

**SUPPORTING STATEMENT
ENVIRONMENTAL PROTECTION AGENCY**

NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal)

1. Identification of the Information Collection

1(a) Title of the Information Collection

NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal), EPA ICR Number 2498.04, OMB Control Number 2060-0697.

1(b) Short Characterization/Abstract

The New Source Performance Standards (NSPS) for Municipal Solid Waste Landfills were proposed on May 30, 1991; promulgated on May 12, 1996; and amended on: June 16, 1998 (63 FR 32753); February 24, 1999 (64 FR 9262); and April 10, 2000 (65 FR 18909). These standards (40 CFR Part 60, Subpart WWW) apply to municipal solid waste landfills that commenced construction, modification, or reconstruction either on or after May 30, 1991. Clean Air Act (CAA) section 111(b)(1)(B) requires the EPA to “at least every 8 years review and, if appropriate, revise” new source performance standards. In response to this mandate, EPA proposed on July 17, 2014 (79 FR 41771) and finalized on August 29, 2016 (81 FR 59368) a new subpart (40 CFR Part 60, Subpart XXX) that applies to municipal solid waste landfills that commenced construction, modification, or reconstruction after July 17, 2014. The finalized version of Subpart XXX retains the design capacity threshold of 2.5 million Mg and 2.5 million cubic meters but reduces the NMOC emission rate threshold that triggers the requirement to install controls from 50 megagrams per year (Mg/yr) to 34 Mg/yr. The final rule also changed certain reporting and recordkeeping requirements from what is required in subpart WWW. The EPA amended Subpart XXX on March 26, 2020 (85 FR 17261)¹ to allow landfills subject to the Landfill NESHAP (40 CFR Part 63, Subpart AAAA) to opt-in to certain compliance provisions. This information is being collected to assure compliance with 40 CFR Part 60, Subpart XXX.

The Landfill NSPS requires landfill owners and operators to submit initial notifications and reports, maintain records, and conduct initial performance tests and periodic monitoring. Landfill owners/operators must submit an initial design capacity report, initial performance test report, emission rate reports, and collection and control system design plans. Landfill closure and equipment removal reports are required when the landfill will close or when the landfill meets the criteria for removing controls. Annual compliance reports must include the following information: descriptions of any period in which the value of any of the monitored operating parameters fell outside the specified ranges, any period during which the monitoring system is not operating, or when the collected gas was diverted from the control device, and any ‘exceedances’ during the period. The final rule also requires an annual wet landfill report for any landfill that recirculated leachate or added other liquids in the last 10 years. In addition, landfills

¹ The NESHAP AAAA rulemaking revised NSPS Subpart XXX to allow affected sources to demonstrate compliance with landfill gas control, operating, monitoring, recordkeeping, and reporting requirements by following the corresponding requirements in the MSW Landfills NESHAP. These final amendments harmonize the control requirements across all of the landfill rules and will result in improved compliance and implementation of the rule.

with exceedances of wellhead operational standards may have additional reporting and recordkeeping burden, including a root cause analysis, corrective action analysis, and implementation timeline for any exceedances that cannot be corrected within the timeframes specified in the regulation.

Landfill owners or operators must keep continuous monitoring records of the parameters reported in the initial performance report; records of monthly monitoring of wellhead temperature, pressure, and nitrogen or oxygen concentration; and records of quarterly monitoring of surface methane concentrations. Landfill owners or operators must also maintain records of all reports, plot map, and well locations. In addition, owners or operators are required to maintain records of the annual compliance reports, including 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. The recordkeeping and reporting requirements specific to municipal solid waste landfills are detailed in Section 4(b) of this supporting statement. These notifications, reports, and records are essential in determining compliance and are required of all affected facilities subject to the NSPS.

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 measurements, maintenance reports, and records. All reports are sent to either 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” are municipal solid waste landfills operated by the public and private landfill owners. It is estimated that on average, 190 existing respondents (municipal solid waste landfills) per year will be subject to these regulations in the next three years based on a design capacity threshold of at least 2.5 million Mg and at least 2.5 million cubic meters. Approximately 2 new and 25 modified municipal solid waste landfills will also become subject to these same standards in the next three years. The ‘burden’ to the Affected Public may be found at the end of this document in both Table 1A: Annual Respondent Burden and Cost: Privately-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal) and Table 1B: Annual Respondent Burden and Cost: Publicly-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal). The ‘burden’ to the Federal Government is attributed entirely to work performed by either Federal employees or government contractors or to state or local agencies that have been delegated authority and may be found at the end of this document in Table 2: Average Annual EPA Burden and Cost – NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal).

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

Over the next three years, approximately 190 existing respondents per year will be subject to these standards, and an additional 2 new landfills and 25 modified landfills per year

will become subject to these same standards over the three-year period of this ICR. This represents an increase in the number of respondents reflected in the final rule, and reflects updates to the respondent inventory to include projected additional new and modified sources becoming subject to the NSPS during this period, and the expected number of landfills subject to the NSPS controlling between years 2022 through 2024 based on projected emissions, assuming these landfills will be controlling at the more stringent 34 megagrams per year (Mg/yr) threshold.

The active (previous) ICR (2498.03) had the following Terms of Clearance (TOC):

“Approval granted for one year due to agency collection of information without separate approval under 5 CFR 1320. Upon resubmission, agency should upload a copy of the final rule in the supplementary documents, add the 60 and 30 day FR citations, include screenshots of each click that a respondent would need to make to submit the information online, and include the OMB control number and the burden statement on the first page of the online collection portal.”

EPA has addressed each item of concern in the TOC by providing the additional supplementary materials in Appendix A of this document, including a copy of the final rule, screenshots of each click that a respondent would need to make to submit the information online, and an example of the first page of the online collection portal with a link to information on the OMB control number and burden statement. The EPA has also included copies of the 60- and 30-day FR notices for this ICR.

2. Need for and Use of the Collection

2(a) Need/Authority for the Collection

The EPA is charged under Section 111 of the Clean Air Act (CAA), as amended, to establish standards of performance for new stationary sources that reflect:

. . . application of the best technological system of continuous emissions reduction which (taking into consideration the cost of achieving such emissions reduction, or any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.
Section 111(a)(1).

The Agency refers to this charge as selecting the best demonstrated technology (BDT). Section 111 also requires that the Administrator review and, if appropriate, revise such standards every eight years.

In addition, section 114(a) states that the Administrator may require any owner/operator subject to any requirement of this Act 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, non-methane organic compound emissions from municipal solid waste landfill either cause or contribute to air pollution that may reasonably be anticipated to endanger public health and/or welfare. Therefore, the NSPS were promulgated for this source category at 40 CFR Part 60, Subpart XXX.

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 these emission standards. Continuous emission monitors are used to ensure compliance with these 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 its 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, leaks are being detected and repaired, and that these same standards are being met. The performance test may also be observed.

The required annual 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 XXX.

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* (85 FR 28003) on May 12, 2020. 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 is based on the database “*Summary of Updated Landfill Dataset Used in the Cost and Emission Reduction Analysis of Landfills Regulations, 2016*” developed for the 2016 rule. The 2016 database included data from 40 CFR Part 98, Subpart HH of the EPA Greenhouse Gas Reporting Program (GHGRP), which was supplemented with a database maintained by EPA’s Landfill Methane Outreach Program (LMOP), as well as for information received from EPA’s Regional Offices and state authorities. The number of respondents has been adjusted in this ICR to reflect the projected additional new and modified sources becoming subject to the NSPS during this period and the expected number of landfills controlling between years 2022 through 2024, based on projected emissions as waste disposal quantities increase over time at active landfills, and assuming that in these years landfills will be controlling under the more stringent 34 Mg/yr requirements. Approximately 190 respondents will be subject to these standards over the three-year period covered by this ICR. This includes a constant growth rate of 2 new sources and 25 modified sources per year.

Industry trade associations and other interested parties were provided an opportunity to comment on the burden associated with these standards as they were being developed and that these same standards have been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both the Solid Waste Association of North America (SWANA), at (800) 467-9262, and the National Waste & Recycling Association (NW&RA), 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 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 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 the standards. The 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. The 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 the standard 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 municipal solid

waste landfills. The United States Standard Industrial Classification (SIC) code for the respondents affected by the standard and the corresponding North American Industry Classification System (NAICS) codes are listed in the table below:

Standard (40 CFR Part 60, Subpart XXX)	SIC Codes	NAICS Codes
Solid Waste Landfill	4953	562212
Administration of Air and Water Resource and Solid Waste Management Programs	9511	924110

4(b) Information Requested

(i) Data Items

In this ICR, all the data that are recorded or reported is required by the NSPS for Municipal Solid Waste Landfill (40 CFR Part 60, subpart XXX) and the general provisions of Part 60.

A source must make the following notifications and reports:

Notifications and Reports	
Initial design capacity report and amended design capacity report	§60.7(a)(1), §60.767(a)
Notification of actual startup	§60.7(a)(3)
Initial and annual (or 5-year) non-methane organic compounds (NMOC) emission rate reports	§60.767(b)
Initial and revised collection and control system design plans	§60.767(c), §60.767(d)
Landfill closure report	§60.767(e)
Equipment removal report	§60.767(f)
Annual operations report	§60.767(g)
Initial performance test report	§60.8, §60.767(h)
Electronic reporting	§60.767(i)
Corrective Action: Root cause analysis, Corrective action analysis, Implementation timeline	§60.767(j), §60.767(g)(7)
Liquids addition (Wet landfill Annual Report)	§60.767(k)
Notifications of SEM prior to Tier 4	§60.767(l)
High temperature report for sources complying with NESHAP provisions	§60.767(m)

A source must keep the following records:

Recordkeeping	
Maintain records of maximum design capacity, refuse-in-place, year-by-year waste acceptance rate (maintain for 5 years)	§60.768(a)
Maintain records of system design and initial performance test/compliance determination (must be kept for life of the control equipment; records of subsequent tests must be maintained for 5 years)	§60.768(b)
Maintain records of monitoring of equipment operating parameters for five years	§60.768(c)
Maintain records of collection system plot map and well locations for the life of the landfill (for life of the collection system)	§60.768(d)
Maintain records of collection and control system exceedances of operational standards	§60.768(e)(1), §60.768(e)(2),
Maintain records of root cause analysis conducted, corrective action, and implementation timeline	§60.768(e)(3), §60.768(e)(4), §60.768(e)(5)
Maintain records of date of compliance with NESHAP provisions	§60.768(e)(6)
Maintain records of annual recalculation of site-specific density and design capacity	§60.768(f)
Maintain records of all surface emissions monitoring and information related to instrument calibrations for 5 years (for landfills opting to use the Tier 4 approach)	§60.768(g)
Maintain records of all collection and control system monitoring data for parameters measured	§60.768(h)
Maintain electronic records	§60.768(i)
Maintain records of any engineering calculations or company records used to estimate the quantities of leachate or liquids added	§60.768(j)

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.

The rule was recently amended to include electronic reporting provisions. The EPA is requiring owners and operators of new or modified landfills to submit electronic copies of certain required performance test reports, NMOC emission rate reports, annual reports, Tier 4 emission rate reports, and annual reports on wet landfilling practices through EPA's Central Data

Exchange (CDX) (http://cdx.epa.gov/epa_home.asp) using the Compliance and Emissions Data Reporting Interface (CEDRI). Electronic copies of records may also be maintained in order to satisfy federal recordkeeping requirements. Since most of the test methods in the landfills NSPS are not supported by the EPA Electronic Reporting Tool (ERT) (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>), electronic reporting of performance tests may not be required for some landfills initially, but will be required when applicable methods are added to the ERT.

(ii) Respondent Activities

Respondent Activities
Familiarization with the regulatory requirements.
Calibrate and operate surface emission monitoring equipment for quarterly monitoring and portable LFG emission analyzer equipment for monthly wellhead monitoring.
Estimate NMOC emission estimates using Tier 1, Tier 2, Tier 3 or Tier 4 procedures in the regulation.
Perform initial performance test, Reference Method 25, Method 25A or 25C test, and repeat performance test 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.
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.
Transmit, or otherwise disclose the information.

Currently, sources are using monitoring equipment that provides parameter data in an automated way (e.g., continuous parameter monitoring system). Although personnel at the source still need to evaluate the data, this type of monitoring equipment has significantly reduced the burden associated with monitoring and recordkeeping.

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

5(a) 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, repeat performance tests and quarterly surface emissions monitoring (or Tier 4) if necessary.
Review notifications and reports, including performance test reports, excess emissions reports, root cause and corrective action analysis, implementation timeline, and wet landfill monitoring report 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 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 annual 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. The EPA uses ICIS 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. Certain data will also be stored and accessible through the EPA's Central Data Exchange (CDX) (http://cdx.epa.gov/epa_home.asp).

The records required by this regulation must be retained by the owner/operator for five years.

5(c) Small Entity Flexibility

Although it is unknown how many new "greenfield" landfills will be owned or operated

by small entities, recent trends in the waste industry have been towards consolidated ownership among larger companies. Based on landfills anticipated to modify and become subject to subpart XXX, and the ownership of recent greenfield landfills, the EPA has determined that, based on the percentage of small entities determined in 2016 final rule, approximately thirteen of the privately owned landfills and nine of the publicly owned landfills are small entities.

Subpart XXX does not contain any provisions reserved exclusively for the benefit of small entities. However, the design capacity threshold of less than 2.5 million megagrams and less than 2.5 million cubic meters in 40 CFR 60.762(a) limits the effect of this regulation on smaller landfills, which tend to be owned disproportionately by smaller entities.

However, the final rule provided a non-numeric definition of treatment, which is expected to provide some flexibility for landfills with LFG energy recovery. Since treatment is one of the three compliance pathways for controlling LFG, this ICR does not estimate the number of landfills that may opt to use the treatment pathway for compliance. In addition, while these standards continue to require monthly monitoring of wellhead parameters, the EPA has removed the wellhead operating standards for oxygen/nitrogen, which will reduce the corrective actions, re-monitoring, and requests for alternative timelines. The final rule also included alternative site-specific emission thresholds for determining when a landfill must install (via Tier 4) or remove controls, which are expected to provide flexibility for landfill owners/operators required to control under subpart XXX. The ICR burden was estimated assuming 50% of landfills use Tier 1 and 50% use Tier 2, as industry experience suggests that no landfills are using the Tier 3 approach and it is unknown how many landfills would opt to use Tier 4.

5(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown at the end of this document in both Table 1A: Annual Respondent Burden and Cost: Privately-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal) and Table 1B: Annual Respondent Burden and Cost: Publicly-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal).

6. Estimating the Burden and Cost of the Collection

Table 1A documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to privately-owned municipal solid waste landfills for Subpart XXX. Table 1B documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to publicly-owned municipal solid waste landfills for Subpart XXX. 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 recordkeeping and reporting requirements is estimated to be 176,000 hours (Total Labor Hours from Table 1A and Table 1B). These hours are based on Agency studies and background documents from the development of these regulations, Agency knowledge and experience with the NSPS program, the previously-approved ICR, and any comments received.

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

This ICR uses the following labor rates for employees at both privately-owned and publicly-owned landfills:

Managerial	\$119.85 (\$57.07 + 110%)
Technical – Civil Engineer	\$95.26 (\$45.36 + 110%)
Technical – Civil Engineer Technician	\$56.01 (\$26.67 + 110%)
Clerical	\$36.71 (\$17.48 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, May 2019, “National Occupational Employment and Wage Estimates United States”. The rates are for: Managers, All Other for Managerial Labor; Civil Engineers; Civil Engineer Technicians; and Office Clerks, General for Clerical Labor. The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry. Details upon which this estimate is based appear at the end of this document in Table 1A: Annual Respondent Burden and Cost: Privately-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal) and Table 1B: Annual Respondent Burden and Cost: Publicly-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal).

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

The types of industry costs associated with the information collection activities in the subject standards are both labor costs, which are addressed elsewhere in this ICR, and the costs associated with continuous monitoring at the flare station, quarterly surface monitoring, monthly wellhead monitoring, and conducting a Tier II NMOC emission rate test. The capital/startup costs are one-time costs when a facility becomes subject to these regulations or when the facility first installs controls. The capital costs from the final rule were annualized over the five-year period allowed before another Tier II test must be conducted. While the final rule allowed landfills to conduct Tier 3 or Tier 4, industry experience suggests that no landfills are using the Tier 3 approach and it is unknown how many landfills would use the Tier 4 alternative. The

capital costs for the initial performance testing continuous monitoring equipment were annualized over a 15-year period, consistent with the expected lifetime of the flare, and an estimated annual O&M for these equipment were also estimated based on consultation with industry on the subpart WWW ICR renewal.

For landfills that must install gas collection and control systems, there are additional non-labor costs associated with conducting an initial (and repeat, if necessary) performance test on the flare or other destruction device, conducting quarterly surface emission monitoring (SEM), and conducting monthly wellhead monitoring. However, the final rule cost analysis assumed that the portable equipment used to complete the SEM and wellhead is rented and not purchased. Based on industry experience, many landfills contract out monitoring services. Therefore, no capital/startup costs are estimated. The table below includes rental cost and calibration and hydrogen fuel costs for the annual O&M of SEM equipment. For wellhead monitoring, the most-recent ICR applied the full monitoring cost in terms of burden hours. Therefore, the table below only shows the O&M costs associated with the calibration gases for the wellhead monitoring device. The costs to monitor surface emissions and wellheads are also included in the annualized cost impacts analysis for the finalized subpart.

The annual operation and maintenance costs are the ongoing costs to maintain, calibrate, and operate the purchased monitoring equipment, rent monitoring equipment, and other costs such as photocopying and postage.

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

Capital/Startup vs. Operation and Maintenance (O&M) Costs							
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Annualized Capital/Startup Cost for One Respondent	Average Number of Respondents per Year	Total Annualized Capital / Startup Cost, (C x D) per Year	Annual O&M Costs for One Respondent	Number of Respondents with O&M	Total O&M (F x G)
Method 25 or 25C testing costs for initial performance test ^a	\$10,067	\$1,105	8	\$8,842	\$0	0	\$0
Sampling probe and Method 25 or 25C testing costs for Tier 2 test ^b	\$11,104	\$2,708	29	\$78,540	\$0	0	\$0
Method 21 Surface Emission Monitor ^c	0	0	0	\$0	\$2,814	190	\$534,660
Portable Wellhead Monitor ^d	0	0	0	\$0	\$204	190	\$38,760
Flow Meter ^{e, f}	\$3,000	\$329	8	\$2,635	\$1,000	190	\$190,000

Thermocouple ^{e, f}	\$500	\$55	8	\$439			
Data Recorder ^{e, f}	\$4,500	\$494	8	\$3,953			
Totals				\$94,409			\$763,420
Total (Rounded) ^g							\$858,000

^a This requirement applies only to new landfills requiring controls and existing landfills that are not "legacy" controllers, i.e. those controlling under the revised more stringent 34 Mg/yr requirement and not those already subject to controls under the original 50 Mg/yr requirement. Annualized cost is figured for method 25 or 25C test at 7% over 15 years, which is the expected lifetime of the flare or other destruction device.

^b Tier 2 testing is done by operating landfills that do not meet control thresholds but meet the size thresholds of 2.5 million Mg. Of these 58 landfills, 50% assumed to do Tier 1 testing and 50% assumed to do Tier 2 testing. Since a Tier 2 test must be repeated every 5 years, annualized capital cost is based on the cost for conducting a method 25, method 25A or 25C test, figured at 7% over 5 years.

^c All controlled landfills must conduct quarterly surface emissions testing at all penetrations of the cover. We assume weekly equipment rental costs at \$600/week, and one week of rental per quarter. In addition, the landfill will need to purchase calibration gases and hydrogen fuel (at a cost of \$103.50 per event) to operate the surface monitoring equipment. [(\$600+ \$103.5) per week * 4 weeks/year = \$2,814/year]

^d All controlled landfills must conduct monthly wellhead monitoring.

^e Sources required to install a control system purchase and install this equipment prior to their initial performance test. All sources operating controls maintain this equipment annually. Annualized cost is figured at 7% over 15 years.

^f All sources operating controls maintain the flow meter, thermocouple, and data recorder annually at a cost of \$1,000.

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

The average annualized capital/startup costs for this ICR are \$94,400. This is the total of column E in the above table.

The total operation and maintenance (O&M) costs for this ICR are \$763,000. This is the total of column H.

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 \$858,000. These are the recordkeeping costs.

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 activities such 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 \$161,000.

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

Managerial	\$68.37 (GS-13, Step 5, \$42.73 + 60%)
Technical	\$50.72 (GS-12, Step 1, \$31.70 + 60%)

Clerical \$27.46 (GS-6, Step 3, \$17.16 + 60%)

These rates are from the Office of Personnel Management (OPM), 2020 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 at the end of this document in Table 2: Average Annual EPA Burden and Cost – NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal).

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

Based on our research for this ICR, on average over the next three years, approximately 190 existing respondents will be subject to these standards and an additional 2 new and 25 modified landfills per year that will become subject to these same standards over the three-year period of this ICR. The overall average number of respondents, as shown in the table below, is 217 per year.

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

Number of Respondents					
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports		
	(A)	(B)	(C)	(D)	(E)
Year	Number of New Respondents ^a	Number of Existing Respondents ^b	Number of Existing Respondents that keep records but do not submit reports	Number of Existing Respondents That Are Also New Respondents	Number of Respondents (E=A+B+C-D)
1	27	163	0	0	190
2	27	190	0	0	217
3	27	217	0	0	244
Average	27	190	0	0	217

^a Based on the data sources used to support the 2016 NSPS rulemaking, there were 14 new landfill over an 8-year period (2 new landfills per year) and 123 modified landfills over a 5-year period (25 modified landfills per year).

^b The previous ICR (2498.03) estimated respondents based on data collected during the 2016 final rule. Due to the gap years between the previous ICR (2498.03) and Year 1 of this ICR, the 'Number of Existing Respondents' in year 3 of the previous ICR (136) has been incremented by 27 modified and new sources (136 + 27 = 163) to show the number of existing respondents in Year 1 of this ICR.

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 217.

The total number of annual responses per year² is calculated using the following table:

² Detailed assumptions upon which the estimates for the number of responses for private and public landfills are based appear at the end of this document Table 1A: Annual Respondent Burden and Cost: Privately-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX)

Total Annual Number of Responses					
(A) Information Collection Activity	(B1) Number of Privately- owned Respondents	(B2) Number of Publicly- owned Respondents	(C) Number of Responses per Responden t	(D) Number of Existing Respondents That Keep Records But Do Not Submit Reports	(E) Total Responses $E=(B1+B2)xC+D$
Initial performance test report ^a	5	3	1	NA	8
Initial design capacity report ^b	0	0	1	NA	0
Amended design capacity report ^c	0	0	1	NA	0
Report of NMOC rate (Tier 1)	10	19	1	NA	29
Report of NMOC rate (Tier 2)	10	19	1	NA	29
Landfill Closure Report	0	0	1	NA	0
Equipment Removal Report	0	0	1	NA	0
Collection and Control System Design Plan	5	3	1	NA	8
Revised C&C System design plan	0.5	0.3	1	NA	0.8
Annual Report	122	68	1	NA	190
Corrective Action Analysis	1	1	1	NA	2
Implementation Timeline	1	1	1	NA	2
Root Cause Analysis	1	1	1	NA	2
Wet Landfill Monitoring Report	15	17	1	NA	32
Total Annual Number of Responses (rounded)					303

^a We estimate that, over the three-year period of this ICR, an average of 8 respondents per year (5 privately-owned and 3 publicly-owned) will need to install controls, perform the initial performance test, and submit an initial performance test report. We assume that each respondent will take 12 hours to attend the test, review the report (written by the testing company), and submit the report.

^b Only new landfills with a design capacity less than 2.5 million Mg and 25 million m³ are required to file an initial design capacity report. This ICR assumes all new landfills will be large in size, therefore 0 respondents would file this initial design capacity report. This ICR assumes the NSPS sites would be legacy controllers during this reporting period. Legacy controllers are exempt from this requirement.

^c This ICR assumes that no landfills subject to NSPS Subpart XXX will file an amended design capacity report during the three-year period of this ICR. Landfills subject to EG Subpart Cf that amend their design capacity will become subject to XXX. That burden is calculated under the ICR for EG Subpart Cf [EPA ICR Number 2522.03].

The number of Total Annual Responses is 303.

The total annual labor costs are \$11,600,000. Details regarding these estimates may be found at the end of this document in both Table 1A: Annual Respondent Burden and Cost: Privately-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal) and Table 1B: Annual Respondent Burden and Cost:

(Renewal) and Table 1B: Annual Respondent Burden and Cost: Publicly-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal).

Publicly-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal).

6(e) Bottom Line Burden Hours and Cost Tables

The detailed bottom line burden hours and cost calculations for the respondents and for the Agency are shown in both Table 1A: Annual Respondent Burden and Cost: Privately-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal), Table 1B: Annual Respondent Burden and Cost: Publicly-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal), and, for the Agency, in Table 2: Average Annual EPA Burden and Cost – NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal), at the end of this document, respectively, and summarized below.

(i) Respondent Tally

The total annual labor hours are 176,000 hours (rounded). Details regarding these estimates may be found in both Table 1A: Annual Respondent Burden and Cost: Privately-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal) and Table 1B: Annual Respondent Burden and Cost: Publicly-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (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 581 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$858,000. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

(ii) The Agency Tally

The average annual Agency burden and cost over next three years is estimated to be 2,360 labor hours at a cost of \$161,000; see below in Table 2: Average Annual EPA Burden and Cost – NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (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 an adjustment increase in the total estimated burden as currently identified in the OMB Inventory of Approved Burdens. This increase in burden is due to changes in several areas. The previous ICR (2498.03) estimated respondents based on data collected during the 2016 final rule. Due to the gap years between the previous ICR and this ICR renewal, the number of respondents has been adjusted to reflect the projected additional new and modified sources becoming subject to the NSPS during this period and the expected number of landfills controlling between years 2022 through 2024 based on projected emissions, as waste disposal quantities increase over time at active landfills, and assuming that in these years landfills will be controlling under the more stringent 34 Mg/yr requirements. This ICR also reflects the average annual respondents and burden for the rule activities following implementation. These adjustments have resulted in an increase in the total number of respondents due to sources modifying and becoming subject to these regulations. This ICR also reflects the implementation of the rule and adjustments to the number of sources conducting one-time activities versus recurring activities. The previous ICR included many new sources with associated testing and capital/startup costs. These costs have decreased in this ICR due to these sources having complied with their initial compliance requirements during the period of the previous ICR. In this ICR renewal, the increase in the number of existing sources has led to an increase in O&M costs. More existing sources are performing routine surface emission and wellhead monitoring, which is labor intensive. We have also adjusted the burden for sources to familiarize themselves with the rule, as most sources have been complying with rule requirements for the last few years. Although the rule has been amended since the previous ICR, the rule changes did not result in an increase in burden.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 581 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; adjusting the existing ways to comply with any previously-applicable instructions and requirements; training personnel to be able to respond to a collection of information; searching 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-2020-0203. 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) 566-1725. 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-2020-0203 and OMB Control Number 2060-0697 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 Respondent Burden and Cost: Privately-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal)

Burden Item	(A) Person Hours per Occurrence	(B) Number of Occurrences Per Respondent Per Year	(C) Technical Person-Hours per Respondent Per Year (A x B)	(D) Average Number of Respondents Per Year ^a	(E) Civil Engineer Technician Hours per Year (C x D)	(F) Civil Engineer Hours per Year (C x D)	(G) Management Person- Hours per Year (F x .05)	(H) Clerical Person- Hours per Year (F x 0.1)	(I) Total Labor Costs Per Year ^b	Footnotes
1. Applications	NA									
2. Surveys and Studies	NA									
3. Reporting Requirements										
A. Read and Understand Rule Requirements										
1. Existing Sources	4	1	4	101	0	404	20	40	\$42,387	c
2. New sources	40	1	40	1	0	40	2	4	\$4,197	c
B. Required Activities										
1. Initial performance test report	12	1	12	5	0	60	3	6	\$6,295	d
2. Surface methane monitoring quarterly	44	4	176	122	21,472	0	0	0	\$1,202,582	e
3. Wellhead monitoring monthly	40	12	480	122	58,560	0	0	0	\$3,279,770	e
C. Create Information	Included in 3B									
D. Gather Information	Included in 3B									
E. Report Preparation										
1. Initial design capacity report	2	1	2	0	0	0	0	0	\$0	f
2. Amended design capacity	2	1	2	0	0	0	0	0	\$0	g

report										
3. Report of NMOC rate (Tier 1)	8	1	8	10	0	80	4	8	\$8,394	h
4. Report of NMOC rate (Tier 2)	12	1	12	10	0	120	6	12	\$12,590	h
5. Landfill Closure Report	1	1	1	0	0	0	0	0	\$0	i
6. Equipment Removal Report	36	1	36	0	0	0	0	0	\$0	i, j
7. Collection and Control System Design Plan	80	1	80	5	0	400	20	40	\$41,968	d, k
8. Revised C&C System design plan	20	1	20	0.5	0	10	1	1	\$1,074	l
9. Initial Performance Test	Included in 3B									
10. Compliance Report	Included in 3B									
11. Annual Report	27	1	27	122	0	3,294	165	329	\$345,604	m
12. Corrective Action Analysis	15	1	15	1	0	15	1	2	\$1,574	n
13. Implementation Timeline	15	1	15	1	0	15	1	2	\$1,574	n
14. Root Cause Analysis	15	1	15	1	0	15	1	2	\$1,574	n
15. Wet Landfill Monitoring Report	15	1	15	15	0	225	11	23	\$23,607	o
Subtotal for Reporting Requirements						85,412			\$4,973,189	
4. Recordkeeping Requirements										
A. Read Instructions	Included in 3A									
B. Plan Activities	NA									
C. Implement Activities	NA									
D. Develop Record System	NA									
E. Record Information										

1. Data Compilation and Review (controllers)	5	12	60	122	0	7,320	366	732	\$768,008	p
2. Recordkeeping and Data Storage (controllers)	11	12	132	122	0	16,104	805	1,610	\$1,689,618	p
3. Recordkeeping and Data Storage (others)	4	1	4	0	0	0	0	0	\$0	q
E. Personnel Training	NA									
F. Time for Audits	NA									
Subtotal for Recordkeeping Requirements						26,938			\$2,457,626	
Total Labor Burden and Costs (rounded)						112,000			\$7,430,000	r
Total Capital and O&M Cost (rounded)									\$527,000	r
Grand Total (rounded)									\$7,960,000	r

Assumptions:

- ^a We assume that, during the three-year period of this ICR, there will be an average of 190 landfills subject to the requirements of NSPS Subpart XXX.
- ^b This ICR uses mean hourly wage for the following labor categories from the United States Department of Labor, Bureau of Labor Statistics, May 2019, “National Occupational Employment and Wage Estimates United States” for employees at privately-owned landfills: Managers, All Other for Managerial Labor, Civil Engineers, Civil Engineer Technicians, and Office Clerks, General for Clerical Labor. The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.
- ^c We estimate that, over the three-year period of this ICR, an average of 190 existing respondents per year (101 privately-owned and 89 publicly-owned) will need to re-familiarize with the requirements of the rule. We have assumed that each existing respondent will take 4 hours to read instructions as part of their reporting requirements. We estimate that, over the three-year period of this ICR, an average of 2 new respondents per year (1 privately-owned and 1 publicly-owned) will need to familiarize with the requirements of the rule. We have assumed that each new respondent will take 40 hours to read instructions as part of their reporting requirements.
- ^d We estimate that, over the three-year period of this ICR, an average of 8 respondents per year (5 privately-owned and 3 publicly-owned) will need to install controls, perform the initial performance test, and submit an initial performance test report. We assume that each respondent will take 12 hours to attend the test, review the report (written by the testing company), and submit the report. Based on the regulatory database, 64% of these respondents are private and 36% are public.
- ^e We estimate that, over the three-year period of this ICR, an average of 190 respondents per year (122 privately-owned and 68 publicly-owned) operating controlled landfills will need to conduct quarterly surface emissions monitoring and monthly well emissions monitoring. For surface monitoring, the average acreage of

controlled sites is estimated to be 174 acres and we estimate monitoring labor at 0.25 hours per acre for a total of 44 labor hours (174 acres x 0.25 hr/acre = 43.5 hours, rounded to 44) per monitoring event. For wellhead monitoring, the estimated burden was based on industry consultation of \$2000 per month during the most recent ICR renewal for subpart WWW (ICR# 1557.09), or approximately 40 hours of technician labor time. Cost of re-monitoring for exceedances of surface monitoring or wellhead monitoring are not included because the rule does not require re-monitoring unless an exceedance is found. Landfills can minimize the number of exceedances found by ensuring the GCCS is well-operated and the surface is well sealed.

^f The initial design capacity report applies to new landfills with a design capacity smaller than 2.5 million Mg. We assume that all new landfills will have a design capacity exceeding 2.5 million Mg. Therefore, this one-time requirement will not apply to new landfills. We assume that the existing NSPS landfills with design capacity less than 2.5 million Mg have submitted this report, and are therefore exempt from this requirement.

^g We assume that no landfills currently subject to Subpart XXX will submit an amended design capacity report during the three-year period of this ICR.

^h We estimate that, over the three-year period of this ICR, an average of 29 respondents per year (10 privately-owned and 19 publicly-owned) will submit Tier 1 reports and another 29 respondents will submit Tier 2 reports. We assume that 50 percent of uncontrolled landfills will use Tier 1 calculations annually and 50 percent will use Tier 2 calculations once every 5 years for their NMOC reports. Of the landfills estimated to remain uncontrolled in the regulatory database 64% are public and 36% are private.

ⁱ We have assumed that no controlled landfill will close or remove equipment during this ICR period. None of the greenfields or modified sources are predicted to close during this ICR period.

^j Equipment Removal Report requires inclusion of 3 successive NMOC rates using Tier 2 calculations to demonstrate landfill is below the NMOC threshold.

^k Prior to installing a collection and control system, a landfill is required to submit a Collection and Control System Design Plan for approval. This requirement applies only to landfills controlling under the revised 34 Mg/yr requirement. This requirement does not apply to landfills that are "legacy" controllers (i.e. those landfills already subject to controls under the original 50 Mg/yr requirement).

^l We have assumed that 10% of landfills installing a collection and control system will revise their design plan. We estimate that, over the three-year period of this ICR, an average of 8 respondents per year (5 privately-owned and 3 publicly-owned) will submit a Collection and Control System Design Plan. This results in submittal of 0.8 C&C System Design Plan revisions per year ($5 \times 0.1 + 3 \times 0.1 = 0.8$ revisions/year).

^m All controlled landfills are required to submit an annual report. We estimate that, over the three-year period of this ICR, an average of 190 respondents per year (122 privately-owned and 68 publicly-owned) operating controlled landfills will need to submit this report. The estimated burden was based on industry consultation of \$5000 per year for compliance reporting (see comment on recent ICR renewal for subpart WWW, ICR# 1557.09). Since this estimate included an assumption of a semi-annual report to satisfy the requirements of the landfills NESHAP, we adjusted this estimate by half to account for the single report required by this NSPS, or \$2500, which is approximately 27 technical hours per occurrence.

ⁿ We assume that, during the three-year period of this ICR, an average of one privately-owned landfill per year and one publicly-owned landfill per year will be required to conduct a root cause analysis, corrective action analysis, and implementation timeline. These items are not required by the rule for controlling landfills. A root cause analysis is only required if the landfill has an exceedance of a wellhead parameter that is identified and cannot be corrected within 15 days. If the exceedance cannot be corrected within 60 days the owner or operator must also conduct a corrective action analysis and develop and implementation schedule. These items must only be submitted for approval if the corrective action will take longer than 120 days to correct.

^o Landfills with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters that have employed leachate recirculation or added

liquids based on a Research, Development, and Demonstration permit must file this report. We assume that, during the three-year period of this ICR, 15 privately-owned landfills and 17 publicly-owned landfills will be required to file this report each year.

- ^p We estimate that, over the three-year period of this ICR, an average of 190 respondents per year (122 privately-owned and 68 publicly-owned) operating controlled landfills will need to compile, review and store these data records. The estimated burden was based on industry consultation of \$1000 per month for recordkeeping and data storage per month and \$500 for data compilation and review per month (see comment on recent ICR renewal for subpart WWW, ICR# 1557.09). This is approximately 5 technical hours per occurrence for data compilation and review and 11 hours for recordkeeping and data storage.
- ^q The respondents subject to this recordkeeping requirement (0) have a reporting requirement but are not required to control.
- ^r Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Table 1B: Annual Respondent Burden and Cost: Publicly-Owned Municipal Solid Waste Landfills - NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal)

Burden Item	(A) Person Hours per Occurrence	(B) Number of Occurrences Per Respondent Per Year	(C) Technical Person-Hours per Respondent Per Year (A x B)	(D) Average Number of Respondents Per Year ^a	(E) Civil Engineer Technician Hours per Year (C x D)	(F) Civil Engineer Hours per Year (C x D)	(G) Management Person- Hours per Year (F x .05)	(H) Clerical Person- Hours per Year (F x 0.1)	(I) Total Labor Costs Per Year ^b	Footnotes
1. Applications	NA									
2. Surveys and Studies	NA									
3. Reporting Requirements										
A. Read and Understand Rule Requirements										
1. Existing Sources	4	1	4	89	0	356	18	36	\$37,351	c
2. New sources	40	1	40	1	0	40	2	4	\$4,197	c
B. Required Activities										
1. Initial performance test report	12	1	12	3		36	2	4	\$3,777	d
2. Surface methane monitoring quarterly	44	4	176	68	11,968	0	0	0	\$670,292	e
3. Wellhead monitoring monthly	40	12	480	68	32,640	0	0	0	\$1,828,068	e
C. Create Information	Included in 3B									
D. Gather Information	Included in 3B									
E. Report Preparation										
1. Initial design capacity report	2	1	2	0	0	0	0	0	\$0	f
2. Amended design capacity report	2	1	2	0	0	0	0	0	\$0	g
3. Report of NMOC rate	8	1	8	19	0	152	8	15	\$15,948	h

(Tier 1)										
4. Report of NMOC rate (Tier 2)	12	1	12	19	0	228	11	23	\$23,922	h
5. Landfill Closure Report	1	1	1	0	0	0	0	0	\$0	i
6. Equipment Removal Report	36	1	36	0	0	0	0	0	\$0	i, j
7. Collection and Control System Design Plan	80	1	80	3	0	240	12	24	\$25,181	d, k
8. Revised C&C System design plan	20	1	20	0.3	0	6	0	1	\$604	l
9. Initial Performance Test	Included in 3B									
10. Compliance Report	Included in 3B									
11. Annual Report	27	1	27	68	0	1,836	92	184	\$192,632	m
12. Corrective Action Analysis	15	1	15	1	0	15	1	2	\$1,574	n
13. Implementation Timeline	15	1	15	1	0	15	1	2	\$1,574	n
14. Root Cause Analysis	15	1	15	1	0	15	1	2	\$1,574	n
15. Wet Landfill Monitoring Report	15	1	15	17	0	255	13	26	\$26,754	o
Subtotal for Reporting Requirements						48,281			\$2,833,448	
4. Recordkeeping Requirements										
A. Read Instructions	Included in 3A									
B. Plan Activities	NA									
C. Implement Activities	NA									
D. Develop Record System	NA									
E. Record Information										
1. Data Compilation and Review (controllers)	5	12	60	68	0	4,080	204	408	\$428,072	p
2. Recordkeeping and Data	11	12	132	68	0	8,976	449	898	\$941,757	p

Storage (controllers)										
3. Recordkeeping and Data Storage (others)	4	1	4	0	0	0	0	0	\$0	q
E. Personnel Training	NA									
F. Time for Audits	NA									
Subtotal for Recordkeeping Requirements								15,014	\$1,369,829	
Total Labor Burden and Costs (rounded)								63,300	\$4,200,000	r
Total Capital and O&M Cost (rounded)									\$331,000	r
Grand Total (rounded)									\$4,530,000	r

Assumptions:

- ^a We assume that, during the three-year period of this ICR, there will be an average of 190 landfills subject to the requirements of NSPS Subpart XXX.
- ^b This ICR uses mean hourly wage for the following labor categories from the United States Department of Labor, Bureau of Labor Statistics, May 2019, “National Occupational Employment and Wage Estimates United States” for employees at privately-owned landfills: Managers, All Other for Managerial Labor, Civil Engineers, Civil Engineer Technicians, and Office Clerks, General for Clerical Labor. The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry. We assume that publicly-owned landfills will be operated and managed by private contractors.
- ^c We estimate that, over the three-year period of this ICR, an average of 190 existing respondents per year (101 privately-owned and 89 publicly-owned) will need to re-familiarize with the requirements of the rule. We have assumed that each existing respondent will take 4 hours to read instructions as part of their reporting requirements. We estimate that, over the three-year period of this ICR, an average of 2 new respondents per year (1 privately-owned and 1 publicly-owned) will need to familiarize with the requirements of the rule. We have assumed that each new respondent will take 40 hours to read instructions as part of their reporting requirements.
- ^d We estimate that, over the three-year period of this ICR, an average of 8 respondents per year (5 privately-owned and 3 publicly-owned) will need to install controls, perform the initial performance test, and submit an initial performance test report. We assume that each respondent will take 12 hours to attend the test, review the report (written by the testing company), and submit the report. Based on the regulatory database, 64% of these respondents are private and 36% are public.
- ^e We estimate that, over the three-year period of this ICR, an average of 190 respondents per year (122 privately-owned and 68 publicly-owned) operating controlled landfills will need to conduct quarterly surface emissions monitoring and monthly well emissions monitoring. For surface monitoring, the average acreage of controlled sites is estimated to be 174 acres and we estimate monitoring labor at 0.25 hours per acre for a total of 44 labor hours (174 acres x 0.25 hr/acre = 43.5 hours, rounded to 44) per monitoring event. For wellhead monitoring, the estimated burden was based on industry consultation of \$2000 per month during the most recent ICR renewal for subpart

WWW (ICR# 1557.09), or approximately 40 hours of technician labor time. Cost of re-monitoring for exceedances of surface monitoring or wellhead monitoring are not included because the rule does not require re-monitoring unless an exceedance is found. Landfills can minimize the number of exceedances found by ensuring the GCCS is well-operated and the surface is well sealed.

- ^f The initial design capacity report applies to new landfills with a design capacity smaller than 2.5 million Mg. We assume that all new landfills will have a design capacity exceeding 2.5 million Mg. Therefore, this one-time requirement will not apply to new landfills. We assume that the existing NSPS landfills with design capacity less than 2.5 million Mg have submitted this report, and are therefore exempt from this requirement.
- ^g We assume that no landfills currently subject to Subpart XXX will submit an amended design capacity report during the three-year period of this ICR.
- ^h We estimate that, over the three-year period of this ICR, an average of 29 respondents per year (10 privately-owned and 19 publicly-owned) will submit Tier 1 reports and another 29 respondents will submit Tier 2 reports. We assume that 50 percent of uncontrolled landfills will use Tier 1 calculations annually and 50 percent will use Tier 2 calculations once every 5 years for their NMOC reports. Of the landfills estimated to remain uncontrolled in the regulatory database 64% are public and 36% are private.
- ⁱ We have assumed that no controlled landfill will close or remove equipment during this ICR period. None of the greenfields or modified sources are predicted to close during this ICR period.
- ^j Equipment Removal Report requires inclusion of 3 successive NMOC rates using Tier 2 calculations to demonstrate landfill is below the NMOC threshold.
- ^k Prior to installing a collection and control system, a landfill is required to submit a Collection and Control System Design Plan for approval. This requirement applies only to landfills controlling under the revised 34 Mg/yr requirement. This requirement does not apply to landfills that are "legacy" controllers (i.e. those landfills already subject to controls under the original 50 Mg/yr requirement).
- ^l We have assumed that 10% of landfills installing a collection and control system will revise their design plan. We estimate that, over the three-year period of this ICR, an average of 8 respondents per year (5 privately-owned and 3 publicly-owned) will submit a Collection and Control System Design Plan. This results in submittal of 0.8 C&C System Design Plan revisions per year ($5 \times 0.1 + 3 \times 0.1 = 0.8$ revisions/year).
- ^m All controlled landfills are required to submit an annual report. We estimate that, over the three-year period of this ICR, an average of 190 respondents per year (122 privately-owned and 68 publicly-owned) operating controlled landfills will need to submit this report. The estimated burden was based on industry consultation of \$5000 per year for compliance reporting (see comment on recent ICR renewal for subpart WWW, ICR# 1557.09). Since this estimate included an assumption of a semi-annual report to satisfy the requirements of the landfills NESHAP, we adjusted this estimate by half to account for the single report required by this NSPS, or \$2500, which is approximately 27 technical hours per occurrence.
- ⁿ We assume that, during the three-year period of this ICR, an average of one privately-owned landfill per year and one publicly-owned landfill per year will be required to conduct a root cause analysis, corrective action analysis, and implementation timeline. These items are not required by the rule for controlling landfills. A root cause analysis is only required if the landfill has an exceedance of a wellhead parameter that is identified and cannot be corrected within 15 days. If the exceedance cannot be corrected within 60 days the owner or operator must also conduct a corrective action analysis and develop and implementation schedule. These items must only be submitted for approval if the corrective action will take longer than 120 days to correct.
- ^o Landfills with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters that have employed leachate recirculation or added liquids based on a Research, Development, and Demonstration permit must file this report. We assume that, during the three-year period of this ICR, 15 privately-owned landfills and 17 publicly-owned landfills will be required to file this report each year.
- ^p We estimate that, over the three-year period of this ICR, an average of 190 respondents per year (122 privately-owned and 68 publicly-owned) operating controlled landfills

will need to compile, review and store these data records. The estimated burden was based on industry consultation of \$1000 per month for recordkeeping and data storage per month and \$500 for data compilation and review per month (see comment on recent ICR renewal for subpart WWW, ICR# 1557.09). This is approximately 5 technical hours per occurrence for data compilation and review and 11 hours for recordkeeping and data storage.

^q The respondents subject to this recordkeeping requirement (0) have a reporting requirement but are not required to control.

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

Table 2: Average Annual EPA Burden and Cost – NSPS for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart XXX) (Renewal)

Burden Item	(A) EPA hours per occurrence	(B) Number of occurrences per plant per year	(C) EPA person- hours per plant per year (C=AxB)	(D) Plants per year ^a	(E) Technical hours per year (CxD)	(F) Management hours per year (F=Ex0.05)	(G) Clerical hours per year (G=Ex0.1)	(H) Costs, \$ ^b	Footnotes
1 Read and understand rule requirements (10 EPA Regions)	4	1	4	10	40	2	4	\$2,275	c
2 Enter and update information into agency recordkeeping system	2	1	2	190	380	19	38	\$21,616	d
3 Required activities								\$0	
A. Observe initial performance test	12	0.2	2	8	19	1	2	\$1,092	e
B. Observe surface methane monitoring quarterly	20	0.2	4	190	760	38	76	\$43,232	e
C. Review operating parameters	1	1	1	8	8	0	1	\$455	f
D. Review continuous parameter monitoring	1	1	1	8	8	0	1	\$455	f
E. Review notification of performance test	2	1	2	8	16	1	2	\$910	f
4 Excess Emissions Enforcement Activities	24	0.1	2	8	19	1	2	\$1,092	g
5 Reporting requirements								\$0	
A. Review initial design capacity report	1	1	1	0	0	0	0	\$0	h
B. Review amended design capacity report	2	0	0	0	0	0	0	\$0	i
C. Review annual NMOC emission rate report	2	1	2	58	116	6	12	\$6,599	j
D. Review landfill closure report	1	1	1	0	0	0	0	\$0	k
E. Review equipment removal report	1	1	1	0	0	0	0	\$0	k

F.	Review Collection and Control System Design Plan	15	1	15	8	120	6	12	\$6,826	e, l
G.	Review Revised Collection and Control System Design Plan	5	0.1	1	1	0	0	0	\$23	m
H.	Review Initial Performance Test Report	12	1	12	8	96	5	10	\$5,461	e
I.	Review Annual Report	2	1	2	190	380	19	38	\$21,616	n
J.	Review Corrective Action Analysis	3.75	1	4	2	8	0	1	\$427	o
K.	Review Implementation Timeline	3.75	1	4	2	8	0	1	\$427	o
L.	Review Root Cause Analysis	3.75	1	4	2	8	0	1	\$427	o
M	Wet Landfills Monitoring Report	2	1	2	32	64	3	6	\$3,641	p
7	Travel Expenses for Tests Attended	3 days * (\$118 hotel + \$58 meals/incidentals) + (\$600 round trip) = \$1128 per trip			40				\$44,669	q
TOTAL (Rounded)							2,360		\$161,000	r

Assumptions:

- ^a We assume that, during the three-year period of this ICR, there will be an average of 68 privately-owned and 122 publicly-owned landfills subject to the requirements of NSPS Subpart XXX.
- ^b This ICR uses the following labor rates: \$68.37 for managerial, \$50.72 for technical, and \$27.46 for clerical labor. These rates are from the Office of Personnel Management (OPM), 2020 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees.
- ^c The number of plants per year is the number of EPA Regions (10 regions). We assume one EPA employee at each Region offices familiarizes with the rule each year.
- ^d The number of plants per year is based on the total number of landfills that are subject to the standard as well as the number of sources that fall below the thresholds of the standard.
- ^e The number of observations of initial performance tests and surface methane monitoring per year is based on the assumption that EPA personnel will observe 20% of the landfills where initial performance tests (8 per year) and surface methane monitoring (190 per year) occur.
- ^f The number of plants is based on the average number of landfills per year expected to install controls, perform the initial performance test, begin monitoring operating parameters, and submit an initial performance test report during the three-year period of this ICR.
- ^g The number of plants per year is based on the assumption that of the landfills that do the initial performance test, 10% of them will have exceedances and need enforcement.

- ^h The initial design capacity report applies to new landfills with a design capacity smaller than 2.5 million Mg. We assume that all new landfills will have a design capacity exceeding 2.5 million Mg. Therefore, this one-time requirement will not apply to new landfills. We assume that the existing NSPS landfills with design capacity less than 2.5 million Mg have submitted this report, and are therefore exempt from this requirement.
- ⁱ We assume that no landfills currently subject to Subpart XXX will have modifications requiring the submittal of an amended design capacity report during the three-year period of this ICR.
- ^j The number of plants is the number of uncontrolled landfills that use Tier 1 or Tier 2 calculations for their NMOC reports. We estimate that, over the three-year period of this ICR, an average of 58 respondents per year will submit Tier 1 or Tier 2 reports.
- ^k We assume that no controlled landfill will close or remove equipment during the three-year period of this ICR.
- ^l We estimate that an average of 8 landfills per year will submit a Collection and Control System Design Plan for approval during the three-year period of this ICR. This requirement applies only to landfills controlling under the revised 34 Mg/yr requirement. This requirement does not apply to landfills that are "legacy" controllers (i.e. those landfills already subject to controls under the original 50 Mg/yr requirement).
- ^m We assume that 10 percent of respondents submitting a collection and control system design plan will submit a revised design plan to account for changes to the landfill or the GCCS as allowed for in 60.767(h).
- ⁿ All controlled landfills are required to submit an annual report. We estimate that, over the three-year period of this ICR, an average of 190 respondents per year (122 privately-owned and 68 publicly-owned) operating controlled landfills will need to submit this report.
- ^o Number of plants is based on the assumption that one public and one private landfill subject to controls will have at least one wellhead exceedance that takes longer than 60 days to correct.
- ^p We assume that, during the three-year period of this ICR, 15 privately-owned landfills and 17 publicly-owned landfills will be required to file this report each year.
- ^q Total cost is based on the number of trips taken by EPA to observe performance tests in year 1 (3.A. & 3.B.) multiplied by \$1128 per trip. The source for hotel and meals/incidental costs is based on FY' 15 per diem rates, averaged across all locations in the United States. Airfares are estimated based on experience from other rulemakings. See: <http://www.gsa.gov/portal/category/100120>
- ^r Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.