**SUPPORTING STATEMENT**

**ENVIRONMENTAL PROTECTION AGENCY**

**Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal)**

**1. Identification of the Information Collection**

**1(a) Title of the Information Collection**

Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal), EPA ICR Number 1901.07, OMB Control Number 2060-0424.

**1(b) Short Characterization/Abstract**

The Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 were originally promulgated in December 1995, but were vacated by the Federal Court in March 1997. Subsequently, the Emission Guidelines were re-proposed on August 30, 1999, and promulgated on December 6, 2000. The Emission Guidelines regulate organics (dioxin/furans), metals (cadmium, lead, mercury), particulate matter, and acid gases (hydrogen chloride, sulfur dioxide, and nitrogen oxides) for small Municipal Waste Combustion (MWC) units. Small MWC units are MWC units with capacities to combust greater than 35 tons per day (tpd) and less than 250 tons per day (tpd) of municipal solid waste. The Emission Guidelines contain monitoring, reporting, and recordkeeping requirements that are to be included in state plans. This Information Collection Request (ICR) identifies the burden for States and U.S. territories to develop and implement State plans, and the burden for small MWCs imposed by these State plans. This information is being collected to assure compliance with 40 CFR Part 60, Subpart BBBB.

In general, all Emission Guidelines require initial notifications, performance tests, and periodic reports by the owners/operators of the affected facilities. They 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 affected facilities subject to Emission Guidelines.

Any owner/operator subject to the provisions of this part shall maintain a file containing these documents and retain the file for at least five years following the generation date of such maintenance reports and records. All reports are sent to the delegated state or local authority. If there is no such delegated authority, the reports are sent directly to the U.S. Environmental Protection Agency (EPA) regional office.

The “Affected Public” includes owners and operators of existing small MWC units. The ‘burden’ to the Affected Public may be found below in both Table 1a: Annual Private Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal) and Table 1b: Annual Public Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal). The ‘burden’ to the “Federal Government” is attributed entirely to work performed by either Federal employees or government contractors and may be found below in Table 2: Average Annual EPA Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal). There are approximately 54 facilities located at 23 plants, which are owned and operated by industry. Of the 23 respondents, 19 are privately-owned, and 4 are owned by either state, or local, or tribal governments. They are all owned and operated by privately-owned, for-profit businesses. We assume that they will all respond to EPA inquiries.

Based on our consultations with industry representatives, there are an average of 2.35 affected facilities at each plant site and that each plant site has only one respondent (i.e., the owner/operator of the plant site).

Over the next three years, approximately 23 respondents per year will be subject to these standards, and no additional respondents per year will become subject to these same standards.

The Office of Management and Budget (OMB) approved the currently active ICR without any “Terms of Clearance”.

**2. Need for and Use of the Collection**

**2(a) Need/Authority for the Collection**

The EPA is required under section 129 of the Act, to establish guidelines for existing stationary sources that reflect the maximum achievable control technology (MACT) for achieving continuous emission reductions:

Section 129(a)(1)(A) states:

The Administrator shall establish performance standards and other requirements pursuant to section 111 and this section for each category of solid waste incineration units. Such standards shall include emissions limitations and other requirements applicable to new units and guidelines (under section 111(d) and this section) and other requirements applicable to existing units.

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 in 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 129(b)(1) states:

Performance standards under this section and section 111 for solid waste incineration units shall include guidelines promulgated pursuant to section 111(d) and this section applicable to existing units. Such guidelines shall include, as provided in this section, each of the elements required by subsection (a) (emissions limitations, notwithstanding any restriction in section 111(d) regarding issuance of such limitations), subsection (c) (monitoring), subsection (d) (operator training), subsection (e) (permits), and subsection (h)(4) (residual risk).

Subpart B of 40 CFR part 60 requires state plans to include monitoring, recordkeeping, and reporting provisions consistent with the emission guidelines. In addition, section 114(a)(1) states that:

the Administrator may require any person who owns or operates any emission source, who manufactures emission control equipment or process equipment, who the Administrator believes may have information necessary for the purposes set forth in this subsection, or who is subject to any requirement of this Act (other than a manufacturer subject to the provisions of section 206(c) or 208 with respect to a provision of title II) on a one-time, periodic or continuous basis 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 Administer 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, organics, metals, and acid gases emissions from small MWCs either cause or contribute to air pollution that may reasonably be anticipated to endanger public health and/or welfare. Therefore, the Emission Guidelines were promulgated for this source category at 40 CFR Part 60,Subpart BBBB.

**2(b) Practical Utility/Users of the Data**

The recordkeeping and reporting requirements in these standards ensure compliance with the applicable regulations which were promulgated in accordance with the Clean Air Act. The collected information is also used for targeting inspections and as evidence in legal proceedings.

Performance tests are required in order to determine an affected facility’s initial capability to comply with the emission standards. Continuous emission monitors are used to ensure compliance with these same standards at all times. During the performance test a record of the operating parameters under which compliance was achieved may be recorded and used to determine compliance in place of a continuous emission monitor.

The notifications required in these standards are used to inform the Agency or delegated authority when a source becomes subject to the requirements of these regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated and leaks are being detected and repaired and that the standards are being met. The performance test may also be observed.

The required annual and semiannual reports are used to determine periods of excess emissions, identify problems at the facility, verify operation/maintenance procedures and for compliance determinations.

**3. Non-duplication, Consultations, and Other Collection Criteria**

The requested recordkeeping and reporting are required under 40 CFR Part 60, Subpart BBBB.

**3(a) Non-duplication**

If the subject 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 local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, duplication does not exist.

**3(b) Public Notice Required Prior to ICR Submission to OMB**

An announcement of a public comment period for the renewal of this ICR was published in the *Federal Register* (83 FR 24785) on May 30, 2018. No comments were received on the burden published in the *Federal Register* for this renewal.

**3(c) Consultations**

The Agency has consulted industry experts and internal data sources to project the number of affected facilities and industry growth over the next three years.The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in these standards, is the Integrated Compliance Information System (ICIS). ICIS is EPA’s database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. The growth rate for the industry is based on our consultations with the Agency’s internal industry experts. Approximately 23 respondents will be subject to these standards over the three-year period covered by this ICR.

Industry trade association(s) and other interested parties were provided an opportunity to comment on the ‘burden’ associated with these standards as they were being developed and these same standards have been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted: the Solid Waste Association of North America (SWANA), at (240) 494-2253; the Energy Recovery Council (ERC), at (202) 467-6240; the National Solid Waste Management Association (NSWMA), at (202) 364-3773; and the National Waste & Recycling Association (NWRA), at (202) 244-4700.

It is our policy to respond after a thorough review of comments received since the last ICR renewal, as well as for those comments submitted in response to the first *Federal Register* notice. In this case, no comments were received.

**3(d) Effects of Less-Frequent Collection**

Less-frequent information collection would decrease the margin of assurance that facilities are continuing to meet these standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and that emission limitations are met. If the information required by these standards was collected less frequently, the proper operation and maintenance of control equipment and the possibility of detecting violations would be less likely.

**3(e) General Guidelines**

These reporting or recordkeeping requirements do not violate any of the regulations promulgated by OMB under 5 CFR Part 1320, Section 1320.5.

These standards require the respondents to maintain all records, including reports and notifications for at least five years. This is consistent with the General Provisions as applied to these standards. EPA believes that the five-year records retention requirement is consistent with the Part 70 permit program and the five-year statute of limitations on which the permit program is based. The retention of records for five 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 five years. In addition, EPA would be prevented from pursuing the violators due to either the destruction or nonexistence of essential records.

**3(f) 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 (CBI) (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

**3(g) Sensitive Questions**

The reporting or recordkeeping requirements in these standards do not include sensitive questions.

**4. The Respondents and the Information Requested**

**4(a) Respondents/SIC Codes**

The respondents to the recordkeeping and reporting requirements are small MWC units constructed on or before August 30, 1999. The United States Standard Industrial Classification (SIC) codes for the respondents affected by the standards, and the corresponding North American Industry Classification System (NAICS) codes are listed in the table below:

|  |  |  |
| --- | --- | --- |
| **Standard (40 CFR Part 60, Subpart BBBB)** | **SIC Codes** | **NAICS Codes** |
| Air and Water Resource and Solid Waste Management | 9511 | 92411 |
| Refuse System; Solid Waste Combustors and Incinerators | 4953 | 562213 |

**4(b) Information Requested**

**(i) Data Items**

In this ICR, all the data that are recorded or reported is required by the Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB).

State/US protectorates must perform the following requirements:

|  |  |
| --- | --- |
| **Requirement** | |
| Submit a state plan | §60.1505 |
| Submit a negative declaration | §60.1510 |

A source must make the following reports:

| **Notifications** | |
| --- | --- |
| Construction/reconstruction | §60.7(a)(1) |
| Notification of completion of each increment of progress | §60.1585 |
| Actual startup | §60.7(a)(3) |
| Performance test and demonstration of continuous monitoring system | §60.7(a)(5) |
| Physical or operational change | §60.7(a)(4) |

| **Reports** | |
| --- | --- |
| Initial report | §60.8 (a) & (d), §60.1860, §60.1875 |
| Annual Report | §60.1880 |
| Semiannual reports for any emission or parameter that does not meet limits | §60.1890, §60.1895, §60.1900 |

A source must keep the following records:

| **Recordkeeping** | |
| --- | --- |
| Startups, shutdowns, and malfunctions, periods where the continuous monitoring system is inoperative. | §60.7(b) & (c)(2) |
| Emission test results and other data needed to determine emissions. | §60.1830, §60.1835, §60.1845 |
| Operator training & certification | §60.1830, §60.1835, §60.1840 |
| Record for MWCs using activated carbon | §60.1830, §60.1835, §60.1855 |
| Records for continuously monitored pollutants or parameters. | §60.1830, §60.1850 |
| Records are required to be retained for 5 Years. All five years of records must be retained at the facility. | §60.1835 |

Electronic Reporting

Some of the respondents are using monitoring equipment that automatically records parameter data. Although personnel at the affected facility must still evaluate the data, internal automation has significantly reduced the burden associated with monitoring and recordkeeping at a plant site.

**(ii) Respondent Activities**

| **Respondent Activities** |
| --- |
| Familiarization with the regulatory requirements. |
| Install, calibrate, maintain, and operate CEMS for SO2, NOx, opacity, CO, CO2 & O2. |
| Perform initial performance test and reports (PM, dioxin/furans, opacity, fugitives, HCL, Cd, Pb, Hg), and repeat performance tests if necessary. |
| Write the notifications and reports listed above. |
| Enter information required to be recorded above. |
| Submit the required reports developing, acquiring, installing, and utilizing technology and systems for collecting, validating, and verifying information. |
| Develop, acquire, install, and utilize technology and systems for processing and maintaining information. |
| Develop, acquire, install, and utilize technology and systems for disclosing and providing information. |
| Train personnel to be able to respond to a collection of information. |
| Transmit, or otherwise disclose the information. |

**5. The Information Collected: Agency Activities, Collection Methodology, and Information Management**

**5(a) Agency Activities**

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

| **Agency Activities** |
| --- |
| Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry. |
| Audit facility records. |
| Input, analyze, and maintain data in the Enforcement and Compliance History Online (ECHO) and ICIS. |

**5(b) Collection Methodology and Management**

Following notification of startup, the reviewing authority could 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 standards and to note the operating conditions under which compliance was achieved. 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 reported by state and local governments in the ICIS Air database, which is operated and maintained by EPA's Office of Compliance. ICIS is EPA’s database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. EPA uses ICIS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. 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/operator for five years.

**5(c) Small Entity Flexibility**

Some of the small MWC units potentially affected by the Emission Guidelines are owned by small businesses, non-profit organizations or governments. The EPA does not expect these standards to adversely affect these small entities. The standards only apply to units with capacities between 35 tpd and 250 tpd. Furthermore, the standards contain provisions for reduced testing. Owners of small MWC units where the aggregate plant capacity is less than 250 tpd can skip annual tests for 2-year periods for certain pollutants if they have demonstrated compliance for three annual tests in a row. In addition to this 3-year testing option, less frequent dioxin/furan testing is possible if all units at a plant achieve emission levels less than the emission limit for two consecutive years. This provision allows plants to test only one unit per year, rather than all units, as normally required.

**5(d) Collection Schedule**

The specific frequency for each information collection activity within this request is shown below in both Table 1a: Annual Private Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal) and Table 1b: Annual Public Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal).

**6. Estimating the Burden and Cost of the Collection**

Tables 1a and 1b document the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart included in this ICR. The individual burdens are expressed under standardized headings believed to be consistent with the concept of burden 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 neither conduct nor sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

**6(a) Estimating Respondent Burden**

The average annual burden to industry over the next three years from these record-keeping and reporting requirements is estimated to be 102,000 hours (Total Labor Hours from Tables 1a and 1b below). These hours are based on Agency studies and background documents from the development of the regulations, Agency knowledge and experience with the Emission Guidelines program, the previously-approved ICR, and any comments received.

**6(b) Estimating Respondent Costs**

**(i) Estimating Labor Costs**

For private facilities, this ICR uses the following labor rates:

Managerial $147.40 ($70.19+ 110%)

Technical $117.92 ($56.15 + 110%)

Clerical $57.02 ($27.15 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2018, “Table 2. Civilian Workers, by occupational and industry group.” The rates are from column 1, “Total compensation.” The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

For public facilities, this ICR uses the following labor rates:

Managerial $65.71 (GS-13, Step 5, $41.07 + 60%)

Technical $48.75 (GS-12, Step 1, $30.47 + 60%)

Clerical $26.38 (GS-6, Step 3, $16.49 + 60%)

These rates are from the Office of Personnel Management (OPM), 2018 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to Federal government employees.

**(ii) Estimating Capital/Startup and Operation and Maintenance Costs**

The type of industry costs associated with the information collection activities in the subject standard(s) are both labor costs which are addressed elsewhere in this ICR and the costs associated with continuous monitoring. The capital/startup costs are one-time costs when a facility becomes subject to the regulation. The annual operation and maintenance costs are the ongoing costs to maintain the monitor(s) and other costs such as photocopying and postage.

**(iii) Capital/Startup vs. Operation and Maintenance (O&M) Costs**

As illustrated in the table below, there are several types of industry costs associated with the information collection, including Operation and Maintenance costs:

| **Capital/Startup vs. Operation and Maintenance (O&M) Costs** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| (A)  Continuous Monitoring Device | (B)  Capital/Startup Cost for One Respondent | (C)  Number of New Respondents | (D)  Total Capital/Startup Cost, (B X C) | (E)  Annual O&M Costs for One Respondent | (F)  Number of Respondents with O&M | (G)  Total O&M,  (E X F) |
| Load monitors, temperature monitors, and carbon federate monitors (Sections 60.1315 thru 60.1335) | $200,000 | 0 | $0 | $19,200 | 54 | $1,036,800 |
| **TOTAL** |  |  |  |  |  | **$1,040,000** |

Note: Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

The total capital/startup costs for this ICR are $0. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR are $1,040,000. This is the total of column G.

The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be $1,040,000.

**6(c) Estimating Agency Burden and Cost**

The only costs to the Agency are those costs associated with analysis of the reported information. EPA's overall compliance and enforcement program includes such activities as the examination of records maintained by the respondents, periodic inspection of sources of emissions, and the publication and distribution of collected information.

The average annual Agency cost during the three years of the ICR is estimated to be $131,000.

This cost is based on the average hourly labor rate as follows:

Managerial $65.71 (GS-13, Step 5, $41.07 + 60%)

Technical $48.75 (GS-12, Step 1, $30.47 + 60%)

Clerical $26.38 (GS-6, Step 3, $16.49 + 60%)

These rates are from the Office of Personnel Management (OPM), 2018 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to Federal government employees. Details upon which this estimate is based appear below in Table 2: Average Annual EPA Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal).

**6(d) Estimating the Respondent Universe and Total Burden and Costs**

There are 55 states and U.S. territories subject to these Emission Guidelines. These are the air quality programs in: 50 states, one federal district, and four U.S. territories.

In addition, the regulations developed under the emissions guidelines apply to small MWCs. Based on our research for this ICR, on average over the next three years, approximately 23 existing respondents (19 privately-owned, and 4 state, or local, or tribal governments) will be subject to these standards. It is estimated that no additional respondents per year will become subject to these same standards. The overall average number of respondents, as shown in the table below, is 23 per year.

The number of respondents is calculated using the following table that addresses the three years covered by this ICR:

| **Number of State and U.S. Protectorate** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | Respondents That Submit Reports | | Respondents That Do Not Submit Any Reports |  | |
| Year | (A)  Number of New Respondents 1 | (B)  Number of Existing Respondents | (C)  Number of Existing Respondents that keep records but do not submit reports | (D)  Number of Existing Respondents That Are Also New Respondents | (E)  Number of Respondents  (E=A+B+C-D) |
| 1 | 0 | 55 | 0 | 0 | 55 |
| 2 | 0 | 55 | 0 | 0 | 55 |
| 3 | 0 | 55 | 0 | 0 | 55 |
| Average | 0 | 55 | 0 | 0 | 55 |

Note: The respondents include the 50 States, one federal district (Washington D.C.), and four territories (America Samoa, Puerto Rico, Virgin Islands, and Northern Mariana Islands); see 40 CFR Part 62.

1 New respondents are those who previously submitted a negative declaration, but subsequently identify and finding a small MWC unit.

| **Number of Respondents** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | Respondents That Submit Reports | | Respondents That Do Not Submit Any Reports |  | |
| Year | (A)  Number of New Respondents 1 | (B)  Number of Existing Respondents | (C)  Number of Existing Respondents that keep records but do not submit reports | (D)  Number of Existing Respondents That Are Also New Respondents | (E)  Number of Respondents  (E=A+B+C-D) |
| 1 | 0 | 23 | 0 | 0 | 23 |
| 2 | 0 | 23 | 0 | 0 | 23 |
| 3 | 0 | 23 | 0 | 0 | 23 |
| Average | 0 | 23 | 0 | 0 | 23 |

1 New respondents include sources with constructed, reconstructed and modified affected facilities.

Column D is subtracted to avoid double-counting respondents. As shown above, the average Number of Respondents over the three-year period of this ICR is 23.

The number of respondents is calculated using the above table, which addresses each of the three years covered by this ICR.

The total number of annual 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 Existing Respondents That Keep Records But Do Not Submit Reports | (E)  Total Annual Responses  E=(BxC)+D |
| State plan | 0 | 1 | 0 | 0 |
| Negative Declaration | 0 | 1 | 0 | 0 |
| Plant Startup (Plant Control Plan, notifications, etc.) | 0 | 5 | 0 | 0 |
| Notifications (Performance Test, CEMS Demonstration, etc.) | 0 | 4 | 0 | 0 |
| Annual Reports | 23 | 2.35 | 0 | 54.05 |
| Semiannual Excess Emission Reports | 2.3 | 2 | 0 | 4.6 |
|  |  |  | Total | 59 (Rounded) |

The number of Total Annual Responses is 59 (rounded) (49 for privately-owned MWC units and 10 for state, or local, or tribal government MWC units).

The total annual labor costs are $10,500,000. Details regarding these estimates may be found below in both Table 1a: Annual Private Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal) and Table 1b: Annual Public Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal).

**6(e) Bottom Line Burden Hours and Cost Tables**

The detailed bottom line burden hours and cost calculations for the respondents and the Agency are shown below in Tables 1a, 1b, and 2, respectively, and summarized below.

**(i) Respondent Tally**

The total annual labor hours are 102,000 hours. Of this burden, 84,600 hours are attributed to sources owned by the private sector, and 17,800 hours are attributed to sources owned by either state or local governments. Details regarding these estimates may be found below in both Table 1a: Annual Private Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal) and Table 1b: Annual Public Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 1,729 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are $1,040,000. The cost calculations are detailed above in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **No. of Respondents** | **Reporting Hours** | **Record-keeping Hours** | **Total Labor Hours** | **Respondent Labor Cost** | **Capital & O&M Cost** | **No. of Responses** |
| Private | 19 | 75,951 | 8,700 | 84,600 | $9,640,000 | $857,000 | 49 |
| State & Local Government | 4 | 15,990 | 1,800 | 17,800 | $850,000 | $180,000 | 10 |
| **Total** | **23** | **92,000** | **10,000** | **102,000** | **$10,500,000** | **$1,040,000** | **59** |

**(ii) The Agency Tally**

The average annual Agency burden and cost over next three years is estimated to be 2,750 labor hours at a cost of $131,000; see below in Table 2: Average Annual EPA Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

**6(f) Reasons for Change in Burden**

There is no change in the total labor hours in this ICR compared to the previous ICR. However, there is an adjustment increase in the respondent costs from the most recently- approved ICR. This adjustment is not due to any program changes. The increase in labor costs from the most recently-approved ICR is due to an adjustment in labor rates. All burden calculations have been updated using the latest labor rates from the Bureau of Labor Statistics and to account for variations in labor rates in both the private and public sectors. There was no change in capital or O&M costs.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 1,729 hours per response. ‘Burden’ means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information either 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 neither conduct nor 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 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-OECA-2012-0517. An electronic version of the public docket is available at <http://www.regulations.gov/>, which may be used to obtain a copy of the draft collection of information, submit or view public comments, access the index listing of the contents of the 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 in this document. The documents are also available for public viewing at the Enforcement and Compliance Docket and Information Center in the EPA Docket Center (EPA/DC), WJC West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. 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 docket center is (202) 566-1752. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OECA-2012-0517 and OMB Control Number 2060-0424 in any correspondence.

**Part B of the Supporting Statement**

This part is not applicable because no statistical methods were used in collecting this information.

**Table 1a: Annual Private Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden item** | **(A) Person-hours per occurrence** | **(B) No. of occurrence per respondent per year** | **(C) Person-hours per respondent per year** | **(D) Respondents per yeara, b** | **(E) Technical person-hours per year** | **(F) Management person-hours per year** | **(G) Clerical person hours per year** | **(H) Cost$ c** |
|  |  |  | **(C=AxB)** |  | **(E=CxD)** | **(Ex0.05)** | **(Ex0.1)** |  |
| 1. Applications | N/A |  |  |  |  |  |  |  |
| 2. Survey and Studies | N/A |  |  |  |  |  |  |  |
| 3. Reporting Requirements |  |  |  |  |  |  |  |  |
| A. Familiarization with Regulatory Requirements | 4 | 1 | 4 | 19 | 76 | 3.8 | 7.6 | $9,954.97 |
| B. Required Activities |  |  |  |  |  |  |  |  |
| i.  Initial performance tests and reports (PM, dioxins/furans, opacity, fugitives, HCl, Cd, Pb, Hg) | 775 | 1 | 775 | 0 | 0 | 0 | 0 | $0 |
| ii. CEMS demonstration (SO2, NOx, opacity, CO, CO2, O2) |  |  |  |  |  |  |  |  |
| a. Installation of CEM units | 225 | 1 | 225 | 0 | 0 | 0 | 0 | $0 |
| b. Initial demonstration | 450 | 1 | 450 | 0 | 0 | 0 | 0 | $0 |
| iii. Annual performance tests and test reports (PM, dioxins/furans, opacity, fugitives, HCl, Cd, Pb, Hg) | 775 | 1 | 775 | 19 | 14,725.00 | 736.25 | 1472.5 | $1,928,775.48 |
| iv. Quarterly Appendix F audits of CEMS (SO2, NOx, CO) |  |  |  |  |  |  |  |  |
| a. RATA audit (one per year) d | 350 | 2.35 | 822.5 | 19 | 15,627.50 | 781.375 | 1,562.8 | $2,046,990.75 |
| b. RAA audit (three per year) e | 130 | 7.05 | 916.5 | 19 | 17,413.50 | 870.68 | 1,741.4 | $2,280,932.55 |
| c. Daily calibration and operation f | 1 | 858 | 858 | 19 | 16,302.00 | 815.1 | 1630.2 | $2,135,341.11 |
| C. Create Information | See 3B |  |  |  |  |  |  |  |
| D. Gather Information | See 3E |  |  |  |  |  |  |  |
| E. Report Preparation |  |  |  |  |  |  |  |  |
| i. Plant startup |  |  |  |  |  |  |  |  |
| a. Plant Control Plan | 40 | 1 | 40 | 0 | 0 | 0 | 0 | $0 |
| b. Notification of Contract Awards | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| c. Notification of on-site construction start | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| d. Notification of construction completion | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| e. Notification of final completion | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| ii. Notification of initial performance tests | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| iii. Initial compliance reports | 40 | 1 | 40 | 0 | 0 | 0 | 0 | $0 |
| iv. Notification of CEMS demonstration | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| v. Initial CEMS demonstration report | 90 | 1 | 90 | 0 | 0 | 0 | 0 | $0 |
| vi. Annual compliance reports | 40 | 2.3 | 92 | 19 | 1,748 | 87.4 | 174.8 | $228,964.31 |
| vii. Semiannual excess emission reports g | 40 | 2 | 80 | 1.9 | 152 | 7.6 | 15.2 | $19,909.94 |
| ***Reporting Subtotal*** |  |  |  |  | ***75,951*** | | | ***$8,650,869*** |
| 4. Recordkeeping Requirements |  |  |  |  |  |  |  |  |
| A. Familiarization with Regulatory Requirements | See 3A |  |  |  |  |  |  |  |
| B. Plan Activities | See 3B |  |  |  |  |  |  |  |
| C. Implement Activities | See 3B |  |  |  |  |  |  |  |
| D. Develop Record System | N/A |  |  |  |  |  |  |  |
| E. Record information |  |  |  |  |  |  |  |  |
| i. Record startups, shutdowns, and malfunctions h | 4 | 47 | 188 | 19 | 3,572 | 178.6 | 357.2 | $467,883.60 |
| ii. Records of all emission rates, computations, tests h | 4 | 47 | 188 | 19 | 3,572 | 178.6 | 357.2 | $467,883.60 |
| iii. Records of employee review of operations manual | 4 | 1 | 4 | 19 | 76 | 3.8 | 7.6 | $9,954.97 |
| iv. Record amount of sorbent used for Hg and dioxin/furan control | 4 | 4 | 16 | 19 | 304 | 15.2 | 30.4 | $39,819.88 |
| F. Personnel Training | N/A |  |  |  |  |  |  |  |
| G. Time for audits | N/A |  |  |  |  |  |  |  |
| ***Recordkeeping subtotal*** |  |  |  |  | ***8,653*** | | | ***$985,542*** |
| **TOTAL LABOR BURDEN AND COST (Rounded):i** |  |  |  |  | **84,600** | | | **$9,640,000** |
| **Capital and O&M Cost (Rounded):i** |  |  |  |  |  |  |  | **$857,000** |
| **GRAND TOTAL (Rounded):i** |  |  |  |  |  |  |  | **$10,500,000** |
| **Assumptions:** |  |  |  |  |  |  |  |  |
| a Assumes an average of 19 private respondents and 2.35 affected facilities (i.e., sources or units) per respondent [54 facilities at 23 plants; 54/23 = 2.35]. | | | | | | | | |
| b No additional facilities will become subject to the standard over the next three years. | | | | | | | | |
| c This ICR uses the following labor rates: $147.40 per hour for Executive, Administrative, and Managerial labor; $117.92 per hour for Technical labor, and $57.02 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2018, Table 2. Civilian Workers, by occupational and industry group. The rates are from column 1, “Total compensation.” The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry. | | | | | | | | |
| d Relative accuracy test audits (RATA) occur once per year for each affected facility (1 x 2.35 = 2.35). RATA are performed for one of the four quarterly audits. RAA tests are performed for three of the four quarterly audits. Audits of the diluent monitor (O2 or CO2) are not required because tests on SO2 and CO monitors will incorporate the use of the diluent monitor. | | | | | | | | |
| e Relative accuracy audits (RAA) occur three times per year for each affected facility (3 x 2.35 = 7.05). | | | | | | | | |
| f Daily calibration and operation data occurs daily [365 x 2.35 = 858 (Rounded)]. | | | | | | | | |
| g Assumes 10 percent of private sources (1.9) have affected facilities with excess emissions and must submit two semiannual reports. | | | | | | | | |
| h Assumes 47 weeks of operation (90 percent availability) per year per facility. | | | | | | | | |
| i Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

**Table 1b: Annual Public Respondent Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden item** | **(A) Person-hours per occurrence** | **(B) No. of occurrence per respondent per year** | **(C) Person-hours per respondent per year** | **(D) Respondents per yeara, b** | **(E) Technical person-hours per year** | **(F) Management person-hours per year** | **(G) Clerical person hours per year** | **(H) Cost$ c** |
|  |  |  | **(C=AxB)** |  | **(E=CxD)** | **(Ex0.05)** | **(Ex0.1)** |  |
| 1. Applications | N/A |  |  |  |  |  |  |  |
| 2. Survey and Studies | N/A |  |  |  |  |  |  |  |
| 3. Reporting Requirements |  |  |  |  |  |  |  |  |
| A. Familiarization with Regulatory Requirements | 4 | 1 | 4 | 4 | 16 | 0.8 | 1.6 | $874.82 |
| B. Required Activities |  |  |  |  |  |  |  |  |
| i.  Initial performance tests and reports (PM, dioxins/furans, opacity, fugitives, HCl, Cd, Pb, Hg) | 775 | 1 | 775 | 0 | 0 | 0 | 0 | $0 |
| ii. CEMS demonstration (SO2, NOx, opacity, CO, CO2, O2) |  |  |  |  |  |  |  | $0 |
| a. Installation of CEM units | 225 | 1 | 225 | 0 | 0 | 0 | 0 | $0 |
| b. Initial demonstration | 450 | 1 | 450 | 0 | 0 | 0 | 0 | $0 |
| iii. Annual performance tests and test reports (PM, dioxins/furans, opacity, fugitives, HCl, Cd, Pb, Hg) | 775 | 1 | 775 | 4 | 3,100.00 | 155 | 310 | $169,495.60 |
| iv. Quarterly Appendix F audits of CEMS (SO2, NOx, CO) |  |  |  |  |  |  |  |  |
| a. RATA audit (one per year) d | 350 | 2.35 | 822.5 | 4 | 3,290.00 | 164.5 | 329.0 | $179,884.04 |
| b. RAA audit (three per year) e | 130 | 7.05 | 916.5 | 4 | 3,666.00 | 183.30 | 366.6 | $200,442.22 |
| c. Daily calibration and operation f | 1 | 858 | 858 | 4 | 3,432.00 | 171.6 | 343.2 | $187,648.03 |
| C. Create Information | See 3B |  |  |  |  |  |  |  |
| D. Gather Information | See 3E |  |  |  |  |  |  |  |
| E. Report Preparation |  |  |  |  |  |  |  |  |
| i. Plant startup |  |  |  |  |  |  |  |  |
| a. Plant Control Plan | 40 | 1 | 40 | 0 | 0 | 0 | 0 | $0 |
| b. Notification of Contract Awards | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| c. Notification of on-site construction start | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| d. Notification of construction completion | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| e. Notification of final completion | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| ii. Notification of initial performance tests | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| iii. Initial compliance reports | 40 | 1 | 40 | 0 | 0 | 0 | 0 | $0 |
| iv. Notification of CEMS demonstration | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0 |
| v. Initial CEMS demonstration report | 90 | 1 | 90 | 0 | 0 | 0 | 0 | $0 |
| vi. Annual compliance reports | 40 | 2.3 | 92 | 4 | 368 | 18.4 | 36.8 | $20,120.77 |
| vii. Semiannual excess emission reports | 40 | 2 | 80 | 0.4 | 32 | 1.6 | 3.2 | $1,749.63 |
| ***Reporting Subtotal*** |  |  |  |  | ***15,990*** | | | ***$760,215*** |
| 4. Recordkeeping Requirements |  |  |  |  |  |  |  |  |
| A. Familiarization with Regulatory Requirements | See 3A |  |  |  |  |  |  |  |
| B. Plan Activities | See 3B |  |  |  |  |  |  |  |
| C. Implement Activities | See 3B |  |  |  |  |  |  |  |
| D. Develop Record System | N/A |  |  |  |  |  |  |  |
| E. Record information |  |  |  |  |  |  |  |  |
| i. Record startups, shutdowns, and malfunctions h | 4 | 47 | 188 | 4 | 752 | 37.6 | 75.2 | $41,116.35 |
| ii. Records of all emission rates, computations, tests h | 4 | 47 | 188 | 4 | 752 | 37.6 | 75.2 | $41,116.35 |
| iii. Records of employee review of operations manual | 4 | 1 | 4 | 4 | 16 | 0.8 | 1.6 | $874.82 |
| iv. Record amount of sorbent used for Hg and dioxin/furan control | 4 | 4 | 16 | 4 | 64 | 3.2 | 6.4 | $3,499.26 |
| F. Personnel Training | N/A |  |  |  |  |  |  |  |
| G. Time for audits | N/A |  |  |  |  |  |  |  |
| ***Recordkeeping subtotal*** |  |  |  |  | ***1,822*** | | | ***$86,607*** |
| **TOTAL LABOR BURDEN AND COST (Rounded):** |  |  |  |  | **17,800** | | | **$850,000** |
| **Capital and O&M Cost (see Section 6(b)(iii)):** |  |  |  |  |  |  |  | **$180,000** |
| **TOTAL COST:** |  |  |  |  |  |  |  | **$1,030,000** |
| **Assumptions:** |  |  |  |  |  |  |  |  |
| a Assumes an average of 4 public respondents and 2.35 affected facilities (i.e., sources or units) per respondent [54 facilities at 23 plants; 54/23 = 2.35]. | | | | | | | | |
| b No additional facilities will become subject to the standard over the next three years. | | | | | | | | |
| c This ICR uses the following labor rates which incorporate a 1.6 benefits multiplication factor to account for government overhead expenses: $65.71 Managerial rate (GS-13, Step 5, $41.07 x 1.6), $48.75 Technical rate (GS-12, Step 1, $30.47 x 1.6), and $26.38 Clerical rate (GS-6, Step 3, $16.49 x 1.6). These rates are from the Office of Personnel Management (OPM) 2018 General Schedule, which excludes locality rates of pay. | | | | | | | | |
| d Relative accuracy test audits (RATA) occur once per year for each affected facility (1 x 2.35 = 2.35). RATA are performed for one of the four quarterly audits. RAA tests are performed for three of the four quarterly audits. Audits of the diluent monitor (O2 or CO2) are not required because tests on SO2 and CO monitors will incorporate the use of the diluent monitor. | | | | | | | | |
| e Relative accuracy audits (RAA) occur three times per year for each affected facility (3 x 2.35 = 7.05). | | | | | | | | |
| f Daily calibration and operation data occurs daily [365 x 2.35 = 858 (Rounded)]. | | | | | | | | |
| g Assumes 10 percent of public sources (0.4) have affected facilities with excess emissions and must submit two semiannual reports. | | | | | | | | |
| h Assumes 47 weeks of operation (90 percent availability) per year per facility. | | | | | | | | |
| i Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

**Table 2: Average Annual EPA Burden and Cost – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (40 CFR Part 60, Subpart BBBB) (Renewal)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **(A) No. occurrence per year** | | **(B) EPA person-hours per occurrence** | | **(C) Technical person-hours per year** | | **(D) Management person-hours per year** | | **(E) Clerical person-hours per year** | | **(H) Costa $** | |
|  |  | |  | | **(C=AxB)** | | **(Ex0.05)** | | **(Ex0.1)** | |  | |
| 1. Applications | N/A | |  | |  | |  | |  | |  | |
| 2. Report Reviews b, c |  | |  | |  | |  | |  | |  | |
| i.  Review preliminary and final material separation plans and siting analysis | 0 | | 8 | | 0 | | 0 | | 0 | | $0 | |
| ii. Review notification of construction | 0 | | 2 | | 0 | | 0 | | 0 | | $0 | |
| iii. Review notification of startup | 0 | | 2 | | 0 | | 0 | | 0 | | $0 | |
| iv. Review notification of initial performance test | 0 | | 8 | | 0 | | 0 | | 0 | | $0 | |
| v. Review notification of initial CEMS demonstration | 0 | | 4 | | 0 | | 0 | | 0 | | $0 | |
| vi. Review initial performance test report | 0 | | 40 | | 0 | | 0 | | 0 | | $0 | |
| vii. Review initial CEMS demonstration report | 0 | | 40 | | 0 | | 0 | | 0 | | $0 | |
| viii. Review annual compliance report d | 23 | | 92 | | 2,116 | | 105.8 | | 211.6 | | $115,694.42 | |
| ix. Review semi-annual excess emission report e | 4.6 | | 16 | | 73.6 | | 3.68 | | 7.36 | | $4,024.15 | |
| 3. Prepare annual summary report | 1 | | 200 | | 200 | | 10 | | 20 | | $10,935.20 | |
| **TOTAL ANNUAL COST (rounded) f** |  | |  | | **2,750** | | | | | | **$131,000** | |
| **Assumptions:** | |  | |  | |  | |  | |  | |  |  | |  |
| a This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for government overhead expenses: $65.71 Managerial rate (GS-13, Step 5, $41.07 x 1.6), $48.75 Technical rate (GS-12, Step 1, $30.47 x 1.6), and $26.38 Clerical rate (GS-6, Step 3, $16.49 x 1.6). These rates are from the Office of Personnel Management (OPM) 2018 General Schedule, which excludes locality rates of pay. | | | | | | | | | | | | | |
| b No additional sources will become subject to the standard over the next three years. We also assume affected air quality program administrator in States and U.S. territories have already submitted a State Plan and/or negative declaration. | | | | | | | | | | | | | |
| c Assumes 54 affected units at 23 plants. | | | | | | | | | | | | | |
| d Assumes four hours to review the annual compliance report for each plant (4 x 23 = 92). | | | | | | | | | | | | | |
| e Assumes submission of semiannual excess emission reports will be required for 10 percent of units (2.3); (2 x 2.3 = 4.6). | | | | | | | | | | | | | |
| f Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. | | | | | | | | | | | | | |