

Form Approved \_\_\_\_\_  
OMB Control No. \_\_\_\_-\_\_\_\_  
Approval Expires \_\_/\_\_/\_\_

ELECTRIC UTILITY STEAM GENERATING UNIT  
MERCURY EMISSIONS INFORMATION COLLECTION EFFORT

INTRODUCTION

Section 112(n)(1)(A) of the Clean Air Act, as amended, (the Act) requires EPA to perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of hazardous air pollutants (HAPs) and to prepare a Report to Congress containing the results of the study. The study has been completed and the Final Report to Congress was issued on February 24, 1998.

In the Final Report to Congress, the EPA stated that mercury is the HAP emission of greatest potential concern from coal-fired utilities and that additional research and monitoring are merited. The EPA also listed a number of research needs related to these mercury emissions. These include obtaining additional data on the mercury content of various types of coal as fired in electric utilities and additional data on mercury emissions (e.g., how much is emitted from various types of units; how much is divalent vs. elemental mercury; and how do factors such as control device, fuel type, and plant configuration affect emissions and

the study" noted above. At the time the report was issued, the Agency deferred making any determination as to whether regulation of the electric utility industry for HAP emissions is appropriate and necessary. The Administrator interprets the quoted language as indicating that the results of the study are to play a principle, but not exclusive, role in informing the Administrator's decision as to whether it is appropriate and necessary to regulate electric utility steam generating units under section 112. The Administrator believes that in addition to considering the results of the study, she may consider any other available information in making her decision. The Administrator also believes that she is authorized to collect and evaluate any additional information which may be necessary to make an informed decision.

After carefully considering the Final Report, the Administrator has concluded that obtaining additional information from certain owner/operators prior to making the required determination is appropriate. This information will be collected under authority of section 114 of the Act.

Section 114(a) states:

For the purpose... (iii) carrying out any provision of this Act... (1) the Administrator may require any person who owns or operates any emission source... to... (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods and in such manner as the Administrator shall prescribe); (E) keep records on control equipment

The data collected under this effort, along with other information, will be used by the Agency in evaluating whether or not regulation of electric utility steam generating units (as defined by section 112(a)(8) of the Act) is appropriate and necessary. Specifically, the data will respond in part to the two research needs noted above, providing the Agency with updated information on the mercury content of coals fired by, and on the speciation and controllability of mercury emitted from, utility boilers. The data will be added to the existing database and will be used to further evaluate the emissions of mercury by the electric utility industry.

#### BURDEN STATEMENT

Preliminary estimates of the public burden associated with this information collection effort indicate a total of 40,516 hours and \$15,181,387. This is the estimated burden for 421 facilities to provide coal analyses (assuming no more than two coal storage piles per facility) and 30 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

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 sections are to be completed:

- ! Part I - General Facility Information: once for each facility at which one or more coal-fired electric utility steam generating units are located
- ! Part II - As-fired Coal Analyses: once a week for

! Part III - Speciated Mercury Emissions Data: once a quarter for 4 consecutive quarters for each of the 30 coal-fired electric utility steam generating units selected for speciated mercury emissions testing

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: Bruce Jordan, Director

PART I: GENERAL FACILITY INFORMATION

1. Name of legal owner of  
facility: \_\_\_\_\_

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

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3. Address of legal owner or  
operator: \_\_\_\_\_

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4. Name of  
facility: \_\_\_\_\_

5. Complete street address of facility (physical  
location): \_\_\_\_\_

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6. Provide mailing address if

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

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8. Contact(s) telephone number(s): \_\_\_\_\_



<sup>c</sup> Examples: no control; wet flue gas desulfurization (FGD); dry scrubbing; compliance coal

<sup>d</sup> Examples: no control; fabric filter; electrostatic precipitator (ESP); cyclone

11. Identification of each distinct on-site coal-storage pile (e.g., piles, silos) that is maintained at this facility:

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(Please provide a unique identification for each pile.)

12. For each on-site coal-storage pile noted in question 11 above, which boiler(s) identified in question 9 does it service:

On-site coal-storage pile ID	Boiler(s) served, ID(s)

PART II: AS-FIRED COAL ANALYSIS

Samples that represent as-fired or as-bunkered coal for each boiler at the facility are to be both obtained and analyzed per appropriate American Society of Testing and Materials (ASTM) procedures for coal once per week for 52 consecutive weeks. New analyses of new samples are required on a weekly basis. Coal analyses performed by coal suppliers may be used providing no further coal-cleaning is performed prior to firing. If coal analyses from coal suppliers are used for a boiler that is firing coal from multiple sources, then the results of coal supplier analyses must be submitted for all sources that contribute 5 percent or more of the coal fired in that boiler. More than one boiler may be represented by a single sample if fed from a common storage pile.

1. Name of facility from Part I, question 4: \_\_\_\_\_
  2. Week covered by this report: \_\_\_\_\_
  3. Specific ASTM methods used to obtain samples: \_\_\_\_\_
  4. Specific ASTM methods used to perform analyses: \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

5. Laboratory performing analyses and evidence of accreditation: \_\_\_\_\_

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7. In addition to the analyses required in question 8 below, please provide copies of any analyses for (1) additional trace metals and (2) the mineralogy of the ash that are readily available for the coal(s) fired in the boilers noted in Part I, question 9.

8. For each boiler noted in Part I, question 9, provide the following information from the analyses of the samples (reported as dry basis):

Boiler ID	Sample ID	Volatile matter, %	Total Sulfur, %	Heating Value, Btu/lb	Ash, %	Carbon, %	Hydrogen, %	Ni

Boiler ID	Sample ID	Mercury, ppm	Chlorine,

### PART III: SPECIATED MERCURY EMISSIONS TESTING DATA

Testing is to be performed on a quarterly basis at the inlet and outlet of the SO<sub>2</sub> control device or, for selected sources with no SO<sub>2</sub> control, at the inlet and outlet of the particulate control device.

Prior to the first test, a site-specific test plan is to be submitted to the EPA for review and approval. 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://134.67.104.12/html/emtic/guidlnd.htm>".

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://134.67.104.12/html/emtic/othermth.htm>".

Each test is to consist of three separate runs. Concurrent coal sampling and analysis is to be conducted and reported according to the specifications given in Part II above. 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://134.67.104.12/html/emtic/guidlnd.htm>".

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