

PART A OF THE SUPPORTING STATEMENT
Hospital/Medical/Infectious Waste Incinerators

Identification of the Information Collection

Title and Number of the Information Collection

“New Source Performance Standards for Hospital/Medical/Infectious Waste Incinerators (40 CFR part 60, subpart Ec).” This is a revision of an existing Information Collection Request (ICR), which is assigned U.S. Environmental Protection Agency (EPA) tracking number 1730.07 and Office of Management and Budget (OMB) Control Number 2060-0363.

Short Characterization

New source performance standards (NSPS) for hospital/medical/infectious waste incinerators (HMIWI), 40 CFR part 60, subpart Ec, were promulgated on September 15, 1997. The standards applied to owners or operators of HMIWI for which construction commenced after June 20, 1996, or for which modification commenced after the effective date of the 1997 NSPS (March 16, 1998). Revised NSPS are being proposed which would only apply to owners or operators of HMIWI for which construction commences after the proposal date of the revised NSPS or for which modification commences after the effective date of the revised NSPS. Those sources subject to the 1997 NSPS would become subject to the revised emission guidelines for HMIWI (40 CFR part 60, subpart Ce) that are also being proposed. The revised guidelines also apply to existing HMIWI for which construction commenced on or before June 20, 1996. The reporting and recordkeeping requirements for HMIWI regulated by subpart Ce are covered in Information Collection 1899.05 and assigned OMB Control Number 2060-0422.

The NSPS require initial notifications, performance tests, and annual and semiannual reporting. Owners or operators are also required to maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. These notifications, reports, and records are essential in determining compliance and are required of all sources subject to the standard.

Any owner or operator subject to the provisions of this part will maintain a file of these measurements, and retain the file for at least 5 years following the date of such occurrences, measurements, maintenance, corrective action, reports or records. All reports are sent to the delegated State or local authority. In the event that there is no such delegated authority, the reports are sent directly to the EPA Regional office.

Reporting and recordkeeping requirements differ for incinerators burning hospital/medical/infectious waste; for combustors co-firing hospital/medical/infectious waste with other fuels; and for incinerators burning only pathological, low-level radioactive, and/or chemotherapeutic waste. No exemption claims are expected over the next 3 years for co-fired combustors or for incinerators burning only pathological, low-level radioactive, and/or chemotherapeutic waste. For this reason, no burden or cost has been estimated for these types of units. This information is being collected to determine compliance with 40 CFR part 60, subpart Ec and 40 CFR part 60, subpart A – General Provisions.

Based on an EPA Office of Air Quality Planning and Standards (OAQPS) facility and emissions inventory effort for HMIWI, we project that, in the absence of revised regulations, three new HMIWI will be constructed. Although the response to revised regulations may be that there are no new HMIWI, for purposes of estimating recordkeeping and reporting burden, we continue to project that three new HMIWI will become subject to the revised NSPS subpart Ec.

Need for and Use of the Collection

Need/Authority for the Collection

The EPA is required under Sections 111 and 129 of the Clean Air Act (CAA), as amended, to establish standards of performance for new stationary sources that reflect the maximum achievable control technology (MACT) for achieving continuous emission reductions. Section 129(a)(2) states:

Standards applicable to solid waste incineration units promulgated under Section 111 and this Section shall reflect the maximum degree of reduction emissions of air pollutants listed under Section (a)(4) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing units in each category.

Section 111(e) further states:

After the effective date of standards of performance promulgated under this Section, it shall be unlawful for any owner or operator of any new source to operate such source in violation of any standards of performance applicable to such source.

Certain records and reports are necessary to ensure that the standards are being achieved on a continuous basis. Consequently, Section 114(a) states that that the Administrator may require any owner or operator subject to any requirement of the CAA to:

(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (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 parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.

In the Administrator's judgment, dioxin/furan, particulate matter (PM), carbon monoxide (CO), hydrogen chloride (HCl), sulfur dioxide (SO₂), nitrogen oxides (NO_x), lead (Pb), cadmium (Cd), and mercury (Hg) emissions from HMIWI cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, NSPS were promulgated for this source category at 40 CFR part 60, subpart Ec on September 15, 1997.

On November 14, 1997, the Sierra Club and the Natural Resources Defense Council (Sierra Club) filed suit in the U.S. Court of Appeals for the District of Columbia Circuit (the Court) challenging EPA's methodology for adopting the regulations. On March 2, 1999, the Court issued its opinion. The Court remanded the rule to EPA for further explanation of the Agency's reasoning in determining the minimum regulatory "floors" for new and existing HMIWI. The Court did not vacate the regulations, so the NSPS and emission guidelines remained in effect during the remand and were fully implemented by September 2002.

On February 6, 2007, EPA published a notice that proposed the Agency's response to the questions raised in the Court's remand and that also proposed its response to the CAA section 129(a)(5) requirement to review the NSPS and emission guidelines every 5 years, which is cited below:

Not later than 5 years following the initial promulgation of any performance standards and other requirements under this section and section 111 applicable to a category of solid waste incineration units, and a 5 year intervals thereafter, the Administrator shall review, and in accordance with this section and section 111, revise such standards and requirements.

Following recent court decisions and receipt of public comments regarding that proposal, EPA chose to reassess its responses to the questions raised in the Court's remand. The results of EPA's reassessment are being provided in the form of another proposed response to the questions raised in the Court's remand. As before, the re-proposal also satisfies the requirement under section 129(a)(5) to conduct a review of the NSPS and emission guidelines every 5 years.

Emissions of dioxins/furans, PM, CO, HCl, SO₂, NO_x, Pb, Cd, and Hg are expected to result from the operation of the facilities affected by the NSPS. The standards will be achieved by the reduction of these emissions using waste minimization and good combustion practices, and appropriate filter and scrubber technology. The control of these emissions from HMIWI requires not only the installation of properly designed equipment, but also the operation and maintenance of that equipment.

The notifications required in the HMIWI regulation are used to inform the Agency or delegated authority when new, modified, and reconstructed sources become subject to the standards. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated and the standards are being met. Performance test reports are needed, as these are the Agency's records of a source's initial capability to comply with the emission standards, and serve as a record of the operating conditions under which compliance was achieved. Operating conditions monitored include the highest maximum and lowest minimum operating parameters and exceedances of emission rates or operating parameters.

Semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations. Annual reports are also required, which include: (1) values for site-specific operating parameters; (2) the highest maximum operating parameter and the lowest minimum operating parameter; (3) exceedances of emissions or operating parameters; (4) malfunctions; (5) periods when data on emissions/operating parameters were not obtained; (6) results of any performance test conducted during the year; (7) if no exceedances or malfunctions, a report stating there were no exceedances; (8) any uses of a bypass stack, the duration, reason for malfunction, and corrective action taken; and (9) information recorded during the annual control equipment inspection (included in proposed amendments to the NSPS). The information generated by the monitoring, recordkeeping and reporting requirements described in this ICR is used by the Agency to ensure that facilities that are affected by the NSPS continue to operate the control equipment in compliance with the regulation. Adequate monitoring, recordkeeping, and reporting are necessary to ensure compliance with the applicable regulations, as required by the CAA. The information collected from recordkeeping and reporting requirements is also used for targeting inspections, and is of sufficient quality to be used as evidence in court. The information will also be used by Agency enforcement personnel to ensure that new incinerators burning hospital/medical/infectious waste undergo a siting analysis and develop a waste management plan.

Nonduplication, Consultations, and Other Collection Criteria

The requested recordkeeping and reporting are required under 40 CFR part 60, subpart Ec.

Nonduplication

If the standards have not been delegated, the information is sent directly to the appropriate EPA Regional office. Otherwise, the information is sent directly to the delegated State or local agency. If a State or local agency has adopted its own similar standards to implement the Federal standards, a copy of the report submitted to the State or a local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, no duplication exists.

Public Notice Required Prior to ICR Submission to OMB

The preamble of the proposed rule will give notice to the public of the submission of the ICR to OMB.

Consultations

Participants in the development process for the proposed amendments to the NSPS included representatives from industry, States, and other stakeholders. Meetings and discussions were held with these representatives to develop the HMIWI inventory and emissions data used as the basis for the revised standards. A 60-day public comment period will be provided after proposal, during which the public will be given the opportunity to comment on the proposed amendments. Public hearings and meetings with State and industry stakeholders will also be held, as necessary, following proposal to discuss EPA's assessment of new information submitted with comments, to gather additional information, and to solicit further comments. All comments received will be considered and may be reflected in the development of the final standards.

Effects of Less Frequent Collection

Less frequent information collection would decrease the margin of assurance that facilities are continuing to meet the standards. Requirements for information gathering and recordkeeping are a useful technique to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the likelihood of detecting poor operation and maintenance of control equipment and noncompliance would decrease. In addition, EPA's authority to take

administrative action would be significantly reduced. Section 113(d) of the CAA limits the assessment of administrative penalties to violations which occur no more than 12 months before initiation of the administrative proceeding. Since administrative proceedings are less costly and require use of fewer resources than judicial proceedings, both EPA and the regulated community benefit from preservation of EPA's administrative powers. Also, the reporting frequency in the standards is consistent with the requirements of the title V permit program. Consequently, less frequent reports would not result in a reduced burden.

General Guidelines

None of the reporting or recordkeeping requirements in the standards violate any of the regulations established by OMB at 5 CFR 1320.5. The standards require the respondents to maintain all records, including reports and notifications for at least 5 years. This is consistent with the General Provisions as applied to the standards. EPA believes that the 5-year records retention requirement is consistent with the Part 70 permit program and the 5-year statute of limitations on which the permit program is based. The retention of records for 5 years allows EPA to establish the compliance history of a source, any pattern of non-compliance and to determine the appropriate level of enforcement action. EPA has found that the most flagrant violators have violations extending beyond 5 years. In addition, EPA would be prevented from pursuing the violators due to the destruction or nonexistence of essential records.

Confidentiality

Any information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, Chapter 1, Part 2, Subpart B--Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 39999, September 28, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

Sensitive Questions

None of the reporting or recordkeeping requirements in the standards contain sensitive questions.

The Respondents and the Information Requested

Respondents/NAICS Codes

The respondents to the recordkeeping and reporting requirements in the revised NSPS are owners or operators of HMIWI for which construction commences after the proposal date of the

revised NSPS or for which modification commences after the effective date of the revised NSPS. Three new HMIWI are projected during the first 3 years after proposal of the revised standards and would be required to comply with the requirements of the revised standards. Possible NAICS codes for the respondents affected by the standards are listed below for source category description.

Standard (40 CFR Part 60, Subpart Ec)	NAICS Codes
General Medical and Surgical Hospitals	622110
Specialty Hospitals	622310
Medicinal and Botanical Manufacturing	325411
Pharmaceutical Preparation Manufacturing	325412
Solid Waste Combustors and Incinerators	562213
Colleges, Universities, and Professional Schools	611310
Research and Development in Physical, Chemical, and Life Sciences	541710
National Security	928110
Public Health Facility	923120

Not all processes classified in these NAICS codes are regulated by the standards.

Information Requested

None of these reporting or recordkeeping requirements violate any of the regulations established by OMB at 50 CFR 1320.5.

Data items. All data in this ICR that are recorded and/or reported are required by the NSPS for HMIWI (40 CFR part 60, subpart Ec). Respondents must make the following reports:

Requirement	Standard Citation by Section
Statement of intent to construct/modify	60.58c(a)(1)(i)
Notification and application of construction or modification	60.58c(a) and 60.7(a)
Notification of anticipated startup	60.58c(a) and 60.7(a)
Notification of actual startup	60.7(a)
Notification of type(s) of waste to be combusted	60.58c(a)(2)(i)
Notification of HMIWI capacity	60.58c(a)(2)(ii)

Requirement	Standard Citation by Section
Documentation produced as a result of the siting requirements	60.58c(a)(1)(iv) and 60.54c(c)
Waste management plan	60.58c(c)(3) and 60.55c
Notification of initial continuous monitoring system (CMS) demonstration (including CO CEMS)	60.7(a)
Notification of initial performance test	60.8(d)
Notification of exemption claim for combustors burning pathological, low-level radioactive, and/or chemotherapeutic waste	60.50c(b)(1)
Notification of exemption claim for co-fired combustors	60.50c(c)(1)
Analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems (included in proposed amendments to NSPS)	60.58c(c)(4)
Report of initial performance tests	60.58c(d)(6) and 60.8(a)
Initial report of values for site-specific operating parameters	60.58c(c)(2) and 60.7(a)
Annual report of values for site-specific operating parameters	60.58c(d)(1)
Annual and semiannual reports of emissions or operating parameter exceedances, malfunctions, and periods for which data on emissions/operating parameters were not obtained	60.58c(d), 60.58c(e), and 60.7(c)
Annual report of no excess emissions	60.58c(d)(7) and 60.7(c)
Report of results of annual performance test	60.58c(d)(6)
Annual report of control equipment inspection (included in proposed amendments to NSPS)	60.58c(d)

Respondents must keep the following records:

Requirement	Standard Citation by Section
Retention of records for 5 years	60.58c(b)
Records of startup, shutdown, or malfunction	60.7(b)
Documentation produced as a result of siting requirements	60.58c(b)(7)
Records of operators completing review of HMIWI operating manual	60.58c(b)(8)
Records of operators completing operator training course and qualification	60.58c(b)(9)-(10)

Requirement	Standard Citation by Section
requirements	
Records of initial and annual testing of fugitive ash emissions (included in proposed amendments to NSPS)	60.58c(b)(2)(ii)
Records of process and control device operating parameters	60.58c(b)(2)(iii)-(xix)
Records of CMS operation and maintenance (including CO CEMS)	60.7(f)
Records of emissions or operating parameter exceedances, malfunctions, and periods for which data on emissions/operating parameters were not obtained	60.58c(b)(3)-(5)
Records of initial, annual, and any subsequent performance tests	60.58c(b)(6)
Records of calibration of monitoring devices (including CO CEMS)	60.58c(b)(11)
Records of annual control equipment inspections, required maintenance, and repairs not completed during established timeframe (included in proposed amendments to NSPS)	60.58c(b)(2)(xvii)
Records of bag leak detection system alarms and corrective action taken (included in proposed amendments to NSPS)	60.58c(b)(2)(xviii)
Records of CO concentrations from CO CEMS (included in proposed amendments to NSPS)	60.58c(b)(2)(xix)
Records on quarterly basis of types and amounts of materials charged for co-fired combustors and for incinerators burning only pathological, low-level radioactive, and/or chemotherapeutical waste	60.50c(b) and (c)

Respondent activities. The respondent activities required by the standards in the first 3 years following the effective date are provided below:

Respondent Activities
Read instructions.
Perform CMS demonstrations and repeat CMS demonstrations if necessary.
Perform performance tests and repeat performance tests if necessary.
Develop, update, and review operating information.
Perform control equipment inspections.
Prepare and submit the notifications and reports listed in the table above.
Develop waste management plan.
Prepare and review reports of performance tests.
Prepare and review reports of CMS demonstrations.
Document siting requirements.

Respondent Activities
Complete operator training and qualification.
Maintain the records listed in the table above.
Train personnel.

The new sources are expected to use monitoring equipment that provides automated parameter data, e.g., scrubber pressure drop. Although personnel at the affected facilities will still need to evaluate the data, this type of monitoring equipment will significantly reduce the burden associated with monitoring and recordkeeping. In addition, some regulatory agencies are setting up electronic reporting systems to allow sources to report electronically which is reducing the reporting burden. However, electronic reporting systems are still not widely used by the regulatory agencies. It is projected that approximately 15 percent of the respondents will use electronic reporting.

The Information Collected--Agency Activities, Collection Methodology, and Information Management

Agency Activities

The EPA conducts the following activities in connection with the acquisition, analysis, storage, and distribution of the required information.

Agency Activities
Observe initial performance tests and repeat performance tests if necessary.
Respond to litigation of the standards.
Observe enforcement activities (retesting) related to excess emissions.
Review notifications and reports (listed in previous table), including performance test reports, excess emissions reports, study addressing siting requirements, and waste management, required to be submitted by industry.
Audit facility records.
Input, analyze, and maintain data in the Air Facility System (AFS).

Collection Methodology and Management

Following notification of startup, the reviewing authority may inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source's initial capability to comply with the emission standard. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

Information contained in the reports is entered into the AFS, which is operated and maintained by EPA's Office of Compliance. The AFS is EPA's database for the collection, maintenance, and retrieval of compliance data for approximately 125,000 industrial and government-owned facilities. The EPA uses the AFS for tracking air pollution compliance and enforcement by local and State regulatory agencies, EPA Regional offices, and EPA headquarters. The EPA and its delegated authorities can edit, store, retrieve, and analyze the data.

The records required by this regulation must be retained by the owner or operator for 5 years.

Small Entity Flexibility

None of the projected new HMIWI subject to the NSPS are expected to be owned by small entities. However, the impact on small entities was taken into consideration during the development of the regulation. Due to technical considerations involving the process operations and types of control equipment employed, the recordkeeping and reporting requirements are the same for both small and large entities. The Agency considers these requirements the minimum needed to ensure compliance and, therefore, cannot reduce them further for small entities. However, the regulation includes various provisions that would reduce the burden on HMIWI, including small entities. For example, there are provisions allowing HMIWI to skip annual tests and test reports for 2-year periods if they have demonstrated compliance for three annual tests in a row.

Collection Schedule

Collection of data will begin after the effective date of the NSPS. The specific frequency for each information collection activity within this request is shown in Table 1.

Estimating the Burden and Cost of the Collection

This section presents estimates of the burden and cost associated with the reporting and recordkeeping requirements in the revised NSPS. Table 1 presents the average annual burden and cost estimates for respondents, while Table 2 presents the average annual burden and cost estimates for the Federal government.

Estimating Respondent Burden

Table 1 documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the projected three new HMIWI that would be subject to the revised standards. The individual burdens are expressed under standardized headings designed to be consistent with the concept of burdens under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory. The Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

The annual average burden to industry over the next 3 years from these recordkeeping and reporting requirements is estimated to be 2,705 hours. These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge and experience with the NSPS program, the previously approved ICR, and any comments received.

Estimating Respondent Costs

Estimating labor costs. Table 1 presents the costs of the recordkeeping and reporting requirements applicable to the projected three new HMIWI that would be subject to the revised standards. The average annual labor cost for industry during the 3 years of the ICR is estimated to be \$102,553. The ICR uses the following labor rates to estimate the labor cost:

Technical	\$37.55 (\$23.47 x 160%)
Management	\$78.76 (\$49.23 x 160%)
Clerical	\$21.10 (\$13.19 x 160%)

These labor rates are from the U.S. Department of Labor, Bureau of Labor Statistics, May 2007 National Industry-Specific Occupational Employment and Wage Estimates for the most common sectors of the HMIWI industry (NAICS codes 622100, 325400, 562200, and 611300).

(Weighted average labor rates for technical, management, and clerical staff in the HMIWI

industry were developed from labor rates in the four industry sectors.) The labor rates were adjusted by an overhead and profit rate of 160 percent.

Estimating capital/startup and operation and maintenance costs. The types of industry costs associated with the information collection activities in the standards are labor costs associated with recordkeeping and reporting, which are addressed elsewhere in this ICR, and costs associated with continuous monitoring. The capital/startup costs are the one-time costs incurred when a facility becomes subject to the regulation, and typically include equipment purchased for the purpose of satisfying EPA requirements (e.g., monitoring equipment, in-house testing equipment, file cabinets). A one-time capital/startup cost can be estimated over multiple years by annualizing the cost using an OMB-approved interest rate. The annual operation and maintenance (O&M) costs are the ongoing costs incurred to maintain the capital equipment (e.g., labor, maintenance materials, and overhead) and the costs associated with the paperwork requirements incurred continuously over the life of the ICR (e.g., photocopying and postage). Tables 3 through 7 present the annualized capital/startup and O&M costs associated with the standards.

The three new HMIWI are already expected to install some monitoring equipment to comply with the 1997 NSPS, but some additional monitoring equipment are needed for the revised NSPS. Consequently, some of the annualized capital costs and annual O&M costs presented here for monitoring equipment would already be incurred. Under the revised NSPS, all three new HMIWI will need to purchase equipment for annual in-house testing of fugitive ash emissions and for continuous measurement of CO emissions. Those equipped with fabric filters will also need to purchase bag leak detectors.

The capital/startup costs associated with file cabinets for storing collected data and reports include the purchase of one standard four-drawer file cabinet for each facility (assume \$235 per file cabinet). Photocopying costs per response are estimated at 0.5 hour of clerical labor at a rate of \$21.10/hr. Postage costs are estimated at \$4.80 per response for mailing to regulatory agencies, based on the Priority Mail shipping rate for the U.S. Postal Service.

The total annualized capital/startup cost over the first 3 years after the effective date is \$137,058, while the total annual O&M cost is \$116,190. Combining the annualized capital costs with the annual O&M cost gives a total annualized cost of \$253,248 for the first 3 years after the effective date.

Estimating Agency Burden and Cost

Because the information collection requirements were developed as an incidental part of standards development, no costs can be attributed to the development of the information collection requirements. Because reporting and recordkeeping requirements on the part of the respondents are required under Section 111 of the CAA, no operational costs will be incurred by the Federal government. Publication and distribution of the information are part of the AFS, with the result that no Federal costs can be directly attributed to the ICR. Examination of records to be maintained by the respondents will occur incidentally as part of the periodic inspection of sources that is part of EPA’s overall compliance and enforcement program and, therefore, is not attributable to the ICR.

The only costs to the Federal government are those costs associated with the analysis of the reported information, onsite observation of the initial CMS demonstrations and initial performance tests and retests, enforcement activities due to excess emissions, and litigation activities.

Table 2 presents the average annual burden and cost estimates for the Federal government. The average annual Agency burden and cost during the 3 years of the ICR are estimated to be 337 hours and \$14,613 (including travel expenses). The cost is based on the following average hourly labor rates:

Technical	\$44.24 (GS-12, Step 1, \$27.65 x 160%)
Management	\$59.63 (GS-13, Step 5, \$37.27 x 160%)
Clerical	\$23.94 (GS-6, Step 3, \$14.96 x 160%)

These labor rates are from the Office of Personnel Management (OPM) “2008 General Schedule,” which excludes locality rates of pay. The rates were multiplied by the standard government benefits factor of 1.6.

Estimating the Respondent Universe and Total Burden and Costs

Three new HMIWI are projected during the first 3 years after proposal of the revised standards and would be subject to the requirements of the revised standards. The total number of responses per year is calculated using the following table:

Total Annual Responses				
(A) Information Collection Activity	(B) Number of respondents	(C) Number of responses	(D) Number of respondents that keep records but do not submit reports	(E) Total annual responses E = (B x C) + D
Notification of intent to construct	1	1	N/A	1.0
Notification of anticipated commencement of construction	1	1	N/A	1.0
Notification of anticipated startup	1	1	N/A	1.0
Notification of actual startup	1	1	N/A	1.0
Notification of type(s) of waste to be combusted	1	1	N/A	1.0
Notification of HMIWI capacity	1	1	N/A	1.0
Notification of initial performance test	1	1	N/A	1.0
Notification of initial CMS demonstration	1	1	N/A	1.0
Initial report for the site selection analysis	1	1	N/A	1.0
Waste management plan	1	1	N/A	1.0
Analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems	0.7	1	N/A	0.7
Report of initial performance test	1	1	N/A	1.0
Report of initial CMS demonstration	1	1	N/A	1.0
Annual report				
CMS emissions and operating parameters	3	1	N/A	3.0
Exceedances, malfunctions, and periods for which data not obtained	0.6	1	N/A	0.6
Results of performance tests conducted during the year	3	1	N/A	3.0
Report of no exceedances	2.4	1	N/A	2.4
Report of annual control equipment inspection	2	1	N/A	2.0
Semiannual report of exceedances, malfunctions, and periods for which data not obtained ^a	0.6	1	N/A	0.6
Total				24.3

^a Because the semiannual report coincides once each year with the annual report and both reports include information on exceedances, malfunctions, and periods for which data were not obtained, the frequency of the semiannual report is shown in the table as only once per year to avoid double-counting.

The number of total annual responses is approximately 24.

Bottom Line Burden Hours and Costs/Master Tables

Respondent tally. The bottom line respondent burden hours and costs, presented in Table 1, are calculated by adding person-hours per year down each column for technical,

management, and clerical staff, and by adding down the cost column. The total hours requested are 2,705 hours. The total annual labor cost is \$102,553. The total annual capital/startup and O&M cost to the regulated entities is \$253,248.

The Agency tally. The bottom line Agency burden hours and costs, presented in Table 2, are calculated as in the respondent table, by adding person-hours per year down each column for technical, managerial, and clerical staff, and by adding down the cost column. In this case, travel expenses for performance tests and CMS demonstrations attended are also added to this salary cost. The annual average burden for all Agency activities is 337 hours, and the total annual cost is \$14,613 (including travel expenses).

Variations in the annual bottom line. Each year, the projected three new HMIWI would incur the same recurring burden and costs associated with the 1997 NSPS (submittal of annual and semiannual reports). The three new HMIWI would also incur the additional burden and costs associated with fugitive ash emission tests and control equipment inspections required for all new HMIWI under the revised NSPS. The three new HMIWI are expected to develop operating information and conduct initial control equipment inspections in the first year after promulgation and update the operating information and conduct annual control equipment inspections in the second and third years after promulgation. Only the two new HMIWI assumed to be equipped with fabric filters (the large and medium HMIWI) are expected to incur the additional burden and costs associated with the bag leak detection system. All three new HMIWI are expected to incur the same monitoring equipment costs for CO monitors, but the remaining monitoring equipment will vary, depending on the type of emission controls expected to be installed on each HMIWI.

Similarly, each year, the Federal government incurs the same recurring burden and costs associated with the 1997 NSPS (reviewing annual and semiannual reports, conducting enforcement activities related to excess emissions), but also incurs the same burden and costs associated with litigation related to the revised NSPS. The Federal government also incurs the additional burden of reviewing the notifications and reports of the annual fugitive ash performance tests and reviewing the analyses for the bag leak detection systems (where applicable).

Reasons for Change in Burden

The reduction in labor burden from the most recently approved ICR is primarily due to a decrease in the number of sources and applicable burden items and hours. Unlike the previous ICR, this ICR does not cover the 1997 NSPS sources, but leaves them instead to the ICR for the revised emission guidelines. This ICR covers only the three new sources projected to be installed during the first 3 years after proposal of the revised NSPS. The decrease in the number of sources offsets any increase in burden associated with the new requirements in the revised NSPS (e.g., fugitive ash emission tests and control equipment inspections for all new sources). However, the resulting reduction in labor costs is more than offset by the increase in annual capital/startup and O&M costs, which is a result of the increased monitoring and testing activity that would be necessary under the proposed revisions to the NSPS.

Burden Statement

The annual burden for this collection of information is estimated to average 111 hours per response. 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 unless it displays a valid OMB Control Number. The OMB Control Numbers for EPA's regulations are listed at 40 CFR part 9 and 48 CFR chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2006-0534, which is available for online viewing at www.regulations.gov, or in person viewing at the Air and Radiation Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket and Information Center is (202) 566-1742. An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments,

access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2006-0534 and OMB Control Number 2060-0363 in any correspondence.

PART B OF THE SUPPORTING STATEMENT
Hospital/Medical/Infectious Waste Incinerators

This section is not applicable because statistical methods are not used in data collection associated with this regulation.

TABLE 1. ANNUAL RESPONDENT BURDEN AND COST OF REPORTING AND RECORDKEEPING REQUIREMENTS -
NSPS FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART EC)

Burden item	(A) Person- hours per occurrence	(B) Number of occurrences per year	(C) Person-hours per respondent per year (C = A x B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E = C x D)	(F) Management person-hours per year (F = E x 0.05)	(G) Clerical person-hours per year (G = E x 0.1)	(H) Total person-hours per year (H = E + F + G)	(I) Cost, \$ ^b	(J) No. of responses	(K) No. of responses per respondent	(L) Hours per response	(M) Monitoring cost per response
1. Applications	N/A												
2. Surveys and studies	N/A												
3. Reporting requirements													
A. Read instructions	1	1	1	1	1.0	0.05	0.1	1.2	\$44				
B. Required activities													
--Perf. spec. tests (certif.) for CMS ^c	16	1	16	1	16	0.8	1.6	18	\$698	1.0			
--Repeat perf. spec. tests (certif.) for CMS ^{c,d}	16	1	16	0	0	0	0	0	\$0				
--Development of operating information ^e	160	1	160	1	160	8.0	16	184	\$6,976				
--Annual update of operating information ^f	20	1	20	2	40	2.0	4.0	46	\$1,744				
--Review of operating information with each operator ^{g,h}	8	2	16	3	48	2.4	4.8	55	\$2,093				
--Initial control equipment inspection ⁱ	20	1	20	1	20	1.0	2.0	23	\$872				
--Annual control equipment inspection ^l	20	1	20	2	40	2.0	4.0	46	\$1,744	2.0			
C. Create information	Incl. in 3B												
D. Gather existing information	Incl. in 3B												
E. Write report													
--Notification of intent to construct	2	1	2	1	2.0	0.1	0.2	2.3	\$87	1.0			
--Notification of anticipated commencement of construction	2	1	2	1	2.0	0.1	0.2	2.3	\$87	1.0			
--Notification of anticipated startup	2	1	2	1	2.0	0.1	0.2	2.3	\$87	1.0			
--Notification of actual startup	2	1	2	1	2.0	0.1	0.2	2.3	\$87	1.0			
--Notification of type(s) of waste to be combusted	2	1	2	1	2.0	0.1	0.2	2.3	\$87	1.0			
--Notification of HMIWI capacity	2	1	2	1	2.0	0.1	0.2	2.3	\$87	1.0			
--Notification of initial performance test	2	1	2	1	2.0	0.1	0.2	2.3	\$87	1.0			
--Notification of initial CMS demonstration	2	1	2	1	2.0	0.1	0.2	2.3	\$87	1.0			
--Initial report for the site selection analysis ^j	460	1	460	1	460	23	46	529	\$20,055	1.0			
--Waste management plan ^k	160	1	160	1	160	8.0	16	184	\$6,976	1.0			
--Analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems ^l	40	1	40	0.7	27	1.3	2.7	31	\$1,163	0.7			
--Report of initial performance test ^m	8	1	8	1	8.0	0.4	0.8	9.2	\$349	1.0			
--Report of initial CMS demonstration	Incl. in 3B												
--Annual report													
--CMS emissions/operating parameters ⁿ	32	1	32	3	96	4.8	9.6	110	\$4,185	3.0			
--Exceedances/malfunctions/periods for which data not obtained ^{o,p}	48	1	48	0.6	29	1.4	2.9	33	\$1,256	0.6			
--Results of performance tests conducted during the year ^q	40	1	40	3	120	6.0	12	138	\$5,232	3.0			

TABLE 1. ANNUAL RESPONDENT BURDEN AND COST OF REPORTING AND RECORDKEEPING REQUIREMENTS -
NSPS FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART EC)

Burden item	(A) Person- hours per occurrence	(B) Number of occurrences per year	(C) Person-hours per respondent per year (C = A x B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E = C x D)	(F) Management person-hours per year (F = E x 0.05)	(G) Clerical person-hours per year (G = E x 0.1)	(H) Total person-hours per year (H = E + F + G)	(I) Cost, \$ ^b	(J) No. of responses	(K) No. of responses per respondent	(L) Hours per response	(M) Monitoring cost per response
--Report of no exceedances ^{o,p}	24	1	24	2.4	58	2.9	5.8	66	\$2,511	2.4			
--Report of annual control equipment inspection	Incl. in 3B												
--Semiannual report of exceedances/malfunctions/ periods for which data not obtained ^{o,p,r}	48	1	48	0.6	29	1.4	2.9	33	\$1,256	0.6			
4. Recordkeeping requirements													
A. Read instructions	Incl. in 3A												
B. Plan activities	N/A												
C. Implement activities	N/A												
D. Develop record system	N/A												
E. Time to enter information													
--Documentation produced as a result of siting requirements	Incl. in 3E												
--Records of operators completing operator training requirements ^h	2	2	4	1	4.0	0.2	0.4	4.6	\$174				
--Records of operators that have been qualified as HMIWI operators ^h	2	2	4	1	4.0	0.2	0.4	4.6	\$174				
--Records of initial performance test	Incl. in 3E												
--Records of startup, shutdown, or malfunction	1.5	52	78	3	234	12	23	269	\$10,202				
--Records of persons completing review of operating information ^h	2	2	4	3	12	0.6	1.2	14	\$523				
--Records of process and control device operating parameters	1.5	52	78	3	234	12	23	269	\$10,202				
--Records of CMS operation and maintenance ^s	0.025	365	9	3	27	1.4	2.7	31	\$1,193				
--Records of exceedances/malfunctions/periods for which data not obtained	1.5	52	78	3	234	12	23	269	\$10,202				
--Records of annual and any subsequent compliance tests	Incl. in 3E												
--Records of annual control equipment inspection	Incl. in 3B												
--Records of bag leak detection system alarms ^l	1.5	52	78	2	156	7.8	16	179	\$6,801				
F. Time to train personnel ^l	40	1	40	3	120	6.0	12	138	\$5,232				
G. Time for audits	N/A												
TOTAL LABOR BURDEN AND COST^u:					2,352	118	235	2,705	\$102,553				
TOTAL REPORTING LABOR BURDEN:					1,327	66	133	1,526	\$57,849	24.3	8.1	63	\$5,222
TOTAL RECORDKEEPING LABOR BURDEN:					1,025	51	103	1,179	\$44,704	24.3	8.1	49	\$5,214
TOTAL LABOR BURDEN:					2,352	118	235	2,705	\$102,553	24.3	8.1	111	\$10,436

^a Three new sources are projected from proposal of revised NSPS, and all of them will need to conduct initial control equipment inspections, initial fugitive ash emission tests, initial stack tests, and CMS demonstrations. These activities are projected to occur in the first year after promulgation. Annual inspections will occur during the second and third years. The average number over the first 3 years after promulgation for one-time activities is (3 + 0 + 0)/3 = 1. Assume

TABLE 1. ANNUAL RESPONDENT BURDEN AND COST OF REPORTING AND RECORDKEEPING REQUIREMENTS -
NSPS FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART EC)

one affected facility per respondent.

^b Costs are based on the following hourly rates: technical at \$37.55, management at \$78.76, and clerical at \$21.10. The composite hourly labor rate is $(\$37.55/\text{hr}) + (0.05 \times \$78.76/\text{hr}) + (0.1 \times \$21.10/\text{hr}) = \$43.60/\text{hr}$.

^c Person-hours per occurrence are based on the performance specification costs to certify CMS (\$700) divided by the composite hourly labor rate (\$43.60/hr); includes CO CEMS.

^d Assume no failures of the initial CMS demonstrations; includes CO CEMS.

^e Assume 160 hrs to develop the operating information.

^f Assume 20 hours to update the operating information each year. Because the update of operating information will not be performed until the second and third years after promulgation, the average number of respondents over the first 3 years for this task is $(0 + 3 + 3)/3 = 2$.

^g Assume 8 hours to review the operating information with each operator.

^h Assume 2 operators per facility. Also assume there is no operator turnover at the affected facilities.

ⁱ Person-hours per occurrence are based on the inspection cost (\$900) divided by the composite hourly labor rate (\$43.60/hr). Because the annual control equipment inspection will not be performed until the second and third years after promulgation, the average number of respondents over the first 3 years for this task is $(0 + 3 + 3)/3 = 2$.

^j Assume 460 hours to develop the site selection analysis.

^k Assume 160 hours to develop the waste management plan.

^l Assume 40 hours to develop the bag leak detection system analysis and 1.5 hours to record bag leak detection system alarms. Assume only new large and medium sources will install baghouses.

^m Assume 8 hours for each facility to review the report of the initial performance test for pollutants and fugitive ash.

ⁿ Person-hours per occurrence are based on the reporting and recordkeeping costs for CMS (\$1,400) divided by the composite hourly rate (\$43.60/hr); includes CO CEMS.

^o Assume 16 and 8 person-hours per report per affected facility per pollutant to report monitoring exceedances and no excess emissions, respectively. Because testing and monitoring requirements focus primarily on three pollutants (PM, CO, and HCl), assume three pollutants.

^p Assume 20 percent of respondents report monitoring exceedances and 80 percent report no excess emissions.

^q Assume 40 hours to review report of annual compliance test.

^r Because the semiannual report coincides once each year with the annual report and both reports include information on exceedances, malfunctions, and periods for which data were not obtained, the frequency of the semiannual report is shown in the table as only once per year to avoid double-counting.

^s Person-hours per occurrence for this daily activity are based on the operation and maintenance (O&M) cost for CMS divided by the composite hourly labor rate and the operating days per year.

^t Based on the time per year to train one person to perform the Method 9 and Method 22 tests. The labor requirements to train the personnel were estimated to be 8 hr/d for 5 d/yr.

^u The total burden and cost for all activities in the 3 years after promulgation are equal to the person-hours added down each column for technical, management, and clerical and the sum of the cost column.

TABLE 2. ANNUAL BURDEN AND COST TO THE FEDERAL GOVERNMENT -
NSPS FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART EC)

Activity	(A) EPA-hours per occurrence	(B) Number of occurrences per year	(C) EPA-hours per facility per year (C = A x B)	(D) Facilities per year ^a	(E) Technical person-hours per year (E = C x D)	(F) Management person-hours per year (F = E x 0.05)	(G) Clerical person-hours per year (G = E x 0.1)	(H) Total person-hours per year (H = E + F + G)	(I) Cost, \$ ^b
1. Attend initial performance test ^c	32	1	32	0.08	2.6	0.1	0.3	2.9	\$127
2. Repeat performance test									
A. Retesting preparation ^d	12	1	12	0.2	2.4	0.1	0.2	2.8	\$119
B. Attend retesting ^e	32	1	32	0.02	0.6	0.03	0.06	0.7	\$32
3. Litigation ^f	2,080	1	2,080	0.03	62	3.1	6.2	72	\$3,096
4. Excess emissions--enforcement activities ^g	32	1	32	0.03	1.0	0.05	0.1	1.1	\$48
5. Report review									
--Review notification of intent to construct	2	1	2	1	2.0	0.1	0.2	2.3	\$99
--Review notification of anticipated commencement of construction	2	1	2	1	2.0	0.1	0.2	2.3	\$99
--Review notification of anticipated startup	2	1	2	1	2.0	0.1	0.2	2.3	\$99
--Review notification of actual startup	2	1	2	1	2.0	0.1	0.2	2.3	\$99
--Review notification of type(s) of waste to be combusted	2	1	2	1	2.0	0.1	0.2	2.3	\$99
--Review notification of HMIWI capacity	2	1	2	1	2.0	0.1	0.2	2.3	\$99
--Review notification of initial performance test	2	1	2	1	2.0	0.1	0.2	2.3	\$99
--Review notification of initial CMS demonstration	2	1	2	1	2.0	0.1	0.2	2.3	\$99
--Review study addressing siting requirements	24	1	24	1	24	1.2	2.4	28	\$1,191
--Review waste management plan	8	1	8	1	8.0	0.4	0.8	9.2	\$397
--Review analysis for bag leak detection systems ^h	8	1	8	0.7	5.3	0.3	0.5	6.1	\$265
--Review report of initial performance test ⁱ	54	1	54	1	54	2.7	5.4	62	\$2,679
--Review report of initial CMS demonstration	NA								
--Review annual report									
--CMS emissions/operating parameters ^j	6	1	6	3	18	0.9	1.8	21	\$893
--Exceedances/malfunctions/periods for which data not obtained ^k	8	1	8	0.6	4.8	0.2	0.5	5.5	\$238
--Results of performance tests conducted during the year ^l									
--PM, CO, HCl	18	1	18	3	54	2.7	5.4	62	\$2,679

TABLE 2. ANNUAL BURDEN AND COST TO THE FEDERAL GOVERNMENT -
NSPS FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART EC)

Activity	(A) EPA-hours per occurrence	(B) Number of occurrences per year	(C) EPA-hours per facility per year (C = A x B)	(D) Facilities per year ^a	(E) Technical person-hours per year (E = C x D)	(F) Management person-hours per year (F = E x 0.05)	(G) Clerical person-hours per year (G = E x 0.1)	(H) Total person-hours per year (H = E + F + G)	(I) Cost, \$ ^b
--Fugitive ash emissions	6	1	6	3	18	0.9	1.8	21	\$893
--Report of no exceedances ^m	2	1	2	2.4	4.8	0.2	0.5	5.5	\$238
--Report of annual control equipment inspection ⁿ	4	1	4	3	12	0.6	1.2	14	\$595
--Review semiannual report of exceedances/ malfunctions/periods for which data not obtained ^{k,o}	8	1	8	0.6	4.8	0.2	0.5	5.5	\$238
AVERAGE TRAVEL EXPENSES ^p = [(1 person x 0.13 facilities/yr x 4 d/facility x \$50/d) x (\$500/round trip x 0.13 round trips/yr)] =									\$91
TOTAL LABOR BURDEN AND COST ^q :					293	15	29	337	\$14,613

^a Three new sources are projected from proposal of revised NSPS, and all of them will need to conduct initial control equipment inspections, initial fugitive ash emission tests, initial stack tests, and CMS demonstrations. These activities are projected to occur in the first year after promulgation. Annual inspections will occur during the second and third years. The average number over the first 3 years after promulgation for one-time activities is $(3 + 0 + 0)/3 = 1$. Assume one affected facility per respondent.

^b Costs are based on the following hourly rates: technical at \$44.24, management at \$59.63, and clerical at \$23.94.

^c Assume EPA personnel attend 8 percent of the initial performance tests.

^d Of the 20 percent that are assumed to fail the initial performance test, assume all repeat the performance test.

^e Assume 10 percent of retests are attended by EPA personnel.

^f Assume 1 percent of the affected facilities will be involved in litigation. Assume litigation will continue for the entire year (2,080 hours) for each of the 3 years after promulgation.

^g Assume 10 percent of the affected facilities are required to retest as a result of excess emissions, and that EPA personnel attend 10 percent of these tests.

^h Assume only new large and medium sources will install baghouses.

ⁱ Assume 6 person-hours per report per pollutant. For the three new HMIWI, nine pollutants are required to be tested.

^j Assume 1 person-hour per report per CMS. For new HMIWI, assume each uses six CMS (flue gas temperature, secondary chamber temperature, charge weight, scrubber liquor pH, scrubber liquor flow, and scrubber energy input).

^k Assume 20 percent of the affected facilities with recurrent burden report monitoring exceedances.

^l Assume 6 person-hours per report per pollutant. For annual tests, there are three pollutants (PM, CO, and HCl) for all three new HMIWI.

^m Assume 80 percent of the affected facilities with recurrent burden report no excess emissions.

ⁿ Assume 4 hours to review the annual control equipment inspection report. Because the annual control equipment inspection will not be performed until the second and third years after promulgation, the average number of respondents over the first 3 years for this task is $(0 + 3 + 3)/3 = 2$.

^o Because the semiannual report coincides once each year with the annual report and both reports include information on exceedances, malfunctions, and periods for which data were not obtained, the frequency of the semiannual report is shown in the table as only once per year to avoid double-counting.

^p Tests attended = 0.08 (initial tests) + 0.02 (repeat tests) + 0.03 (excess emissions enforcement tests) = 0.13 tests.

^q The total burden and cost for all activities in the 3 years after promulgation for EPA are equal to the person-hours added down each column for technical, management, and clerical and the sum of the cost column including travel expenses.

TABLE 3. ANNUAL MONITORING COSTS -

NSPS FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART EC)

Parameters	Large				Medium					Small			Total cost, \$
	DIFF/WS	ACI	BLD	CO CEMS	DIFF/WS	SNCR	ACI	BLD	CO CEMS	WS	SNCR	CO CEMS	
1. Parameters													
A. Recording charge weight and hourly rate, min/hr	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	
B. Recording lime/carbon flow, min/4-hr period	5	5	5	5	5	5	5	5	5	5	5	5	
C. Annual operating hours, hr/yr	8,000	8,000	8,000	6,000	4,500	4,500	4,500	8,000	6,000	3,000	3,000	6,000	
D. Cost index													
-- 2007	525.4	525.4	525.4	525.4	525.4	525.4	525.4	525.4	525.4	525.4	525.4	525.4	
-- 2006	499.6	499.6	499.6	499.6	499.6	499.6	499.6	499.6	499.6	499.6	499.6	499.6	
-- 1997	386.5	386.5	386.5	386.5	386.5	386.5	386.5	386.5	386.5	386.5	386.5	386.5	
-- 1993	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	
E. Operating labor wage rate, \$/hr	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	
F. Capital recovery factor (20 yrs, 7%)	0.09439	0.09439	0.09439	0.09439	0.09439	0.09439	0.09439	0.09439	0.09439	0.09439	0.09439	0.09439	
2. Total Capital Investment, \$													
A. Planning	\$700			\$3,700	\$700	\$700			\$3,700	\$700	\$700	\$3,700	
B. Select type of equipment	\$400			\$9,100	\$400	\$400			\$9,100	\$400	\$400	\$9,100	
C. Provide support facilities	\$1,400			\$18,800	\$1,400	\$1,400			\$18,800	\$1,400	\$1,400	\$18,800	
D. Purchased equipment cost ^{a-c}													
-- Monitor	\$20,900			\$44,200	\$20,900	\$4,900			\$44,200	\$20,800	\$4,900	\$44,200	
-- Taxes and freight	\$1,700				\$1,700	\$400				\$1,700	\$400		
E. Install and check equipment ^d	\$1,000			\$16,600	\$1,000	\$1,000			\$16,600	\$1,000	\$1,000	\$16,600	
F. Perf. spec. tests (certif.)	\$700			\$14,300	\$700	\$700			\$14,300	\$700	\$700	\$14,300	
G. Prepare QA/QC plan ^e	\$700			\$16,000	\$700	\$700			\$16,000	\$700	\$700	\$16,000	
H. Total capital cost	\$27,500		\$23,100	\$122,700	\$27,500	\$10,200		\$23,100	\$122,700	\$27,400	\$10,200	\$122,700	
3. Annual Costs, \$/yr													
A. Operating labor													
-- Recording charge weight and hourly rate	\$4,300				\$2,400					\$1,600			
-- Recording lime or carbon flow measurements	\$4,000	\$4,000			\$2,300		\$2,300						
B. Maintenance materials	\$600				\$600	\$200				\$500	\$200		
C. CEMS O&M ^f			\$3,800	\$25,100					\$25,100			\$25,100	
D. Recordkeeping and reporting ^g	\$1,400		\$1,500	\$1,500	\$1,400	\$1,400			\$1,500	\$1,400	\$1,400	\$1,500	
E. Overhead	\$5,300	\$2,400			\$3,200	\$100	\$1,400			\$1,300	\$100		

TABLE 3. ANNUAL MONITORING COSTS -

NSPS FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART EC)

Parameters	Large				Medium					Small			Total cost, \$
	DIFF/WS	ACI	BLD	CO CEMS	DIFF/WS	SNCR	ACI	BLD	CO CEMS	WS	SNCR	CO CEMS	
F. Property taxes, insurance, and administration	\$1,100		\$900		\$1,100	\$400				\$1,100	\$400		
G. Capital recovery	\$2,600		\$2,200	\$17,500	\$2,600	\$1,000			\$17,500	\$2,600	\$1,000	\$17,500	
H. Total annual cost ^h	\$19,300	\$6,400	\$8,400	\$44,100	\$13,600	\$3,100	\$3,700	\$8,400	\$44,100	\$8,500	\$3,100	\$44,100	
D. Nationwide Annualized Capital Cost, \$/yr	\$3,700	\$0	\$3,100	\$17,500	\$3,700	\$1,400	\$0		\$17,500	\$3,700	\$1,400	\$17,500	\$69,500
E. Nationwide O&M Cost, \$/yr	\$14,200	\$6,400	\$3,800	\$25,100	\$8,500	\$300	\$3,700		\$25,100	\$3,400	\$300	\$25,100	\$115,900
F. Nationwide Annualized and O&M Cost, \$/yr ⁱ	\$17,900	\$6,400	\$6,900	\$42,600	\$12,200	\$1,700	\$3,700		\$42,600	\$7,100	\$1,700	\$42,600	\$185,400

^a Wet scrubber parameter monitoring equipment=4'x4' scale with digital display and ramp, data logger, 300 ft of thermocouple wire, 300 ft of signal wire, two liquid flow transducers, one pressure transducer, controller element and transmitter for pH meter, computer, data logger/computer interface, logging and reporting software, and printer. Taxes and freight=8% of equipment cost.

^b Dry/wet scrubber parameter monitoring equipment=4'x4' scale with digital display and ramp, data logger, 400 ft of thermocouple wire, 300 ft of signal wire, two liquid flow transducers, one pressure transducer, controller element and transmitter for pH meter, computer, data logger/computer interface, logging and reporting software, and printer. Taxes and freight=8% of equipment cost.

^c SNCR parameter monitoring equipment=NH₃ injection rate sensor with data acquisition system and data reduction.

^d Installation=3 hours for scale, 8 hours plus travel and per diem for parameter monitoring system.

^e Cost associated with Appendix F requirements.

^f Includes day-to-day activities, annual RATA, CGA, annual QA and O&M review and update for CO CEMS. Determined by difference for bag leak detector (BLD) by subtracting recordkeeping and reporting (\$1,500); property taxes, insurance, and administration (4% of TCI); and capital recovery (CRF x TCI) from total annual cost (\$8,400).

^g Recordkeeping and reporting (R&R) cost for BLD assumed to be same as R&R cost for CO CEMS (\$1,500); R&R cost for SNCR monitor assumed to be same as R&R cost for DIFF/WS monitor (\$1,400).

^h Includes recordkeeping and reporting cost.

ⁱ Does not include recordkeeping and reporting cost.

TABLE 4. ANNUAL TESTING COSTS -

EMISSION GUIDELINES FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART CE)

Parameters	Tests conducted alone		Tests conducted in conjunction with other tests							Total Each Year
	Fug. ash	Opacity	HCl	CO	PM	Metals	CDD/CDF	NO _x	SO ₂	
1. Cost Factors										
A. Operating labor wage rate, \$/hr	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00
B. Stack test CRF (15 yrs, 7%)	0.10979	0.10979	0.10979	0.10979	0.10979	0.10979	0.10979	0.10979	0.10979	0.10979
C. Fugitive ash testing equipment CRF (5 yrs, 7%)	0.24389	0.24389	0.24389	0.24389	0.24389	0.24389	0.24389	0.24389	0.24389	0.24389
C. Number of sources conducting tests	3	3	3	3	3	3	3	3	3	3
2. One-Time Cost, \$										
A. In-house fugitive ash testing ^a	\$250									
B. Initial stack testing						\$14,000	\$26,000	\$7,000	\$7,000	
3. Annual Cost, \$/yr										
A. In-house fugitive ash testing ^b	\$200									
B. Initial stack testing ^c						\$1,537	\$2,855	\$769	\$769	
C. Annual stack testing		\$1,000	\$7,000	\$7,000	\$12,000					
D. Total annual cost	\$200	\$1,000	\$7,000	\$7,000	\$12,000	\$1,537	\$2,855	\$769	\$769	
4. Nationwide Annualized Capital Cost, \$/yr ^d	\$600	\$3,000	\$21,000	\$21,000	\$36,000	\$4,611	\$8,564	\$2,306	\$2,306	\$67,458

^a Fugitive ash testing one-time cost includes cost for equipment (two stopwatches and combination light meter/anemometer).

^b Fugitive ash testing annual cost includes labor (1 hr/reading, 3 readings/test, 1 test, and \$24.00/hr), overhead (60% of labor); taxes, insurance, and administration (4% of equipment cost); and annualized equipment cost (equipment CRF x equipment cost).

^c The capital recovery factor (CRF) (0.10979) is based on 15-year annualization period and 7% interest rate.

^d The total cost of multiple tests were adjusted by 2/3 in nationwide cost estimates to account for travel, accomodations, etc. common to all tests.

TABLE 5. ANNUAL FILE CABINET COSTS - NSPS FOR HOSPITAL/MEDICAL/
INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART EC)

Parameters	Large	Medium	Small	Total Each Year
1. Equipment CRF (10 yrs, 7%)	0.14238	0.14238	0.14238	
2. Capital Cost, \$	\$235	\$235	\$235	\$705
3. Annual Cost, \$ ^a	\$33	\$33	\$33	\$100

^a Annual cost equivalent to capital recovery factor (0.14238) times capital cost for file cabinet. The capital recovery factor is based on a 10-year equipment life and a 7 percent interest rate.

TABLE 6. ANNUAL PHOTOCOPYING AND POSTAGE COSTS - NSPS FOR HOSPITAL/
MEDICAL/INFECTIOUS WASTE INCINERATORS (40 CFR PART 60, SUBPART EC)

Parameters	No. of Responses	Photocopying, \$/yr ^a	Postage, \$/yr ^b
1. Notification of Intent to Construct	1.0	\$10.55	\$4.80
2. Notification of Anticipated Commencement of Construction	1.0	\$10.55	\$4.80
3. Notification of Anticipated Startup	1.0	\$10.55	\$4.80
4. Notification of Actual Startup	1.0	\$10.55	\$4.80
5. Notification of Type(s) of Waste to Be Combusted	1.0	\$10.55	\$4.80
6. Notification of HMIWI Capacity	1.0	\$10.55	\$4.80
7. Notification of Initial Performance Test	1.0	\$10.55	\$4.80
8. Notification of Initial CMS Demonstration	1.0	\$10.55	\$4.80
9. Initial Report for the Site Selection Analysis	1.0	\$10.55	\$4.80
10. Waste Management Plan	1.0	\$10.55	\$4.80
11. Analysis and Supporting Documentation Demonstrating Conformance with EPA Guidance and Specifications for Bag Leak Detection Systems	0.7	\$7.03	\$3.20
12. Report of Initial Performance Test	1.0	\$10.55	\$4.80
13. Report of Initial CMS Demonstration	1.0	\$10.55	\$4.80
14. Annual Report	12	\$122.38	\$55.68
15. Semiannual Report	0.6	\$6.33	\$2.88
16. Total	19	\$199.04	\$90.56

^a Photocopy cost based on 0.5 hr of clerical labor at \$21.10/hr for each report.

^b Postage cost based on \$4.80 per report for mailing packages to regulatory agencies based on the Priority Mail shipping rate (\$4.80) for the U.S. Postal Service.

TABLE 7. ANNUALIZED CAPITAL AND O&M COSTS -
NSPS FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE
INCINERATORS (40 CFR PART 60, SUBPART EC)

Parameters	Total Each Year
1. Annualized Capital Cost, \$/yr	
a. Monitoring	\$69,500
b. Testing	\$67,458
c. File cabinets	\$100
d. Total annualized capital cost	\$137,058
2. O&M Cost, \$/yr	
a. Monitoring	\$115,900
b. Testing	\$0
c. Photocopying	\$199
d. Postage	\$91
e. Total O&M cost	\$116,190
3. Total Annualized and O&M Cost, \$/yr	
a. Reporting ^a	\$126,719
b. Recordkeeping ^a	\$126,529
c. Total annualized and O&M cost	\$253,248

^a Assigned 50% of monitoring and testing costs to reporting, 50% to recordkeeping.

