§ 63.8240 What are my monitoring requirements?

For each by-product hydrogen stream, each end box ventilation system vent, and each mercury thermal recovery unit vent, you must monitor the mercury emissions using the procedures in paragraph (a) or (b) of this section.

(a) You must continuously monitor the mercury concentration using a mercury continuous emissions monitor according to the requirements in §§ 63.8242(a) and 63.8244(a); or

(b) You must periodically monitor the mercury emissions according to the requirements in §§ 63.8242(b) and 63.8244(b).

§ 63.8242 What are the installation, operation, and maintenance requirements for my continuous monitoring systems?

(a) If you choose the continuous mercury monitoring option under § 63.8240(a), you must install, operate, and maintain each mercury continuous emissions monitor according to paragraphs (a)(1) through (5) of this section.

(1) Each mercury continuous emissions monitor must sample, analyze, and record the concentration of mercury at least once every 15 minutes.

(2) Each mercury continuous emissions monitor analyzer must have a detector with the capability to detect a mercury concentration at or below 0.5 times the mercury concentration level measured during the performance test conducted according to § 63.8232.

(3) In lieu of a promulgated performance specification as required in § 63.8(a)(2), you must develop a site-specific monitoring plan that addresses the elements in paragraphs (a)(1) through (3) of this section.

(i) Installation and measurement location downstream of the final control device for each by-product hydrogen stream, end box ventilation system vent, and mercury thermal recovery unit vent.

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration analyzer, and the data collection and reduction system.

(ii) Performance evaluation procedures and acceptance criteria (i.e., calibrations).

(iv) Ongoing operation and maintenance procedures according to the requirements of § 63.8(c)(1), (3), and (4)(ii).

(v) Ongoing data quality assurance procedures according to the requirements of § 63.8(d).

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c), (e)(1), and (e)(2)(i).

(4) You must conduct a performance evaluation of each mercury continuous emissions monitor according to your site-specific monitoring plan.

(5) You must operate and maintain each mercury continuous emissions monitor in continuous operation according to the site-specific monitoring plan.

(b) If you choose the periodic monitoring option and your final control device is not a nonregenerable carbon adsorber, you must install, operate, and maintain a continuous parameter monitoring system (CPMS) for each parameter specified in § 63.8232(f)(1), according to § 63.8(c).

§ 63.8243 What equations and procedures must I use to demonstrate continuous compliance?

(a) By-product hydrogen streams and end box ventilation system vents. For each consecutive 52-week period, you must determine the g Hg/Mg Cl₂ produced from all by-product hydrogen streams and all end box ventilation system vents, if applicable, at a mercury cell chlor-alkali production facility using the procedures in paragraphs (a)(1) through (3) of this section. You must begin collecting data on the compliance date that is specified in § 63.8186 for your affected source and calculate your first 52-week average mercury emission rate at the end of the 52nd week after the compliance date.

(1) Each week, you must determine the weekly mercury emission rate in grams per week for each by-product hydrogen stream and for each end box ventilation system vent, if applicable, using one of the monitoring options in paragraph (a)(1)(i) or (ii) of this section.