mercury spill or accumulation, either remove all visible mercury from your footwear or replace your footwear immediately.
6. End boxes	a. Either equip each end box with a fixed cover that is leak tight, or route the end box head space to an end box ventilation system.
	b. For each end box ventilation system: maintain a flow of aqueous liquid over the liquid mercury in the end box and maintain the temperature of the aqueous liquid below its boiling point, maintain a negative pressure in the end box ventilation system, and maintain the end box ventilation system in good condition.
	c. Maintain each end box cover in good condition and keep the end box closed when the cell is in service and when liquid mercury is flowing down the cell, except when operation or maintenance activities require short-term access.
	d. Keep all bolts and C-clamps used to hold the covers in place when the cell is in service and when liquid mercury is flowing down the cell.
	e. Maintain each access port stopper in an end box cover in good sealing condition and keep each end box access port closed when the cell is in service and when liquid mercury is flowing down the cell.
7. Decomposers	a. Maintain each decomposer cover in good condition and keep each decomposer closed and sealed, except when maintenance activities require the cover to be removed.
	b. Maintain connections between the decomposer and the corresponding cell components, hydrogen system piping, and caustic system piping in good condition and keep the connections closed/tight, except when maintenance activities require opening/loosening these connections.
	c. Keep each mercury cell amalgam seal pot closed and sealed, except when operation or maintenance activities require short-term access.
	d. Prior to opening a decomposer, do the following: fill the decomposer with an aqueous liquid or drain the decomposer liquid mercury into a container that meets requirements in Table 1, Item 9 or 10, allow the decomposer to cool before opening, and complete work that can be done before opening the decomposer.
	e. Take precautions to avoid mercury spills when changing graphite grids or balls in horizontal decomposers or graphite packing in vertical decomposers. If a spill occurs, you must clean it up in accordance with the requirements in Table 3 to this subpart.
	f. After each maintenance activity, use an appropriate technique (Table 6 to this subpart) to check for hydrogen leaks.
	g. Before transporting any internal part from the decomposer (such as the graphite basket) to another work area, remove all visible mercury from the part or contain the part to prevent mercury from dripping during transport.
	h. Store carbon from decomposers in accordance with the requirements in 40 CFR part 265, subparts I and CC, until the carbon is treated or is disposed.
8. Submerged mercury pumps	a. Provide a vapor outlet connection from each submerged pump to an end box ventilation system. The connection must be maintained under negative pressure.
	b. Keep each mercury pump tank closed, except when maintenance or operation activities require the cover to be removed.
	c. Maintain a flow of aqueous liquid over the liquid mercury in each mercury pump tank and maintain the aqueous liquid at a temperature below its boiling point.
9. Open-top containers holding liquid mercury.	Maintain a layer of aqueous liquid over liquid mercury in each open-top container. Replenish the aqueous layer at least once per day and, when necessitated by operating procedures or observation, collect the liquid mercury from the container in accordance with the requirements in Table 4 to this subpart.
10. Closed containers used to store liquid mercury.	a. Store liquid mercury in containers with tight fitting covers.
	b. Maintain the seals on the covers in good condition.
	c. Keep each container securely closed when mercury is not being added to, or removed from, the container.
11. Caustic systems	a. Maintain the seal between each caustic basket cover and caustic basket by using gaskets and other appropriate material.
	b. Do not allow solids and liquids collected from back-flushing primary caustic filters to contact floors or run into open trenches.

For . . .	You must . . .
	c. Collect solids and liquids from back-flushing each primary caustic filter and collect these mercury-containing wastes in process vessels or in accordance with the requirements in 40 CFR part 265, subparts I and CC. d. Keep each caustic basket closed and sealed, except when operation or maintenance activities require short term access.
12. Hydrogen systems	a. Collect drips from each hydrogen seal pot and compressor seal in containers meeting the requirements in this table for open containers. These drips should not be allowed to run on the floor or in open trenches. b. Minimize purging of hydrogen from a decomposer into the cell room by either sweeping the decomposer with an inert gas or by routing the hydrogen to the hydrogen system. c. Maintain hydrogen piping gaskets in good condition. d. After any maintenance activities, use an appropriate technique (Table 6 to this subpart) to check all hydrogen piping flanges that were opened for hydrogen leaks.

TABLE 2 TO SUBPART IIIII OF PART 63—WORK PRACTICE STANDARDS—REQUIRED INSPECTIONS

As stated in §63.8192, you must meet the work practice standards in the following table:

You must inspect . . .	At least once each . . .	And if you find . . .	You must . . .
1. Each vent hose on each mercury cell.	Half day	A leaking vent hose	Take action immediately to correct the leak.
2. Each open-top container holding liquid mercury.	Half day	Liquid mercury that is not covered by an aqueous liquid.	Take action immediately to cover the liquid mercury with an aqueous liquid.
3. Each end box	Half day	a. An end box cover not securely in place.	Take action immediately to put the end box cover securely in place.
		b. An end box stopper not securely in place.	Take action immediately to put the end box stopper securely in place.
		c. Liquid mercury in an end box that is not covered by an aqueous liquid at a temperature below boiling.	Take action immediately to cover the liquid mercury with an aqueous liquid.
4. Each mercury amalgam seal pot.	Half day	A seal pot cover that is not securely in place.	Take action immediately to put the seal pot cover securely in place.
5. Each mercury seal pot	Half day	A mercury seal pot stopper not securely in place.	Take action immediately to put the mercury seal pot stopper securely in place.
6. Cell room floors	Month	Cracks, spalling, or other deficiencies that could cause liquid mercury to become trapped.	Repair the crack, spalling, or other deficiency within 1 month from the time you identify the deficiency.
7. Pillars and beams	6 months	Cracks, spalling, or other deficiencies that could cause liquid mercury to become trapped.	Repair the crack, spalling, or other deficiency within 1 month from the time you identify the deficiency.
8. Each caustic basket	Half day	A caustic basket cover that is not securely in place.	Take action immediately to put the caustic basket cover securely in place.
9. All equipment and piping in the caustic system.	Day	Equipment that is leaking caustic	Initiate repair of the leaking equipment within 72 hours from the time that you identify the caustic leak.
10. All floors and other surfaces where liquid mercury could accumulate in cell rooms and other production facilities and in mercury recovery facilities.	Half day	A liquid mercury spill or accumulation.	Take the required action specified in Table 3 to this subpart.
11. Each electrolyzer bottom, electrolyzer side panel, end box, mercury amalgam seal pot, decomposer, mercury pump, and hydrogen cooler, and all other vessels, piping, and equipment in liquid mercury service in the cell room.	Day	Equipment that is leaking liquid mercury.	Take the required action specified in Table 3 to this subpart.

You must inspect . . .	At least once each . . .	And if you find . . .	You must . . .
12. Each decomposer and all hydrogen piping up to the hydrogen header.	Half day	Equipment that is leaking hydrogen and/or mercury vapor.	Take the required action specified in Table 3 to this subpart.
13. All equipment in the hydrogen system from the start of the header to the last control device.	3 months	Equipment that is leaking hydrogen and/or mercury vapor.	Take the required action specified in Table 3 to this subpart.

TABLE 3 TO SUBPART IIIII OF PART 63—WORK PRACTICE STANDARDS—REQUIRED ACTIONS FOR LIQUID MERCURY SPILLS AND ACCUMULATIONS AND HYDROGEN AND MERCURY VAPOR LEAKS

As stated in §63.8192, you must meet the work practice standards in the following table:

During a required inspection or at any other time, If you find . . .	You must . . .
1. A liquid mercury spill or accumulation ...	a. Initiate clean up of the liquid mercury spill or accumulation as soon as possible, but no later than 1 hour from the time you detect it. b. Clean up liquid mercury using a mercury vacuum cleaner or by using an alternative method. If you use an alternative method to clean up liquid mercury, you must submit a description of the method to the Administrator in your Notification of Compliance Status report. c. If you use a mercury vacuum cleaner, the vacuum cleaner must be designed to prevent generation of airborne mercury; you must cap the ends of hoses after each use; and after vacuuming, you must wash down the area. d. Inspect all equipment in liquid mercury service in the surrounding area to identify the source of the liquid mercury within 1 hour from the time you detect the liquid mercury spill or accumulation. e. If you identify leaking equipment as the source of the spill or accumulation, contain the dripping mercury, stop the leak, and repair the leaking equipment as specified below. f. If you cannot identify the source of the liquid mercury spill or accumulation, re-inspect the area within 6 hours of the time you detected the liquid mercury spill or accumulation, or within 6 hours of the last inspection of the area.
2. Equipment that is leaking liquid mercury	a. Contain the liquid mercury dripping from the leaking equipment by placing a container under the leak within 30 minutes from the time you identify the liquid mercury leak. b. The container must meet the requirement for open-top containers in Table 1 to this subpart. c. Make a first attempt at stopping the leak within 1 hour from the time you identify the liquid mercury leak. d. Stop the leak and repair the leaking equipment within 4 hours from the time you identify the liquid mercury leak. e. You can delay repair of equipment leaking liquid mercury if you either isolate the leaking equipment from the process so that it does not remain in mercury service; or determine that you cannot repair the leaking equipment without taking the cell off line, provided that you contain the dripping mercury at all times as described above, and take the cell off line as soon as practicable, but no later than 48 hours from the time you identify the leaking equipment. You cannot place the cell back into service until the leaking equipment is repaired.
3. A decomposer or hydrogen system piping up to the hydrogen header that is leaking hydrogen and/or mercury vapor.	a. Make a first attempt at stopping the leak within 1 hour from the time you identify the hydrogen and/or mercury vapor leak. b. Stop the leak and repair the leaking equipment within 4 hours from the time you identify the hydrogen and/or mercury vapor leak. c. You can delay repair of an equipment leaking hydrogen and/or mercury vapor if you isolate the leaking equipment or take the cell off line until you repair the leaking equipment.
4. Equipment in the hydrogen system, from the start of the hydrogen header to the last control device, that is leaking hydrogen and/or mercury vapor.	a. Make a first attempt at stopping the leak within 4 hours from the time you identify the hydrogen and/or mercury vapor leak. b. Stop the leak and repair the header within 24 hours from the time you identify the hydrogen and/or mercury vapor leak. c. You can delay repair of equipment leaking hydrogen and/or mercury vapor if you isolate the leaking equipment.

TABLE 4 TO SUBPART IIIII OF PART 63—WORK PRACTICE STANDARDS—REQUIREMENTS FOR MERCURY LIQUID COLLECTION

As stated in §63.8192, you must meet the work practice standards in the following table:

You must collect liquid mercury from . . .	At the following intervals	When collecting the mercury, you must meet these requirements		
1. Open-top containers.	a. At least once each 72 hours.	i. If you spill liquid mercury during collection or transport, you must take the action specified in Table 3 to this subpart for liquid mercury spills and accumulations.	ii. From the time that you collect liquid mercury into a temporary container until the time that you store the liquid mercury, you must keep it covered by an aqueous liquid.	iii. Within 4 hours from the time you collect the liquid mercury, you must transfer it from each temporary container to a storage container that meets the specifications in Table 1 to this subpart.
2. Vessels, low point drains, mercury knockout pots, and other closed mercury collection points.	a. At least once each week.	See 1.a.i through iii above.		
3. All other equipment.	a. Whenever maintenance activities require the opening of the equipment.	See 1.a.i. through iii above.		

TABLE 5 TO SUBPART IIIII OF PART 63—REQUIRED ELEMENTS OF FLOOR-LEVEL MERCURY VAPOR MEASUREMENT AND CELL ROOM MONITORING PLANS

Your Floor-Level Mercury Vapor Measurement Plan required by §63.8192(d) and Cell Room Monitoring Plan required by §63.8192(g) must contain the elements listed in the following table:

You must specify in your plan . . .	Additional requirements
Floor-Level Mercury Vapor Measurement Plan	
1. Locations in the cell room where you will measure the level of mercury vapor.	The locations must be representative of the entire cell room floor area. At a minimum you must measure the level of mercury vapor above mercury-containing cell room equipment, as well as areas around the cells, decomposes, or other mercury-containing equipment.
2. Equipment or sampling and analytical methods that you will use to measure the level of mercury vapor.	If an instrument or other equipment is used, the plan must include manufacturer specifications and calibration procedures. The plan must also include a description of how you will ensure that the instrument will be calibrated and maintained according to manufacturer specifications.
3. Measurement frequency	Measurements must take place at least once each half day.
4. Number of measurements	At least three readings must be taken at each sample location and the average of these readings must be recorded.
5. A floor-level mercury concentration action level	The action level may not be higher than 0.05 mg/m^3.
Cell Room Monitoring Plan	
1. Details of your mercury monitoring system.	
2. How representative sampling will be conducted	Include some pre-plan measurements to demonstrate the profile of mercury concentration in the cell room and how the selected sampling locations ensure conducted representativeness.
3. Quality assurance/quality control procedures for your mercury monitoring system.	Include a description of how you will keep records or other means to demonstrate that the system is operating properly.

You must specify in your plan . . .	Additional requirements
4. Your action level	Include the background data used to establish your level.

TABLE 6 TO SUBPART IIIII OF PART 63—EXAMPLES OF TECHNIQUES FOR EQUIPMENT PROBLEM IDENTIFICATION, LEAK DETECTION AND MERCURY VAPOR

As stated in Tables 1 and 2 of Subpart IIIII, examples of techniques for equipment problem identification, leak detection and mercury vapor measurements can be found in the following table:

To detect . . .	You could use . . .	Principle of detection . . .
1. Leaking vent hoses; liquid mercury that is not covered by an aqueous liquid in open-top containers or end boxes; end box covers or stoppers, amalgam seal pot stoppers, or caustic basket covers not securely in place; cracks or spalling in cell room floors, pillars, or beams; caustic leaks; liquid mercury accumulations or spills; and equipment that is leaking liquid mercury.	Visual inspections	
2. Equipment that is leaking hydrogen and/or mercury vapor during inspections required by Table 2 to this subpart.	a. Auditory and visual inspections	
	b. Portable mercury vapor analyzer—ultraviolet light absorption detector.	A sample of gas is drawn through a detection cell where ultraviolet light at 253.7 nanometers (nm) is directed perpendicularly through the sample toward a photodetector. Elemental mercury absorbs the incident light in proportion to its concentration in the air stream.
	c. Portable mercury vapor analyzer—gold film amalgamation detector.	A sample of gas is drawn through a detection cell containing a gold film detector. Elemental mercury amalgamates with the gold film, changing the resistance of the detector in proportion to the mercury concentration in the air sample.
	d. Portable short-wave ultraviolet light, fluorescent background—visual indication.	Ultraviolet light is directed toward a fluorescent background positioned behind a suspected source of mercury emissions. Elemental mercury vapor absorbs the ultraviolet light, projecting a dark shadow image on the fluorescent background.
	e. Portable combustible gas meter.	
3. Level of mercury vapor in the cell room and other areas.	a. Portable mercury vapor analyzer—ultraviolet light absorption detector.	See Item 2.b.
	b. Portable mercury vapor analyzer—gold film amalgamation detector.	See Item 2.c.
	c. Permanganate impingement	A known volume of gas sample is absorbed in potassium permanganate solution. Elemental mercury in the solution is determined using a cold vapor adsorption analyzer, and the concentration of mercury in the gas sample is calculated.

TABLE 7 TO SUBPART IIIII OF PART 63—REQUIRED ELEMENTS OF WASHDOWN PLANS

As stated in §63.8192, your written washdown plan must address the elements contained in the following table:

For each of the following areas . . .	You must establish the following as part of your plan . . .
1. Center aisles of cell rooms	A description of the manner of washdown of the area, and the washdown frequency for the area.
2. Electrolyzers	

For each of the following areas . . .	You must establish the following as part of your plan . . .
3. End boxes and areas under end boxes 4. Decomposers and areas under decomposers 5. Caustic baskets and areas around caustic baskets 6. Hydrogen system piping 7. Basement floor of cell rooms 8. Tanks 9. Pillars and beams in cell rooms 10. Mercury cell repair areas 11. Maintenance shop areas 12. Work tables 13. Mercury thermal recovery units 14. Storage areas for mercury-containing wastes	

TABLE 8 TO SUBPART IIIII OF PART 63—REQUIREMENTS FOR CELL ROOM MONITORING PROGRAM

As stated in §63.8192(g)(1), your mercury monitoring system must meet the requirements contained in the following table:

If you utilize an . . .	Your . . .	Must . . .
1. Extractive cold vapor spectroscopy system.	a. Mercury vapor analyzer	Be capable of continuously monitoring the elemental mercury concentration with a detection level at least two times lower than the baseline mercury concentration in the cell room.
	b. Sampling system	Obtain measurements at three or more locations along the center aisle of the cell room at a height sufficient to ensure that sample is representative of the entire cell room. One sampling location must be above the midpoint of the center aisle, and the other two an equidistance between the midpoint and the end of the cells.
2. Open path differential optical absorption spectroscopy system.	a. Mercury vapor analyzer	Be capable of continuously monitoring the elemental mercury concentration with a detection level at least two times lower than the baseline mercury concentration in the cell room.
	b. Path	Be directed along the center aisle at a height sufficient to ensure that the sample is representative of the entire cell room.

TABLE 9 TO SUBPART IIIII OF PART 63—REQUIRED RECORDS FOR WORK PRACTICE STANDARDS

As stated in §63.8256(c), you must keep the records (related to the work practice standards) specified in the following table:

For each . . .	You must record the following information . . .
1. Inspection required by Table 2 to this subpart	Date and time the inspection was conducted.
2. Situation found during an inspection required by Table 2 to this subpart: leaking vent hose; open-top container where liquid mercury is not covered by an aqueous liquid; end box cover that is not securely in place; end box stopper that is not securely in place; end box where liquid mercury is not covered by an aqueous liquid at a temperature below boiling; seal pot cover that is not securely in place; open or mercury seal pot stopper that is not securely in place; crack, spalling, or other deficiency in a cell room floor, pillar, or beam that could cause liquid mercury to become trapped; or caustic basket that is not securely in place.	a. Description of the condition. b. Location of the condition. c. Date and time you identify the condition. d. Description of the corrective action taken. e. Date and time you successfully complete the corrective action.
3. Caustic leak during an inspection required by Table 2 to this subpart.	a. Location of the leak. b. Date and time you identify the leak. c. Date and time you successfully stop the leak and repair the leaking equipment.
4. Liquid mercury spill or accumulation identified during an inspection required by Table 2 to this subpart or at any other time.	a. Location of the liquid mercury spill or accumulation. b. Estimate of the weight of liquid mercury. c. Date and time you detect the liquid mercury spill or accumulation. d. Method you use to clean up the liquid mercury spill or accumulation.

For each . . .	You must record the following information . . .
5. Liquid mercury leak or hydrogen leak identified during an inspection required by Table 2 to this subpart or at any other time.	e. Date and time when you clean up the liquid mercury spill or accumulation. f. Source of the liquid mercury spill or accumulation. g. If the source of the liquid mercury spill or accumulation is not identified, the time when you reinspect the area. a. Location of the leak. b. Date and time you identify the leak. c. If the leak is a liquid mercury leak, the date and time that you successfully contain the dripping liquid mercury. d. Date and time you first attempt to stop the leak. e. Date and time you successfully stop the leak and repair the leaking equipment. f. If you take a cell off line or isolate the leaking equipment, the date and time you take the cell off line or isolate the leaking equipment, and the date and time you put the cell or isolated equipment back into service.
6. Occasion for which it is not possible to perform the design, operation and maintenance procedures required by Item 2 of Table 1 to this subpart.	a. Reason for not being able to perform each procedure determined to be not possible. b. Actions taken to reduce or prevent mercury emissions, in lieu of the requirements in Table 1 to this subpart.

TABLE 10 TO SUBPART IIIII OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART IIIII

As stated in §63.8262, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applies to Subpart IIIII	Explanation
§63.1	Applicability	Yes.	
§63.2	Definitions	Yes.	
§63.3	Units and Abbreviations	Yes.	
§63.4	Prohibited Activities	Yes.	
§63.5	Construction/Reconstruction	Yes.	
§63.6(a)–(g), (i), (j)	Compliance with Standards and Maintenance Requirements.	Yes.	
§63.6(h)	Compliance with Opacity and Visible Emission Standards.	No	Subpart IIIII does not have opacity and visible emission standards.
§63.7(a)(1), (b)–(h)	Performance Testing Requirements.	Yes	Subpart IIIII specifies additional requirements related to site-specific test plans and the conduct of performance tests.
§63.7(a)(2)	Applicability and Performance Test Dates.	No	Subpart IIIII requires the performance test to be performed on the compliance date.
§63.8(a)(1), (a)(3); (b); (c)(1)–(4), (6)–(8); (d); (e); and (f)(1)–(5).	Monitoring Requirements	Yes.	
§63.8(a)(2)	Continuous Monitoring System (CMS) Requirements.	No	Subpart IIIII requires a site-specific monitoring plan in lieu of a promulgated performance specification for a mercury concentration CMS.
§63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11.	No	Subpart IIIII does not require flares.
§63.8(c)(5)	COMS Minimum Procedures	No	Subpart IIIII does not have opacity and visible emission standards.
§63.8(f)(6)	Alternative to Relative Accuracy Test.	No	Subpart IIIII does not require CEMS.
§63.8(g)	Data Reduction	No	Subpart IIIII specifies mercury concentration CMS data reduction requirements.
§63.9(a)–(e), (g)–(j)	Notification Requirements	Yes.	
§63.9(f)	Notification of VE/Opacity Test.	No	Subpart IIIII does not have opacity and visible emission standards.

Citation	Subject	Applies to Subpart IIIII	Explanation
§ 63.10(a); (b)(1); (b)(2)(i)–(xii), (xiv); (b)(3); (c); (d)(1)–(2), (4)–(5); (e); (f).	Recordkeeping/Reporting	Yes.	
§ 63.10(b)(2)(xiii)	CMS Records for RATA Alternative.	No	Subpart IIIII does not require CEMS.
§ 63.10(d)(3)	Reporting Opacity or VE Observations.	No	Subpart IIIII does not have opacity and visible emission standards.
§ 63.11	Flares	No	Subpart IIIII does not require flares.
§ 63.12	Delegation	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by Reference	Yes.	
§ 63.15	Availability of Information	Yes.	

Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing

SOURCE: 68 FR 26722, May 16, 2003, unless otherwise note.

WHAT THIS SUBPART COVERS

§ 63.8380 What is the purpose of this subpart?

This subpart establishes national emission limitations for hazardous air pollutants (HAP) emitted from brick and structural clay products (BSCP) manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.8385 Am I subject to this subpart?

You are subject to this subpart if you own or operate a BSCP manufacturing facility that is, is located at, or is part of, a major source of HAP emissions according to the criteria in paragraphs (a) and (b) of this section.

(a) A BSCP manufacturing facility is a plant site that manufactures brick (including, but not limited to, face brick, structural brick, and brick pavers); clay pipe; roof tile; extruded floor and wall tile; and/or other extruded, dimensional clay products. Brick and structural clay products manufacturing facilities typically process raw clay and shale, form the processed materials into bricks or shapes, and dry and fire the bricks or shapes.

(b) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

§ 63.8390 What parts of my plant does this subpart cover?

(a) This subpart applies to each existing, new, or reconstructed affected source at a BSCP manufacturing facility.

(b) The existing affected source is an existing tunnel kiln with a design capacity equal to or greater than 9.07 megagrams per hour (Mg/hr) (10 tons per hour (tph)) of fired product according to paragraphs (b)(1) through (3) of this section. For the remainder of this subpart, a tunnel kiln with a design capacity equal to or greater than 9.07 Mg/hr (10 tph) of fired product will be called a large tunnel kiln, and a tunnel kiln with a design capacity less than 9.07 Mg/hr (10 tph) of fired product will be called a small tunnel kiln.

(1) For existing tunnel kilns that do not have sawdust dryers, the kiln exhaust process stream (*i.e.,* the only process stream) is subject to the requirements of this subpart.

(2) For existing tunnel kilns that ducted exhaust to sawdust dryers prior to July 22, 2002, only the kiln exhaust process stream (*i.e.,* the process stream that exhausts directly to the atmosphere or to an air pollution control device (APCD)) is subject to the requirements of this subpart. As such, any process stream that is ducted to a sawdust dryer is not subject to these requirements.