

ELECTRIC UTILITY STEAM GENERATING UNIT
MERCURY EMISSIONS INFORMATION COLLECTION EFFORT

BURDEN STATEMENT

Preliminary estimates of the public burden associated with this information collection effort indicate a total of 186,127 hours and \$16,806,796. This is the estimated burden for 1,100 facilities to provide information on their boilers, 766 facilities to provide coal analyses, and 102 units to provide speciated mercury emission data.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information that is sent to ten or more persons unless it displays a currently valid OMB control number.

GENERAL INSTRUCTIONS

Please provide the information requested in the following forms. If you are unable to respond to an item as it is stated, please provide any information you believe may be related. Use additional copies of the request forms for your response.

If you believe the disclosure of the information requested would compromise a trade secret, clearly identify such information as discussed in Enclosure 1. Any information subsequently determined to constitute a trade secret will be protected under 18 U.S.C. 1905. If

no claim of confidentiality accompanies the information when it is received by EPA, it may be made available to the public by EPA without further notice (40 CFR 2.203, September 1, 1976). Because section 114(c) of the Act exempts emission data from claims of confidentiality, the emission data you provide may be made available to the public. A definition of what the EPA considers emissions data is provided in 40 CFR 2.301(a)(2)(i).

The following section is to be completed by all facilities:

- ! Part I - General Facility Information: once for each facility. A copy of Part I should be completed and returned to the address noted below within 30 days of receipt.

The following section is to be completed by all facilities meeting the section 112(a)(8) definition of an electric utility steam generating unit:

- ! Part II - Coal Analyses: Item 3 of Part II is to be completed for every coal shipment received at each facility at which one or more coal-fired electric utility steam generating units are located. Item 4 of Part II is to be completed for every sample analyzed per the schedule described in Part II. A copy of each Part II compiled for a calendar quarter should be completed and returned to the address noted below within 45 days of the end of the previous calendar quarter.

The following section is to be completed by all facilities selected for speciated stack testing:

- ! Part III - Speciated Mercury Emissions Data: one emissions test (consisting of three runs at each sampling location). A copy of the emissions test report should be completed and returned to the address noted below within 60 days of completion of the test.

Detailed instructions for each part follow.

Questions regarding this information request should be directed to Mr. Bill Maxwell at (919) 541-5430 or Mr. Bill Grimley at (919) 541-1065.

Return this information request and any additional information to:

Emissions Standards Division (MD-13)
U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

Attention: Sally L. Shaver, Director

PART I: GENERAL FACILITY INFORMATION

NOTE: If any type of coal is fired, complete Part I and continue to Part II. If NO coal is fired, complete only Part I and return to the address noted earlier.

1. Name of legal owner of facility: _____

2. Name of legal operator of facility, if different from legal owner: _____

3. Address of ____ legal owner or ____ operator: _____

- 4a. Plant name (as reported on Form EIA-767, "Steam-Electric Plant Operation and Design Report," page 1, question 3) OR Facility name (as reported on Form EIA-867, "Annual Nonutility Power Producer Report," page 1, question 2): _____

- 4b. Plant code (as reported on Form EIA-767, page 1, question 4) OR Facility code (as reported on Form EIA-867, page 1, question 1): _____
5. Complete street address of facility (physical location): _____

6. Provide mailing address if different: _____

7. Name and title of contact(s) able to answer technical questions about the completed survey: _____

8. Contact(s) telephone number(s): _____
and e-mail address(es): _____

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PART II: COAL ANALYSIS

Each facility should report the amount of coal received on a per shipment basis for the calendar year. In addition, for every sixth shipment the mercury and chlorine content of the coal, and any other available analyzed information as specified, should be reported. However, each facility is required to obtain a minimum of three analyses per month for mercury and chlorine in order to maintain good statistical practices. There are two exceptions where “shipments” will not apply in maintaining these three analyses per month. If a facility such as a mine-mouth operation does not receive “shipments” of coal, analyses of the coal supply should be made approximately every ten days in order to meet the required three analyses per month. A facility that receives less than 18 shipments of coal in any given month should report the analyzed information for 3 shipments received that are spaced approximately equally across the month.

At the end of the first quarter (i.e., three months), an evaluation is required to determine whether or not a 90 percent confidence interval about the mean amount of mercury content from the coal is within ± 10 percent. The calculation is as follows:

$$P\left[\bar{X} - t_{.05}\left(\frac{s}{\sqrt{n}}\right) < \mu < \bar{X} + t_{.05}\left(\frac{s}{\sqrt{n}}\right)\right] = .90$$

$$LCL_{.05} = \bar{X} - t_{.05}\left(\frac{s}{\sqrt{n}}\right)$$

$$UCL_{.05} = \bar{X} + t_{.05}\left(\frac{s}{\sqrt{n}}\right)$$

$$\text{Target: } LCL_{.05} \geq .9\bar{X} \text{ with } UCL_{.05} \leq .1\bar{X}$$

If the evaluation meets this target, continue analysis for every sixth shipment with a minimum of three reports per month. If the evaluation is outside the target, start reporting every third shipment, while maintaining a minimum of three analyses per month.

This evaluation should be repeated every quarter (i.e., every three months) for the duration of one year. The following table indicates how to proceed based on the potential outcomes of the quarterly evaluations.

IF	THEN
Two quarterly evaluations back-to-back (i.e., total over a 6-month period) meet target...	...analyses may be relaxed to every twelfth shipment.
The evaluation results fail to meet the target in any quarter...	...analyses must increase to every shipment, if current analyses are being made for every third shipment; ... OR
	...to every third shipment, if current analyses are being made for every sixth shipment; ... OR
	...to every sixth shipment, if current analyses are being made for every twelfth shipment.
Analyses for every shipment or every third shipment and a quarterly evaluation meets the target...	...analyses may be relaxed back to every third shipment, if analyzing every shipment, ... OR
	...analyses may be relaxed back to every sixth shipment, if analyzing every third shipment.

There should never be fewer than three reports per month (i.e., minimum total reports for the year should be 36) for each facility nor should a facility ever sample less frequently than every twelfth shipment. Sufficient data were unavailable to determine whether or not a ± 10 percent of a 90 percent confidence interval about the mean amount of mercury contained within the coal was attainable. If data become available before reporting begins on January 1, 1999 that indicates this percentage should be higher or lower, proper adjustments will be made.

1a. Plant or facility name from Part I, question 4a: _____

1b. Plant or facility code from Part I, question 4b: _____

2. Period covered by this report: _____

3. For each individual coal shipment received, provide the following information:

Date shipment received	Amount received, dry basis, tons	ID # of boiler(s) firing coal ⁷	Coal source			Contract verification sample ID #	Coal shipment method
			State	County	Seam ⁸		

⁷ Boiler ID (as reported on Form EIA-767, "Steam-Electric Plant Operation and Design Report," page 5, question 1) OR Generator ID (as reported on Form EIA-867, "Annual Nonutility Power Producer Report," page 7, question 1).

⁸ If known.

5. Analyses provided in Part II, question 4 supplied by
___ Coal supplier (name and address) _____

___ Other (name and address) _____

6. Name and address of laboratory performing analyses: _____

7. Specific method(s) used to obtain samples: _____
8. Specific method(s) used to prepare samples for analysis for mercury: _____

9. Specific method(s) used to analyze samples for mercury: _____

10. Evidence of accuracy and precision of analysis for mercury (e.g., results of concurrent analyses of NIST SRMs): _____
11. In addition to the analyses required in question 4 above, please provide copies of any analyses for (a) complete proximate and ultimate analyses, (b) additional trace metals, and (c) the mineralogy of the ash that are readily available for the coal(s) listed in Part II, question 3 above. The Agency is requesting these data only as they may already be available; no additional sampling or analyses are required to provide these data.

PART III: SPECIATED MERCURY EMISSIONS TESTING DATA

For statistically selected sources from the category, testing is to be performed on a one-time basis at the inlet and outlet of the SO₂ control device or, for the category of “no SO₂ control,” at the inlet and outlet of the particulate control device.

Prior to the test, a site-specific test plan is to be submitted by the owner/operator to the EPA for review and approval. In addition, any revisions suggested by the owner/operator and any plant-specific material that should be added to the generic Quality Assurance Project Plan (QAPP) provided by the EPA with the section 114 letter should be submitted for approval with the site-specific test plan. The EPA will provide the results of its review of the site-specific test plan, and any QAPP modifications suggested, to the facility within 30 days of receipt. The test plan is to be prepared according to the document entitled “Preparation and Review of Site Specific Test Plans,” which can be electronically obtained from the Internet at

“<http://www.epa.gov/ttn/emc/guidlnd.html>”.

Use the test method entitled “Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method),” which can be electronically obtained from the Internet at

“<http://www.epa.gov/ttn/emc/prelim.html>”.

Each test is to consist of three separate runs at each sampling location with inlet and outlet runs being run concurrently. Concurrent coal sampling and analysis of the coal fired during each of the three separate runs is to be done by taking three coal samples at intervals throughout each testing period, and the results are to be reported along with the emission results. Following the testing, submit the test report prepared according to the document entitled “Preparation and Review of Emission Test Reports,” which can be electronically obtained from the Internet at

“<http://www.epa.gov/ttn/emc/guidlnd.html>”.