

**Table 1a. Annual Respondent Burden and Cost NSPS
for Publicly-Owned Municipal Solid Waste Landfills - (40 CFR Part 63, Subpart WWW) (Renewal)**

Burden Item	(A) Respondent Hours per Occurrence ^a	(B1) Annualized Non-Labor Capital Costs Per Occurrence	(B2) Annual Non- Labor O&M Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Civil Engineer Technician Hours per Respondent Per Year (A × C)	(E) Technical Hours per Respondent Per Year (A × C)	(F) Number of Respondents Per Year	(G) Technical Hours per Year @ \$117.92 (E × F)	(H) Clerical Hours per Year @ \$57.02 (H × 0.1)	(I) Management Hours per Year @ \$147.40 (H × .05)	(J) Total Labor Costs Per Year ¹	(K) Total Annualized Non-Labor Capital and O&M Costs Per Year (B1+B2) × (C × F)
1. Applications	na											
2. Surveys and Studies	na											
3. Reporting Requirements												
A. Familiarization with Regulatory Requirements^c	5	\$0		1	0	1	238	238	23.80	11.90	\$31,174.78	\$0
B. Required Activities												
1. Surface methane monitoring quarterly ^{d,e}	12	\$1,983.66	\$1,000.00	1	0	12	0	0	0	0	\$0	\$0
2. Wellhead monitoring monthly ^{e,f}	44	\$703.50		4	176	0	0	0	0	0	\$0	\$0
3. Wellhead monitoring monthly ^{e,f}	40	\$17.00		12	480	0	0	0	0	0	\$0	\$0
C. Create Information	Included in 3B											
D. Gather Information	Included in 3B											
E. Report Preparation												
1. Initial design capacity report^g	2	\$0		1	0	2	0	0	0	0	\$0	\$0
2. Amended design capacity report^g	2	\$0		1	0	2	0	0	0	0	\$0	\$0
3. Report of NMOC rate (Tier 1)^g	8	\$0		1	0	8	0	0	0	0	\$0	\$0
4. Report of NMOC rate (Tier 2)^{e,h}	12	\$2,708.28		1	0	12	0	0	0	0	\$0	\$0
5. Landfill Closure Report^e	1	\$0		1	0	1	0	0	0	0	\$0	\$0
6. Equipment Removal Report^e	36	\$0		1	0	36	0	0	0	0	\$0	\$0
7. Collection and Control System Design Plan^e	80	\$0		1	0	80	0	0	0	0	\$0	\$0
8. Revised design plan^e	20	\$0		1	0	20	0	0	0	0	\$0	\$0
9. Initial Performance Test	Included in 3B											
10. Compliance Report	Included in 3B											
11. Annual Report^e	27	\$0		1	0	27	0	0	0	0	\$0	\$0
Subtotal for Reporting Requirements								273.70			\$31,174.78	\$0
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. Recordkeeping and Data Storage (controllers)^e	5	\$0		12	0	60	0	0	0	0	\$0	\$0
2. Recordkeeping and Data Storage (controllers)^e	11	\$0		12	0	132	0	0	0	0	\$0	\$0
3. Recordkeeping and Data Storage (others)^e	4	\$0		1	0	4	0	0	0	0	\$0	\$0
E. Personnel Training	na											
F. Time for Audits	na											
Subtotal for Recordkeeping Requirements								0			\$0	\$0
TOTAL LABOR BURDEN AND COSTS (rounded)¹								274			\$31,200	\$0
TOTAL CAPITAL AND O&M COST (rounded)¹												\$0
GRAND TOTAL (rounded)¹												\$31,200

FOOTNOTES

^a We have assumed all respondent hours equals the number of Technical Hours except for surface methane monitoring and wellhead monitoring which fall under Civil Engineer Technician Hours.

^b

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.

^c We have assumed that it will take five hours for each respondent to read instructions as part of their reporting requirements. Based on the regulatory database, 64% of these respondents are private and 36% are public. There are a total of 1,147 existing MSW landfills estimated have a design capacity of 2.5 million Mg or more and expected to review the rule requirements. Of these it is estimated that 60 percent of respondents are subject to Subpart WWW and 40 percent of the respondents are subject to a state or federal plan implementing Subpart Cc. There are no new sources anticipated. If a landfill constructs or modifies after July 17, 2014, the landfill will be subject to Subpart XXX.

^d

Based on the annualized capital costs for method 25 or 25C over 15 years, which is the expected lifetime of the flare or other destruction device. Other capital costs related to flare station monitoring include a thermocouple, flowmeter and data recorder. The costs for these equipment purchases were provided based on industry comment on the ICR renewal 1557.09 burden. These capital/start-up costs were also annualized over 15 years, since this is a one-time requirement. In addition, the industry comments also reported an annual O&M cost for these equipment in the most recent ICR renewal, and these costs were incorporated here.

^e

No respondents are included here because the burden are accounted for in the estimates for the corresponding burden line items under the ICRs for 40 CFR Part 60 Subpart XXX (ICR 2498.03, OMB 2060-0697) and 40 CFR Part 60 Subpart Cf (ICR 2522.02, OMB 2060-0720).

^f

For surface monitoring: The average acreage of controlled sites is estimated to be 174 acres (44 labor hours @ 0.25 hours per acre). We assumed weekly equipment rental costs at \$350/week, and one week per occurrence. In addition, the landfill will need to purchase calibration gases and hydrogen fuel to operate the surface monitoring equipment, 36% of which are public and 64% of which are private. 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. The burden provided did not breakdown labor vs. non-labor costs, therefore we have not incorporated equipment rental costs in this estimate. We did however include costs for calibration gases for the wellhead equipment. 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.

^g

No respondents are estimated here because the facilities have already submitted initial design capacity reports under WWW. Amended design capacity reports would be submitted as sources were modified with additional capacity and would become subject to subpart XXX.

^h Based on the annualized capital costs for conducting a method 25, method 25A or 25C over 5 years, since a Tier 2 test must be repeated every 5 years. Labor burden is assigned once every 5 years.

**Table 1b: Annual Respondent Burden and Cost - NSPS
for Privately-Owned Municipal Solid Waste Landfills - (40 CFR Part 63, Subpart WWW) (Renewal)**

Burden Item	(A) Respondent Hours per Occurrence ^a	(B1) Annualized Non-Labor Capital Costs Per Occurrence	(B2) Annual Non- Labor O&M Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Civil Engineer Technician Hours per Respondent Per Year (A × C)	(E) Technical Hours per Respondent Per Year (A × C)	(F) Number of Respondents Per Year	(G) Technical Hours per Year @ \$117.92 (E × F)	(H) Clerical Hours per Year @ \$57.02 (H × 0.1)	(I) Management Hours per Year @ \$147.40 (H × .05)	(J) Total Labor Costs Per Year ^b	(K) Total Annualized Non-Labor Capital and O&M Costs Per Year (B1+B2) × (C × F)
1. Applications	na											
2. Surveys and Studies	na											
3. Reporting Requirements												
A. Familiarization with Regulatory Requirements ^c	5	\$0		1	0	1	423	423	42.30	21.15	\$55,407.27	\$0
B. Required Activities												
1. Initial Performance Test report ^{d,e}	12	\$1,983.66	\$1,000	1	0	12	0	0	0	0	\$0	\$0
2. Surface Performance Monitoring Quarterly ^{a,e,f}	44	\$703.50		4	176	0	0	0	0	0	\$0	\$0
3. Wellhead monitoring monthly ^{a,e,f}	40	\$17		12	480	0	0	0	0	0	\$0	\$0
C. Create Information	Included in 3B											
D. Gather Information	Included in 3B											
E. Report Preparation												
1. Initial design capacity report ^g	2	\$0		1	0	2	0	0	0	0	\$0	\$0
2. Amended design capacity report ^g	2	\$0		1	0	2	0	0	0	0	\$0	\$0
3. Report of NMOC rate (Tier 1) ^g	8	\$0		1	0	8	0	0	0	0	\$0	\$0
4. Report of NMOC rate (Tier 2) ^{g,h}	12	\$2,708.28		1	0	12	0	0	0	0	\$0	\$0
5. Landfill Closure Report ^g	1	\$0		1	0	1	0	0	0	0	\$0	\$0
6. Equipment Removal Report ^g	36	\$0		1	0	36	0	0	0	0	\$0	\$0
7. Collection and Control System Design Plan ^g	80	\$0		1	0	80	0	0	0	0	\$0	\$0
8. Revised design plan ^g	20	\$0		1	0	20	0	0	0	0	\$0	\$0
9. Initial Performance Test	Included in 3B											
10. Compliance Report	Included in 3B											
11. Annual Report ^g	27	\$0		1	0	27	0	0	0	0	\$0	\$0
Subtotal for Reporting Requirements									486.45		\$55,407.27	\$0
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) ^e	5	\$0		12	0	60	0	0	0	0	\$0	\$0
2. Recordkeeping and Data Storage (controllers) ^e	11	\$0		12	0	132	0	0	0	0	\$0	\$0
3. Recordkeeping and Data Storage (others) ^e	4	\$0		1	0	4	0	0	0	0	\$0	\$0
E. Personnel Training	na											
F. Time for Audits	na											
Subtotal for Recordkeeping Requirements									0		\$0	\$0
TOTAL LABOR BURDEN AND COSTS (rounded)ⁱ									486		\$55,400	\$0
TOTAL CAPITAL AND O&M COST (rounded)ⁱ												\$0
GRAND TOTAL (rounded)ⁱ												\$55,400

FOOTNOTES

- a We have assumed all respondent hours equals the number of Technical Hours except for surface methane monitoring and wellhead monitoring which fall under Civil Engineer Technician Hours.
- b 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.
- c We have assumed that it will take five hours for each respondent to read instructions as part of their reporting requirements. Based on the regulatory database, 64% of these respondents are private and 36% are public. There are a total of 1,147 existing MSW landfills estimated have a design capacity of 2.5 million Mg or more and expected to review the rule requirements. Of these 8 is estimated that 60 percent of respondents are subject to Subpart WWW and 40 percent of the respondents are subject to a state or federal plan implementing Subpart Cc. There are no new sources anticipated. If a landfill constructs or modifies after July 17, 2014, the landfill will be subject to Subpart XXX.
- d Based on the annualized capital costs for method 25 or 25C over 15 years, which is the expected lifetime of the flare or other destruction device. Other capital costs related to flare station monitoring include a thermocouple, flowmeter and data recorder. The costs for these equipment purchases were provided based on industry comment on the ICR renewal 1557.09 burden. These capital/start-up costs were also annualized over 15 years, since this is a one-time requirement. In addition, the industry comments also reported an annual O&M cost for these equipment in the most recent ICR renewal, and these costs were incorporated here.
- e No respondents are included here because the burden is accounted for in the estimates for the corresponding burden line items under the ICRs for 40 CFR Part 60 Subpart XXX (ICR 2498.03, OMB 2060-0697) and 40 CFR Part 60 Subpart Cf (ICR 2522.02, OMB 2060-0720).
- f For surface monitoring: The average acreage of controlled sites is estimated to be 174 acres (44 labor hours @ 0.25 hours per acre). We assumed weekly equipment rental costs at \$350/week, and one week per occurrence. In addition, the landfill will need to purchase calibration gases and hydrogen fuel to operate the surface monitoring equipment. 38% of which are public and 64% of which are private. 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. The burden provided did not breakdown labor vs. non-labor costs, therefore we have not incorporated equipment rental costs in this estimate. We did however include costs for calibration gases for the wellhead equipment. 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.
- g No respondents are estimated here because the facilities have already submitted initial design capacity reports under WWW. Amended design capacity reports would be submitted as sources were modified with additional capacity and would become subject to subpart XXX.
- h Based on the annualized capital costs for conducting a method 25, method 25A or 25C over 5 years, since a Tier 2 test must be repeated every 5 years. Labor burden is assigned once every 5 years.

Table 1c: Annual Respondent Burden and Cost Breakdown by Affected Sector - NSPS for Municipal Solid Waste I

Affected Sector	Number of Respondents per Year (Average)	Number of Responses Per Year (Average)	Labor Hours		
			Reporting	Recordkeeping	Total
Total	661	661	760	0	760
Private Sector Only	423	423	486	0	486
Public Sector Only	238	238	274	0	274

Landfills (40 CFR Part 60, Subpart WWW) (Renewal)

Labor Cost	Capital and O&M Cost	Total Costs
\$86,600	\$ -	\$86,600
\$55,400	\$ -	\$55,400
\$31,200	\$ -	\$31,200

**Table 2 Average Annual EPA Burden and Cost - NSPS
for Municipal Solid Waste Landfills (40 CFR Part 63, Subpart WWW) (Renewal)**

Burden Item	EPA hours per occurrence (A)	Number of occurrences per year (B)	EPA hours per occurrence per year (C=A×B)	Technical hours per year (D=C)	Management hours per year (E=D×0.05)	Clerical hours per year (F=D×0.1)	(G) Costs, \$ ^f
1. Familiarization with Regulatory Requirements ^a	5	10	50	50	3	5	\$2,733.80
2. Enter and update information into agency recordkeeping system ^b	2	0	0	0	0	0	\$0
3. Required activities							
A. Observe initial performance test ^c	12	0	0	0	0	0	\$0
B. Observe surface methane monitoring quarterly ^c	20	0	0	0	0	0	\$0
C. Review operating parameters ^c	1	0	0	0	0	0	\$0
D. Review continuous parameter monitoring ^c	1	0	0	0	0	0	\$0
E. Review notification of performance test ^c	2	0	0	0	0	0	\$0
4. Excess Emissions Enforcement Activities ^d	24	43	1,032	1,032	51.60	103.20	\$56,425.63
5. Notification requirements							
A. Review amended design capacity report ^e	2	0	0	0	0	0	\$0
6. Reporting requirements							
A. Review initial design capacity report ^e	1	0	0	0	0	0	\$0
B. Review annual NMOC emission rate report ^c	2	0	0	0	0	0	\$0
C. Review landfill closure report ^c	1	0	0	0	0	0	\$0
D. Review equipment removal report ^c	1	0	0	0	0	0	\$0
E. Review Collection and Control System Design Plan ^c	15	0	0	0	0	0	\$0
F. Review Revised Collection and Control System Design Plan ^c	5	0	0	0	0	0	\$0
G. Review Initial Performance Test ^c	12	0	0	0	0	0	\$0
H. Review Annual Report ^c	2	0	0	0	0	0	\$0
7. Travel Expenses for Tests Attended ^{c,g}	3 days * (\$134 hotel + \$63 meals/incidentals) + (\$600 round trip) = \$1191 per trip						\$0
TOTAL ANNUAL BURDEN AND COST^h					1,240		\$59,200

a This ICR estimates that staff from each EPA region will familiarize themselves with the requirements of this subpart each year, to account for staff transitions.

b Number of occurrences is based on the total number of landfills that are subject to the standard. This line item is accounted for under ICRs for 40 Part 60 Subpart XXX (ICR 2498.03, OMB 2060-0697) and 40 CFR Part 60 Subpart Cf (ICR 2522.02, OMB 2060-0720).

c Number of occurrences is estimated to be zero. This line item is accounted for under ICRs for 40 Part 60 Subpart XXX (ICR 2498.03, OMB 2060-0697) and 40 CFR Part 60 Subpart Cf (ICR 2522.02, OMB 2060-0720) and is not duplicated here.

d Number of occurrences is based on the assumption that of the landfills that control emissions, 10% of them will have exceedances and need enforcement. There are estimated to be 719 existing landfills MSW landfills estimated have a design capacity of 2.5 million Mg or more and meet the emission threshold 50 Megagrams per year or more of NMOC. Of these it is estimated that 60 percent of respondents are subject to Subpart WWW and 40 percent of the respondents are subject to a state or federal plan implementing Subpart Cf and so only the fraction of units anticipated to be covered under WWW for enforcement are estimated here. There are no new sources anticipated. If a landfill constructs or modifies after July 17, 2014, the landfill will be subject to Subpart XXX and not WWW.

e No respondents are estimated here because the facilities have already submitted initial design capacity reports under WWW. Amended design capacity reports would be submitted as sources were modified with additional capacity and would become subject to subpart XXX.

f This cost is based on the following hourly labor rates: \$65.71 for Managerial (GS-13, Step 5, \$41.07 + 60%), \$48.75 for Technical (GS-12, Step 1, \$30.47 + 60%) and \$26.38 Clerical (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. These rates have been increased by 60 percent to account for the benefit packages available to government employees.

g There are no trips estimated since this line item is accounted for under ICRs for 40 Part 60 Subpart XXX (ICR 2498.03, OMB 2060-0697) and 40 CFR Part 60 Subpart Cf (ICR 2522.02, OMB 2060-0720) and therefore not duplicated here. The source for hotel and meals/incidental costs is based on FY '18 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>