

Table 1.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Standards of Performance for Publicly-Owned Municipal Solid Waste Landfills - Subpart XXX - Year 1

| 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 X C) | (E) Technical Hours per Respondent Per Year (A X C) | (F) Number of Respondents Per Year | (G) Civil Engineer Technician per Year @ \$49.85 | (H) Technical Hours per Year @ \$86.46 (E X F) | (I) Clerical Hours per Year @ \$30.28 (H X 0.1) | (J) Management Hours per Year @ \$109.43 (H X .05) | (K) Total Labor Costs Per Year ^b | (L) Total Annualized Non-Labor Capital and O&M Costs Per Year ((B1+B2) x C x F) | (M) Total Number of Responses per Year (C X F) | (N) Capital/Start-up Costs per occurrence | Footnotes |
|---|--|--|--|---|---|---|------------------------------------|--|--|---|--|---|---|--|---|-----------|
| 1. Applications | na | | | | | | | | | | | | | | | |
| 2. Surveys and Studies | na | | | | | | | | | | | | | | | |
| 3. Reporting Requirements | | | | | | | | | | | | | | | | |
| A. Read and Understand Rule Requirements | 40 | \$0 | | 1 | 0 | 40 | 59 | 0 | 2,360 | 236 | 118 | \$224,098 | \$0 | 0 | | d |
| B. Required Activities | | | | | | | | | | | | | | | | |
| 1. Initial performance test report | 12 | \$1,984 | \$1,000 | 1 | 0 | 12 | 30 | 0 | 360 | 36 | 18 | \$34,184 | \$89,509.78 | 30 | 18,067 | e, f |
| 2. Surface methane monitoring quarterly | 44 | \$704 | | 4 | 176 | 0 | 30 | 5,280 | 0 | 0 | 0 | \$263,229 | \$84,420 | 0 | | a, g |
| 3. Wellhead monitoring monthly | 40 | \$17 | | 12 | 480 | 0 | 30 | 14,400 | 0 | 0 | 0 | \$717,898 | \$6,120 | 1 | | a, g |
| C. Create Information | | | | | | | | | | | | | | | | |
| D. Gather Information | | | | | | | | | | | | | | | | |
| E. Report Preparation | | | | | | | | | | | | | | | | |
| 1. Initial design capacity report | 2 | \$0 | | 1 | 0 | 2 | 8 | 0 | 16 | 2 | 1 | \$1,519 | \$0 | 8 | | h |
| 2. Amended design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | i |
| 3. Report of NMOG rate (Tier 1) | 8 | \$0 | | 1 | 0 | 8 | 11 | 0 | 84 | 8 | 4 | \$7,976 | \$0 | 11 | | j |
| 4. Report of NMOG rate (Tier 2) | 12 | \$2,708 | | 1 | 0 | 12 | 11 | 0 | 126 | 13 | 6 | \$11,965 | \$28,437 | 11 | 10,067 | j, k |
| 5. Landfill Closure Report | 1 | \$0 | | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l |
| 6. Equipment Removal Report | 36 | \$0 | | 1 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l,m |
| 7. Collection and Control System Design Plan | 80 | \$0 | | 1 | 0 | 80 | 30 | 0 | 2,400 | 240 | 120 | \$227,896 | \$0 | 30 | | f |
| 8. Revised design plan | 20 | \$0 | | 1 | 0 | 20 | 3 | 0 | 60 | 6 | 3 | \$5,697 | \$0 | 3 | | n |
| 9. Initial Performance Test | | | | | | | | | | | | | | | | |
| 10. Compliance Report | | | | | | | | | | | | | | | | |
| 11. Annual Report | 27 | \$0 | | 1 | 0 | 27 | 30 | 0 | 810 | 81 | 41 | \$76,915 | \$0 | 30 | | o |
| 12. Corrective Action Analysis | 15 | \$0 | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 13. Implementation Timeline | 15 | \$0 | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 14. Root Cause Analysis | 15 | \$0 | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 15. Wet Landfill Monitoring Report | 15 | \$0 | | 1 | 0 | 15 | 17 | 1 | 255 | 26 | 13 | \$24,264 | \$0 | 17 | | s |
| Reporting Subtotal | | | | | | | | 19,681 | 6,516 | 652 | 326 | \$1,599,915 | \$208,487 | 142 | \$28,134 | |
| 4. Recordkeeping Requirements | | | | | | | | | | | | | | | | |
| A. Read Instructions | | | | | | | | | | | | | | | | |
| B. Plan Activities | na | | | | | | | | | | | | | | | |
| C. Implement Activities | na | | | | | | | | | | | | | | | |
| D. Develop Record System | na | | | | | | | | | | | | | | | |
| E. Record Information | | | | | | | | | | | | | | | | |
| 1. Data Compilation and Review (controllers) | 5 | \$0 | | 12 | 0 | 60 | 30 | 0 | 1,800 | 180 | 90 | \$170,922 | \$0 | 0 | | p |
| 2. Recordkeeping and Data Storage (controllers) | 11 | \$0 | | 12 | 0 | 132 | 30 | 0 | 3,960 | 396 | 198 | \$376,029 | \$0 | 0 | | p |
| 3. Recordkeeping and Data Storage (others) | 4 | \$0 | | 1 | 0 | 4 | 29 | 0 | 116 | 12 | 6 | \$11,015 | \$0 | 0 | | q |
| E. Personnel Training | na | | | | | | | | | | | | | | | |
| F. Time for Audits | na | | | | | | | | | | | | | | | |
| Recordkeeping Subtotal | | | | | | | | 0 | 5,876 | 588 | 294 | \$557,966 | \$0 | 0 | \$0 | |
| Totals | | | | | | | | 19,681 | 12,392 | 1,239 | 620 | \$2,157,881 | \$208,487 | 142 | \$28,134 | |

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 mean hourly wage for the following labor categories from the United States Department of Labor, Bureau of Labor Statistics, May 2013, "National Occupational Employment and Wage Estimates United States": Managers, All Other for Managerial labor, Civil Engineer for Technical labor, 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 Includes only responses that are submitted as reports.
- d This is a one time requirement for new respondents. We have assumed that each new respondent will take 40 hours to read instructions as part of their reporting requirements. Based on the regulatory database, 53% of these respondents are private and 47% are public.
- e 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.
- f Assumes 84 controlled landfill during the first year of this ICR period. 36% of which are public and 64% of which are private. This is a one-time requirement.
- g Assumes 84 controlled landfill during the first year of this ICR period. For surface monitoring: The average acreage of controlled sites is estimated to be 174 acres (44 labor hours @ 0.25 hours per acre) under the final 2.5/34 option. We assumed weekly equipment rental costs at \$600/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.
- h Based on the regulatory database, there are 9 greenfields and modified landfills with design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume and thus will complete the initial design capacity report in the first year of this ICR. This is a one-time requirement. Based on the regulatory database, 11% of these respondents are private and 89% are public.
- i Assumes no landfills will submit an amended design capacity report.
- j We have assumed that 50 percent of uncontrolled landfills with use Tier 1 calculations annually and 50 percent will use Tier 2 calculations once every 5 years for their NMOG reports. Of the landfills estimated to remain uncontrolled in the regulatory database 64% are public and 36% are private.
- k 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.
- l 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.
- m Equipment Removal Report requires inclusion of 3 successive NMOG rates using Tier 2 calculations to demonstrate landfill is below the NMOG threshold.
- n We have assumed that 10% of controlled landfill will revise their design plan.
- o Assumes 84 controlled landfill during the first year of this ICR period. 36% of which are public and 64% of which are private. 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.
- p Assumes 84 controlled landfill during the first year of this ICR period. 36% of which are public and 64% of which are private. 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 Number of occurrences is based on the total number of landfills that are subject to the standard but not controlling. Based on the regulatory database, 31% of these respondents are private and 69% are public. These records are much more simplistic for these sources than landfills controlling emissions.
- r It is unknown how many landfills will be required to conduct a root cause analysis, corrective action analysis, or 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 the wellhead parameter 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. Landfills can minimize the number of exceedances found by ensuring the GCCS is well-operated. For the purposes of estimating ICR burden, one of the landfills subject to controls will have at least one wellhead exceedance that takes longer than 60 days to correct.
- s The initial wet landfill report will take some additional time to prepare as it will contain historical records, when available. Subsequent year reports will only require reporting of the data for the reporting year. The report is required for all landfills affected by this rule based on size if they have added liquids or recirculated leachate in the last 10 years.

Table 1.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Standards of Performance for Privately-Owned Municipal Solid Waste Landfills - Subpart XXX - Year 1

| 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) | (E) | (F) | (G) | (H) | (I) | (J) | (K) | (L) | (M) | (N) | Footnotes |
|---|---|---|---|--|--|---|--------------------------------------|--|--|---|--|---|---|--|--|-----------|
| | | | | | Civil Engineer Technician Hours per Respondent Per Year (A X C) | Technical Hours per Respondent Per Year (A X C) | Number of Respondents Per Year | Civil Engineer Technician per Year @ \$49.85 | Technical Hours per Year @ \$86.46 (E X F) | Clerical Hours per Year @ \$30.28 (H X 0.1) | Management Hours per Year @ \$109.43 (H X .05) | Total Labor Costs Per Year ^b | Total Annualized Non- Labor Capital and O&M Costs Per Year (B1+B2) x C x F | Total Number of Responses per Year (C X F) ^c | Capital/Start- up Costs per occurrence | |
| 1. Applications | na | | | | | | | | | | | | | | | |
| 2. Surveys and Studies | na | | | | | | | | | | | | | | | |
| 3. Reporting Requirements | | | | | | | | | | | | | | | | |
| A. Read and Understand Rule Requirements | 40 | \$0 | | 1 | 0 | 40 | 67 | 0 | 2,680 | 268 | 134 | \$254,484 | \$0 | 0 | | d |
| B. Required Activities | | | | | | | | | | | | | | | | |
| 1. Initial performance test report | 12 | \$1,984 | \$1,000 | 1 | 0 | 12 | 54 | 0 | 648 | 65 | 32 | \$61,532 | \$161,117.61 | 54 | 18,067 | e, f |
| 2. Surface methane monitoring quarterly | 44 | \$704 | | 4 | 176 | 0 | 54 | 9,504 | 0 | 0 | 0 | \$473,812 | \$151,956 | 0 | | a, g |
| 3. Wellhead monitoring monthly | 40 | \$17 | | 12 | 480 | 0 | 54 | 25,920 | 0 | 0 | 0 | \$1,292,216 | \$11,016 | 1 | | a, g |
| C. Create Information | Included in 3B | | | | | | | | | | | | | | | |
| D. Gather Information | Included in 3B | | | | | | | | | | | | | | | |
| E. Report Preparation | | | | | | | | | | | | | | | | |
| 1. Initial design capacity report | 2 | \$0 | | 1 | 0 | 2 | 1 | 0 | 2 | 0 | 0 | \$190 | \$0 | 1 | | h |
| 2. Amended design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | i |
| 3. Report of NMOC rate (Tier 1) | 8 | \$0 | | 1 | 0 | 8 | 6 | 0 | 48 | 5 | 2 | \$4,558 | \$0 | 6 | | j |
| 4. Report of NMOC rate (Tier 2) | 12 | \$2,708 | | 1 | 0 | 12 | 6 | 0 | 72 | 7 | 4 | \$6,837 | \$16,250 | 6 | 10,067 | j, k |
| 5. Landfill Closure Report | 1 | \$0 | | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l |
| 6. Equipment Removal Report | 36 | \$0 | | 1 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l, m |
| 7. Collection and Control System Design Plan | 80 | \$0 | | 1 | 0 | 80 | 54 | 0 | 4,320 | 432 | 216 | \$410,213 | \$0 | 54 | | f |
| 8. Revised design plan | 20 | \$0 | | 1 | 0 | 20 | 5 | 0 | 108 | 11 | 5 | \$10,255 | \$0 | 5 | | n |
| 9. Initial Performance Test | Included in 3B | | | | | | | | | | | | | | | |
| 10. Compliance Report | Included in 3B | | | | | | | | | | | | | | | |
| 11. Annual Report | 27 | \$0 | | 1 | 0 | 27 | 54 | 0 | 1,458 | 146 | 73 | \$138,447 | \$0 | 54 | | o |
| 12. Corrective Action Analysis | 15 | \$0 | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 13. Implementation Timeline | 15 | \$0 | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 14. Root Cause Analysis | 15 | \$0 | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 15. Wet Landfill Monitoring Report | 15 | \$0 | | 1 | 0 | 15 | 15 | 0 | 225 | 23 | 11 | \$21,365 | \$0 | 15 | | s |
| Reporting Subtotal | | | | | | | | 35,424 | 9,606 | 961 | 480 | \$2,678,183 | \$340,339 | 198 | \$28,134 | s |
| 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 | \$0 | | 12 | 0 | 60 | 54 | 0 | 3,240 | 324 | 162 | \$307,660 | \$0 | 0 | | p |
| 2. Recordkeeping and Data Storage (controllers) | 11 | \$0 | | 12 | 0 | 132 | 54 | 0 | 7,128 | 713 | 356 | \$676,852 | \$0 | 0 | | p |
| 3. Recordkeeping and Data Storage (others) | 4 | \$0 | | 1 | 0 | 4 | 13 | 0 | 52 | 5 | 3 | \$4,938 | \$0 | 0 | | q |
| F. Personnel Training | na | | | | | | | | | | | | | | | |
| G. Time for Audits | na | | | | | | | | | | | | | | | |
| Recordkeeping Subtotal | | | | | | | | 0 | 10,420 | 1,042 | 521 | \$989,449 | \$0 | 0 | \$0 | |
| Totals | | | | | | | | 35,424 | 20,026 | 2,003 | 1,001 | \$3,667,632 | \$340,339 | 198 | \$28,134 | |

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 mean hourly wage for the following labor categories from the United States Department of Labor, Bureau of Labor Statistics, May 2013, "National Occupational Employment and Wage Estimates United States": Managers, All Other for Managerial labor, Civil Engineer for Technical labor, 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 Includes only responses that are submitted as reports.
- d This is a one time requirement for new respondents. We have assumed that each new respondent will take 40 hours to read instructions as part of their reporting requirements. Based on the regulatory database, 53% of these respondents are private and 47% are public.
- e 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.
- f Assumes 84 controlled landfill during the first year of this ICR period. 36% of which are public and 64% of which are private. This is a one-time requirement.
- g Assumes 84 controlled landfill during the first year of this ICR period. For surface monitoring: The average acreage of controlled sites is estimated to be 174 acres (44 labor hours @ 0.25 hours per acre) under the final 2.5/34 option. We assumed weekly equipment rental costs at \$600/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.
- h Based on the regulatory database, there are 9 greenfields and modified landfills with design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume and thus will complete the initial design capacity report in the first year of this ICR. This is a one-time requirement. Based on the regulatory database, 11% of these respondents are private and 89% are public.
- i Assumes no landfills will submit an amended design capacity report.
- j We have assumed that 50 percent of uncontrolled landfills with 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.
- k 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.
- l 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.
- m Equipment Removal Report requires inclusion of 3 successive NMOC rates using Tier 2 calculations to demonstrate landfill is below the NMOC threshold.
- n We have assumed that 10% of controlled landfill will revise their design plan.
- o Assumes 84 controlled landfill during the first year of this ICR period, 36% of which are public and 64% of which are private. 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.
- p Assumes 84 controlled landfill during the first year of this ICR period, 36% of which are public and 64% of which are private. 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 Number of occurrences is based on the total number of landfills that are subject to the standard but not controlling. Based on the regulatory database, 31% of these respondents are private and 69% are public. These records are much more simplistic for these sources than landfills controlling emissions.
- r It is unknown how many landfills will be required to conduct a root cause analysis, corrective action analysis, or 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 the wellhead parameter 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. Landfills can minimize the number of exceedances found by ensuring the GCCS is well-operated. For the purposes of estimating ICR burden, one of the landfills subject to controls will have at least one wellhead exceedance that takes longer than 60 days to correct.
- s The initial wet landfill report will take some additional time to prepare as it will contain historical records, when available. Subsequent year reports will only require reporting of the data for the reporting year. The report is required for all landfills affected by this rule based on size if they have added liquids or recirculated leachate in the last 10 years.

Table 2.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Standards of Performance for Publicly-Owned Municipal Solid Waste Landfills - Subpart XXX - Year 2

| Burden Item | (A) Respondent Hours per Occurrence ^a | (B1) Annualized Non-Labor Capital Costs Per Occurrence | (B2) Annual Non-O&M Costs Per Occurrence | (C) Number of Occurrences Per Respondent Per Year | (D) Civil Engineer Technician Hours per Respondent Per Year (A X C) | (E) Technical Hours per Respondent Per Year (A X C) | (F) Number of Respondents Per Year | (G) Civil Engineer Technician per Year @ \$49.85 | (H) Technical Hours per Year @ \$86.46 (E X F) | (I) Clerical Hours per Year @ \$30.28 (H X 0.1) | (J) Management Hours per Year @ \$109.43 (H X .05) | (K) Total Labor Costs Per Year ^b | (L) Total Annualized Non-Labor Capital and O&M Costs Per Year ((B1+B2) x C x F) | (M) Total Number of Responses per Year (C X F) ^c | (N) Capital/Start-up Costs per occurrence | Footnotes |
|---|--|--|--|---|---|---|------------------------------------|--|--|---|--|---|---|---|---|-----------|
| 1. Applications | na | | | | | | | | | | | | | | | |
| 2. Surveys and Studies | na | | | | | | | | | | | | | | | |
| 3. Reporting Requirements | | | | | | | | | | | | | | | | |
| A. Read and Understand Rule Requirements | 40 | \$0 | | 1 | 0 | 40 | 3 | 0 | 120 | 12 | 6 | \$11,395 | \$0 | 0 | | d |
| B. Required Activities | | | | | | | | | | | | | | | | |
| 1. Initial performance test report | 12 | \$1,984 | \$1,000 | 1 | 0 | 12 | 3 | 0 | 36 | 4 | 2 | \$3,418 | \$98,460.76 | 3 | 18,067 | e, f |
| 2. Surface methane monitoring quarterly | 44 | \$704 | | 4 | 176 | 0 | 33 | 5,808 | 0 | 0 | 0 | \$289,552 | \$92,862 | 0 | | a, g |
| 3. Wellhead monitoring monthly | 40 | \$17 | | 12 | 480 | 0 | 33 | 15,840 | 0 | 0 | 0 | \$789,687 | \$6,732 | 1 | | a, g |
| C. Create Information | | | | | | | | | | | | | | | | |
| Included in 3B | | | | | | | | | | | | | | | | |
| D. Gather Information | | | | | | | | | | | | | | | | |
| Included in 3B | | | | | | | | | | | | | | | | |
| E. Report Preparation | | | | | | | | | | | | | | | | |
| 1. Initial design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | h |
| 2. Amended design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | i |
| 3. Report of NMOC rate (Tier 1) | 8 | \$0 | | 1 | 0 | 8 | 11 | 0 | 84 | 8 | 4 | \$7,976 | \$0 | 11 | | j |
| 4. Report of NMOC rate (Tier 2) | 12 | \$2,708 | | 1 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | \$0 | \$28,437 | 0 | 10,067 | j, k |
| 5. Landfill Closure Report | 1 | \$0 | | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l |
| 6. Equipment Removal Report | 36 | \$0 | | 1 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l, m |
| 7. Collection and Control System Design Plan | 80 | \$0 | | 1 | 0 | 80 | 3 | 0 | 240 | 24 | 12 | \$22,790 | \$0 | 3 | | f |
| 8. Revised design plan | 20 | \$0 | | 1 | 0 | 20 | 0 | 0 | 6 | 1 | 0 | \$570 | \$0 | 0 | | n |
| 9. Initial Performance Test | | | | | | | | | | | | | | | | |
| Included in 3B | | | | | | | | | | | | | | | | |
| 10. Compliance Report | | | | | | | | | | | | | | | | |
| Included in 3B | | | | | | | | | | | | | | | | |
| 11. Annual Report | 27 | \$0 | | 1 | 0 | 27 | 33 | 0 | 891 | 89 | 45 | \$84,606 | \$0 | 33 | | o |
| 12. Corrective Action Analysis | 15 | \$0 | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 13. Implementation Timeline | 15 | \$0 | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 14. Root Cause Analysis | 15 | \$0 | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 15. Wet Landfill Monitoring Report | 5 | \$0 | | 1 | 0 | 5 | 17 | 0 | 85 | 9 | 4 | \$8,071 | \$0 | 17 | | s |
| Reporting Subtotal | | | | | | | | 21,648 | 1,507 | 151 | 75 | \$1,222,339 | \$226,492 | 70 | \$28,134 | s |
| 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 | \$0 | | 12 | 0 | 60 | 33 | 0 | 1,980 | 198 | 99 | \$188,014 | \$0 | 0 | | p |
| 2. Recordkeeping and Data Storage (controllers) | 11 | \$0 | | 12 | 0 | 132 | 33 | 0 | 4,356 | 436 | 218 | \$413,632 | \$0 | 0 | | p |
| 3. Recordkeeping and Data Storage (others) | 4 | \$0 | | 1 | 0 | 4 | 29 | 0 | 116 | 12 | 6 | \$11,015 | \$0 | 0 | | q |
| F. Personnel Training | na | | | | | | | | | | | | | | | |
| Included in 3a | | | | | | | | | | | | | | | | |
| G. Time for Audits | na | | | | | | | | | | | | | | | |
| Recordkeeping Subtotal | | | | | | | | 0 | 6,452 | 645 | 323 | \$612,661 | \$0 | 0 | \$0 | |
| Totals | | | | | | | | 21,648 | 7,959 | 796 | 398 | \$1,835,000 | \$226,492 | 70 | \$28,134 | |

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 mean hourly wage for the following labor categories from the United States Department of Labor, Bureau of Labor Statistics, May 2013, "National Occupational Employment and Wage Estimates United States": Managers, All Other for Managerial labor, Civil Engineer for Technical labor, 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 Includes only responses that are submitted as reports.
- d This is a one-time requirement for new respondents. We have assumed that each new respondent will take 40 hours to read instructions as part of their reporting requirements. Based on the regulatory database, 70% of these respondents are private and 30% are public.
- e
- f 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.
- g Assumes 7 additional controlled landfills during the second year of this ICR period. 36% of which are public and 64% of which are private. This is a one-time requirement.
- h
- i A total of 91 controlled sites in year 2. For surface monitoring: The average acreage of controlled sites is estimated to be 174 acres (44 labor hours @ 0.25 hours per acre) under the final 2.5/34 option. 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.
- j No additional landfills subject to this subpart are estimated to have a design capacity of less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume.
- k Assumes no landfills will submit an amended design capacity report.
- l We have assumed that 50 percent of uncontrolled landfills with 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 58% are public and 42% are private.
- m 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.
- n 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.
- o Equipment Removal Report requires inclusion of 3 successive NMOC rates using Tier 2 calculations to demonstrate landfill is below the NMOC threshold.
- p We have assumed that 10% of controlled landfill will revise their design plan.
- q Assumes 91 controlled landfill during the second year of this ICR period. 36% of which are public and 64% of which are private. 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.
- r
- s Assumes 91 controlled landfill during the second year of this ICR period. 36% of which are public and 64% of which are private. 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.
- t Number of occurrences is based on the total number of landfills that are subject to the standard but not controlling. Based on the regulatory database, 36% of these respondents are private and 64% are public. These records are much more simplistic for these sources than landfills controlling emissions.
- u It is unknown how many landfills will be required to conduct a root cause analysis, corrective action analysis, or 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 the wellhead parameter 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. Landfills can minimize the number of exceedances found by ensuring the GCCS is well-operated. For the purposes of estimating ICR burden, one of the landfills subject to controls will have at least one wellhead exceedance that takes longer than 60 days to correct.
- v The initial wet landfill report will take some additional time to prepare as it will contain historical records, when available. Subsequent year reports will only require reporting of the data for the reporting year. The report is required for all landfills affected by this rule based on size if they have added liquids or recirculated leachate in the last 10 years.

Table 2.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Standards of Performance for Privately-Owned Municipal Solid Waste Landfills - Subpart XXX - Year 2

| 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 X C) | (E) Technical Hours per Respondent Per Year (A X C) | (F) Number of Respondents Per Year | (G) Civil Engineer Technician per Year @ \$49.85 | (H) Technical Hours per Year @ \$86.46 (E X F) | (I) Clerical Hours per Year @ \$30.28 (H X 0.1) | (J) Management Hours per Year @ \$109.43 (H X .05) | (K) Total Labor Costs Per Year ^b | (L) Total Annualized Non- Labor Capital and O&M Costs Per Year ((B1+B2) x Cx F) | (M) Total Number of Responses per Year (C X F) ^c | (N) Capital/Start- up Costs per occurrence | Footnotes | |
|---|---|---|---|--|---|---|---|---|---|--|---|---|--|--|--|-----------|------|
| | | | | | | | | | | | | | | | | | |
| 1. Applications | na | | | | | | | | | | | | | | | | |
| 2. Surveys and Studies | na | | | | | | | | | | | | | | | | |
| 3. Reporting Requirements | | | | | | | | | | | | | | | | | |
| A. Read and Understand Rule Requirements | 40 | \$0 | | 1 | 0 | 40 | 7 | 0 | 280 | 28 | 14 | \$26,588 | \$0 | 0 | | | d |
| B. Required Activities | | | | | | | | | | | | | | | | | |
| 1. Initial performance test report | 12 | \$1,984 | \$1,000 | 1 | 0 | 12 | 4 | 0 | 48 | 5 | 2 | \$4,558 | \$173,052.25 | 4 | 18,067 | | e, f |
| 2. Surface methane monitoring quarterly | 44 | \$704 | | 4 | 176 | 0 | 58 | 10,208 | 0 | 0 | 0 | \$508,910 | \$163,212 | 0 | | | a, g |
| 3. Wellhead monitoring monthly | 40 | \$17 | | 12 | 480 | 0 | 58 | 27,840 | 0 | 0 | 0 | \$1,387,935 | \$11,832 | 1 | | | a, g |
| C. Create Information | | Included in 3B | | | | | | | | | | | | | | | |
| D. Gather Information | | Included in 3B | | | | | | | | | | | | | | | |
| E. Report Preparation | | | | | | | | | | | | | | | | | |
| 1. Initial design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | | h |
| 2. Amended design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | | i |
| 3. Report of NMOC rate (Tier 1) | 8 | \$0 | | 1 | 0 | 8 | 8 | 0 | 60 | 6 | 3 | \$5,697 | \$0 | 8 | | | j |
| 4. Report of NMOC rate (Tier 2) | 12 | \$2,708 | | 1 | 0 | 12 | 2 | 0 | 18 | 2 | 1 | \$1,709 | \$20,312 | 2 | 10,067 | | j, k |
| 5. Landfill Closure Report | 1 | \$0 | | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | | l |
| 6. Equipment Removal Report | 36 | \$0 | | 1 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | | l,m |
| 7. Collection and Control System Design Plan | 80 | \$0 | | 1 | 0 | 80 | 4 | 0 | 320 | 32 | 16 | \$30,386 | \$0 | 4 | | | f |
| 8. Revised design plan | 20 | \$0 | | 1 | 0 | 20 | 0 | 0 | 8 | 1 | 0 | \$760 | \$0 | 0 | | | n |
| 9. Initial Performance Test | | Included in 3B | | | | | | | | | | | | | | | |
| 10. Compliance Report | | Included in 3B | | | | | | | | | | | | | | | |
| 11. Annual Report | 27 | \$0 | | 1 | 0 | 27 | 58 | 0 | 1,566 | 157 | 78 | \$148,702 | \$0 | 58 | | | o |
| 12. Corrective Action Analysis | 15 | | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | | r |
| 13. Implementation Timeline | 15 | | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | | r |
| 14. Root Cause Analysis | 15 | | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | | r |
| 15. Wet Landfill Monitoring Report | 5 | | | 1 | 0 | 5 | 15 | | 75 | 8 | 4 | \$7,122 | \$0 | 15 | | | s |
| Reporting Subtotal | | | | | | | | 38,048 | 2,420 | 242 | 121 | \$2,126,640 | \$368,408 | 93 | \$28,134 | | |
| 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 | \$0 | | 12 | 0 | 60 | 58 | 0 | 3,480 | 348 | 174 | \$330,449 | \$0 | 0 | | | p |
| 2. Recordkeeping and Data Storage (controllers) | 11 | \$0 | | 12 | 0 | 132 | 58 | 0 | 7,656 | 766 | 383 | \$726,989 | \$0 | 0 | | | p |
| 3. Recordkeeping and Data Storage (others) | 4 | \$0 | | 1 | 0 | 4 | 16 | 0 | 64 | 6 | 3 | \$6,077 | \$0 | 0 | | | q |
| E. Personnel Training | | na | | | | | | | | | | | | | | | |
| F. Time for Audits | | na | | | | | | | | | | | | | | | |
| Recordkeeping Subtotal | | | | | | | | 0 | 11,200 | 1,120 | 560 | \$1,063,516 | \$0 | 0 | \$0 | | |
| Totals | | | | | | | | 38,048 | 13,620 | 1,362 | 681 | \$3,190,156 | \$368,408 | 93 | \$28,134 | | |

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 mean hourly wage for the following labor categories from the United States Department of Labor, Bureau of Labor Statistics, May 2013, "National Occupational Employment and Wage Estimates United States": Managers, All Other for Managerial labor, Civil Engineer for Technical labor, 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 Includes only responses that are submitted as reports.
- d This is a one time requirement for new respondents. We have assumed that each new respondent will take 40 hours to read instructions as part of their reporting requirements. Based on the regulatory database, 70% of these respondents are private and 30% are public.
- e 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.
- f Assumes 7 additional controlled landfills during the second year of this ICR period. 36% of which are public and 64% of which are private. This is a one-time requirement.
- g A total of 91 controlled sites in year 2. For surface monitoring: The average acreage of controlled sites is estimated to be 174 acres (44 labor hours @ 0.25 hours per acre) under the final 2.5/34 option. 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.
- h No additional landfills subject to this subpart are estimated to have a design capacity of less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume.
- i Assumes no landfills will submit an amended design capacity report.
- j We have assumed that 50 percent of uncontrolled landfills with 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 58% are public and 42% are private.
- k 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.
- l 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.
- m Equipment Removal Report requires inclusion of 3 successive NMOC rates using Tier 2 calculations to demonstrate landfill is below the NMOC threshold.
- n We have assumed that 10% of controlled landfill will revise their design plan.
- o Assumes 91 controlled landfill during the second year of this ICR period. 36% of which are public and 64% of which are private. 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.
- p Assumes 91 controlled landfill during the second year of this ICR period. 36% of which are public and 64% of which are private. 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 Number of occurrences is based on the total number of landfills that are subject to the standard but not controlling. Based on the regulatory database, 36% of these respondents are private and 64% are public. These records are much more simplistic for these sources than landfills controlling emissions.
- r It is unknown how many landfills will be required to conduct a root cause analysis, corrective action analysis, or 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 the wellhead parameter 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. Landfills can minimize the number of exceedances found by ensuring the GCCS is well-operated. For the purposes of estimating ICR burden, one of the landfills subject to controls will have at least one wellhead exceedance that takes longer than 60 days to correct.
- s The initial wet landfill report will take some additional time to prepare as it will contain historical records, when available. Subsequent year reports will only require reporting of the data for the reporting year. The report is required for all landfills affected by this rule based on size if they have added liquids or recirculated leachate in the last 10 years.

Table 3.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Standards of Performance for Publicly-Owned Municipal Solid Waste Landfills - Subpart XXX - Year 3

| 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 X C) | (E) Technical Hours per Respondent Per Year (A X C) | (F) Number of Respondents Per Year | (G) Civil Engineer Technician per Year @ \$49.85 | (H) Technical Hours per Year @ \$86.46 (E X F) | (I) Clerical Hours per Year @ \$30.28 (H X 0.1) | (J) Management Hours per Year @ \$109.43 (H X .05) | (K) Total Labor Costs Per Year ^b | (L) Total Annualized Non-Labor Capital and O&M Costs Per Year ((B1+B2) x Cx F) | (M) Total Number of Responses per Year (C X F) ^c | (N) Capital/Start-up Costs per occurrence | Footnotes |
|---|--|--|--|---|---|---|------------------------------------|--|--|---|--|---|--|---|---|-----------|
| | | | | | | | | | | | | | | | | |
| 1. Applications | na | | | | | | | | | | | | | | | |
| 2. Surveys and Studies | na | | | | | | | | | | | | | | | |
| 3. Reporting Requirements | | | | | | | | | | | | | | | | |
| A. Read and Understand Rule Requirements | 40 | \$0 | | 1 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | d |
| B. Required Activities | | | | | | | | | | | | | | | | |
| 1. Initial performance test report | 12 | \$1,984 | \$1,000 | 1 | 0 | 12 | 7 | 0 | 84 | 8 | 4 | \$7,976 | \$119,346.38 | 7 | 18,067 | e, f |
| 2. Surface methane monitoring quarterly | 44 | \$704 | | 4 | 176 | 0 | 40 | 7,040 | 0 | 0 | 0 | \$350,972 | \$112,560 | 0 | | a, g |
| 3. Wellhead monitoring monthly | 40 | \$17 | | 12 | 480 | 0 | 40 | 19,200 | 0 | 0 | 0 | \$957,197 | \$8,160 | 1 | | a, g |
| C. Create Information | Included in 3B | | | | | | | | | | | | | | | |
| D. Gather Information | Included in 3B | | | | | | | | | | | | | | | |
| E. Report Preparation | | | | | | | | | | | | | | | | |
| 1. Initial design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | h |
| 2. Amended design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | i |
| 3. Report of NMOC rate (Tier 1) | 8 | \$0 | | 1 | 0 | 8 | 7 | 0 | 56 | 6 | 3 | \$5,318 | \$0 | 7 | | j |
| 4. Report of NMOC rate (Tier 2) | 12 | \$2,708 | | 1 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | \$0 | \$28,437 | 0 | 10,067 | j, k |
| 5. Landfill Closure Report | 1 | \$0 | | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l |
| 6. Equipment Removal Report | 36 | \$0 | | 1 | 0 | 36 | 7 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l,m |
| 7. Collection and Control System Design Plan | 80 | \$0 | | 1 | 0 | 80 | 7 | 0 | 560 | 56 | 28 | \$53,176 | \$0 | 7 | | f |
| 8. Revised design plan | 20 | \$0 | | 1 | 0 | 20 | 1 | 0 | 14 | 1 | 1 | \$1,329 | \$0 | 1 | | n |
| 9. Initial Performance Test | Included in 3B | | | | | | | | | | | | | | | |
| 10. Compliance Report | Included in 3B | | | | | | | | | | | | | | | |
| 11. Annual Report | 27 | \$0 | | 1 | 0 | 27 | 40 | 0 | 1,080 | 108 | 54 | \$102,553 | \$0 | 40 | | o |
| 12. Corrective Action Analysis | 15 | | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 13. Implementation Timeline | 15 | | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 14. Root Cause Analysis | 15 | | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 15. Wet Landfill Monitoring Report | 5 | | | 1 | 0 | 5 | 17 | 0 | 85 | 9 | 4 | \$8,071 | \$0 | 17 | | s |
| Reporting Subtotal | | | | | | | | 26,240 | 1,924 | 192 | 96 | \$1,490,866 | \$268,503 | 82 | \$28,134 | |
| 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 | \$0 | | 12 | 0 | 60 | 40 | 0 | 2,400 | 240 | 120 | \$227,896 | \$0 | 0 | | p |
| 2. Recordkeeping and Data Storage (controllers) | 11 | \$0 | | 12 | 0 | 132 | 40 | 0 | 5,280 | 528 | 264 | \$501,372 | \$0 | 0 | | p |
| 3. Recordkeeping and Data Storage (others) | 4 | \$0 | | 1 | 0 | 4 | 22 | 0 | 88 | 9 | 4 | \$8,356 | \$0 | 0 | | q |
| E. Personnel Training | na | | | | | | | | | | | | | | | |
| F. Time for Audits | na | | | | | | | | | | | | | | | |
| Recordkeeping Subtotal | | | | | | | | 0 | 7,768 | 777 | 388 | \$737,624 | \$0 | 0 | \$0 | |
| Totals | | | | | | | | 26,240 | 9,692 | 969 | 485 | \$2,228,490 | \$268,503 | 82 | \$28,134 | |

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 mean hourly wage for the following labor categories from the United States Department of Labor, Bureau of Labor Statistics, May 2013, "National Occupational Employment and Wage Estimates United States": Managers, All Other for Managerial labor, Civil Engineer for Technical labor, 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 Includes only responses that are submitted as reports.
- d This is a one time requirement for new respondents. We have assumed that each new respondent will take 40 hours to read instructions as part of their reporting requirements.
- e 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.
- f Assumes 13 additional controlled landfill during the third year of this ICR period. 38% of which are public and 62% of which are private. This is a one-time requirement.
- g A total of 104 controlled sites in year 3. For surface monitoring: The average acreage of controlled sites is estimated to be 174 acres (44 labor hours @ 0.25 hours per acre) under the final 2.5/34 option. 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 62% 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.
- h No additional landfills subject to this subpart are estimated to have a design capacity of less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume.
- i Assumes no landfills will submit an amended design capacity report.
- j We have assumed that 50 percent of uncontrolled landfills with 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 61% are public and 39% are private.
- k 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.
- l 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.
- m Equipment Removal Report requires inclusion of 3 successive NMOC rates using Tier 2 calculations to demonstrate landfill is below the NMOC threshold.
- n We have assumed that 10% of controlled landfill will revise their design plan.
- o Assumes 104 controlled landfill during the third year of this ICR period. 38% of which are public and 62% of which are private. 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.
- p Assumes 104 controlled landfill during the third year of this ICR period. 38% of which are public and 62% of which are private. 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 Number of occurrences is based on the total number of landfills that are subject to the standard but not controlling. Based on the regulatory database, 31% of these respondents are private and 69% are public. These records are much more simplistic for these sources than landfills controlling emissions.
- r It is unknown how many landfills will be required to conduct a root cause analysis, corrective action analysis, or 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 the wellhead parameter 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. Landfills can minimize the number of exceedances found by ensuring the GCCS is well-operated. For the purposes of estimating ICR burden, one of the landfills subject to controls will have at least one wellhead exceedance that takes longer than 60 days to correct.
- s The initial wet landfill report will take some additional time to prepare as it will contain historical records, when available. Subsequent year reports will only require reporting of the data for the reporting year. The report is required for all landfills affected by this rule based on size if they have added liquids or recirculated leachate in the last 10 years.

Table 3.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Standards of Performance for Privately-Owned Municipal Solid Waste Landfills - Subpart XXX - Year 3

| 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 X C) | (E) Technical Hours per Respondent Per Year (A X C) | (F) Number of Respondents Per Year | (G) Civil Engineer Technician per Year @ \$49.85 | (H) Technical Hours per Year @ \$86.46 (E X F) | (I) Clerical Hours per Year @ \$30.28 (H X 0.1) | (J) Management Hours per Year @ \$109.43 (H X .05) | (K) Total Labor Costs Per Year ^b | (L) Total Annualized Non-Labor Capital and O&M Costs Per Year ((B1+B2) x C x F) | (M) Total Number of Responses per Year (C X F) ^c | (N) Capital/Start-up Costs per occurrence | Footnotes |
|---|--|--|--|---|---|---|------------------------------------|--|--|---|--|---|---|---|---|-----------|
| 1. Applications | na | | | | | | | | | | | | | | | |
| 2. Surveys and Studies | na | | | | | | | | | | | | | | | |
| 3. Reporting Requirements | | | | | | | | | | | | | | | | |
| A. Read and Understand Rule Requirements | 40 | \$0 | | 1 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | d |
| B. Required Activities | | | | | | | | | | | | | | | | |
| 1. Initial performance test report | 12 | \$1,984 | \$1,000 | 1 | 0 | 12 | 6 | 0 | 72 | 7 | 4 | \$6,837 | \$190,954 | 6 | 18,067 | e, f |
| 2. Surface methane monitoring quarterly | 44 | \$704 | | 4 | 176 | 0 | 64 | 11,264 | 0 | 0 | 0 | \$561,555 | \$180,096 | 0 | | a, g |
| 3. Wellhead monitoring monthly | 40 | \$17 | | 12 | 480 | 0 | 64 | 30,720 | 0 | 0 | 0 | \$1,531,515 | \$13,056 | 1 | | a, g |
| C. Create Information | Included in 3B | | | | | | | | | | | | | | | |
| D. Gather Information | Included in 3B | | | | | | | | | | | | | | | |
| E. Report Preparation | | | | | | | | | | | | | | | | |
| 1. Initial design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | h |
| 2. Amended design capacity report | 2 | \$0 | | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | i |
| 3. Report of NMOC rate (Tier 1) | 8 | \$0 | | 1 | 0 | 8 | 5 | 0 | 36 | 4 | 2 | \$3,418 | \$0 | 5 | | j |
| 4. Report of NMOC rate (Tier 2) | 12 | \$2,708 | | 1 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | \$0 | \$20,312 | 0 | 10,067 | j, k |
| 5. Landfill Closure Report | 1 | \$0 | | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l |
| 6. Equipment Removal Report | 36 | \$0 | | 1 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | 0 | | l,m |
| 7. Collection and Control System Design Plan | 80 | \$0 | | 1 | 0 | 80 | 6 | 0 | 480 | 48 | 24 | \$45,579 | \$0 | 6 | | f |
| 8. Revised design plan | 20 | \$0 | | 1 | 0 | 20 | 1 | 0 | 12 | 1 | 1 | \$1,139 | \$0 | 1 | | n |
| 9. Initial Performance Test | Included in 3B | | | | | | | | | | | | | | | |
| 10. Compliance Report | Included in 3B | | | | | | | | | | | | | | | |
| 11. Annual Report | 27 | \$0 | | 1 | 0 | 27 | 64 | 0 | 1,728 | 173 | 86 | \$164,085 | \$0 | 64 | | o |
| 12. Corrective Action Analysis | 15 | | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 13. Implementation Timeline | 15 | | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 14. Root Cause Analysis | 15 | | | 1 | 0 | 15 | 1 | 0 | 15 | 2 | 1 | \$1,424 | \$0 | 1 | | r |
| 15. Wet Landfill Monitoring Report | 5 | | | 1 | 0 | 5 | 15 | 0 | 75 | 8 | 4 | \$7,122 | \$0 | 15 | | s |
| Reporting Subtotal | | | | | | | | 41,984 | 2,448 | 245 | 122 | \$2,325,524 | \$404,418 | 99 | \$28,134 | |
| 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 | \$0 | | 12 | 0 | 60 | 64 | 0 | 3,840 | 384 | 192 | \$364,634 | \$0 | 0 | | p |
| 2. Recordkeeping and Data Storage (controllers) | 11 | \$0 | | 12 | 0 | 132 | 64 | 0 | 8,448 | 845 | 422 | \$802,195 | \$0 | 0 | | p |
| 3. Recordkeeping and Data Storage (others) | 4 | \$0 | | 1 | 0 | 4 | 10 | 0 | 40 | 4 | 2 | \$3,798 | \$0 | 0 | | q |
| E. Personnel Training | na | | | | | | | | | | | | | | | |
| F. Time for Audits | na | | | | | | | | | | | | | | | |
| Recordkeeping Subtotal | | | | | | | | 0 | 12,328 | 1,233 | 616 | \$1,170,627 | \$0 | 0 | \$0 | |
| Totals | | | | | | | | 41,984 | 14,776 | 1,478 | 739 | \$3,496,151 | \$404,418 | 99 | \$28,134 | |

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 mean hourly wage for the following labor categories from the United States Department of Labor, Bureau of Labor Statistics, May 2013, "National Occupational Employment and Wage Estimates United States": Managers, All Other for Managerial labor, Civil Engineer for Technical labor, 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 Includes only responses that are submitted as reports.
- d This is a one time requirement for new respondents. We have assumed that each new respondent will take 40 hours to read instructions as part of their reporting requirements.
- e 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.
- f Assumes 13 additional controlled landfill during the third year of this ICR period. 38% of which are public and 62% of which are private. This is a one-time requirement.
- g A total of 104 controlled sites in year 3. For surface monitoring: The average acreage of controlled sites is estimated to be 174 acres (44 labor hours @ 0.25 hours per acre) under the final 2.5/34 option. 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 62% 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.
- h No additional landfills subject to this subpart are estimated to have a design capacity of less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume.
- i Assumes no landfills will submit an amended design capacity report.
- j We have assumed that 50 percent of uncontrolled landfills with 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 61% are public and 39% are private.
- k 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.
- l 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.
- m Equipment Removal Report requires inclusion of 3 successive NMOC rates using Tier 2 calculations to demonstrate landfill is below the NMOC threshold.
- n We have assumed that 10% of controlled landfill will revise their design plan.
- o Assumes 104 controlled landfill during the third year of this ICR period. 38% of which are public and 62% of which are private. 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.
- p Assumes 104 controlled landfill during the third year of this ICR period. 38% of which are public and 62% of which are private. 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 Number of occurrences is based on the total number of landfills that are subject to the standard but not controlling. Based on the regulatory database, 31% of these respondents are private and 69% are public. These records are much more simplistic for these sources than landfills controlling emissions.
- r It is unknown how many landfills will be required to conduct a root cause analysis, corrective action analysis, or 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 the wellhead parameter 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. Landfills can minimize the number of exceedances found by ensuring the GCCS is well-operated. For the purposes of estimating ICR burden, one of the landfills subject to controls will have at least one wellhead exceedance that takes longer than 60 days to correct.
- s The initial wet landfill report will take some additional time to prepare as it will contain historical records, when available. Subsequent year reports will only require reporting of the data for the reporting year. The report is required for all landfills affected by this rule based on size if they have added liquids or recirculated leachate in the last 10 years.

**Table 1.C. Annual Federal Government Burden and Cost of Recordkeeping and Reporting
for Municipal Solid Waste Landfills - Subpart XXX - Year 1**

| Burden Item | EPA hours per occurrence (A) | Number of occurrences per year (B) | EPA hours per occurrence per year (C=AxB) | Technical hours per year (D=C) | Management hours per year (E=Dx0.05) | Clerical hours per year (F=Dx0.1) | (H) Costs, \$ ^k | Footnotes | |
|--|--|------------------------------------|---|--------------------------------|--------------------------------------|-----------------------------------|----------------------------|-----------|---|
| 1. Read and understand rule requirements | 40 | 10 | 400 | 400 | 20 | 40 | \$21,360 | a | |
| 2. Enter and update information into agency recordkeeping system | 2 | 84 | 168 | 168 | 8 | 17 | \$8,971 | b | |
| 3. Required activities | | | | | | | | | |
| A. Observe initial performance test | 12 | 17 | 202 | 202 | 10 | 20 | \$10,765 | c, d | |
| B. Observe surface methane monitoring quarterly | 20 | 17 | 336 | 336 | 17 | 34 | \$34,978 | c | |
| C. Review operating parameters | 1 | 84 | 84 | 84 | 4 | 8 | \$4,486 | d | |
| D. Review continuous parameter monitoring | 1 | 84 | 84 | 84 | 4 | 8 | \$4,486 | e | |
| E. Review notification of performance test | 2 | 84 | 168 | 168 | 8 | 17 | \$8,971 | d | |
| 4. Excess Emissions Enforcement Activities | 24 | 8 | 202 | 202 | 10 | 20 | \$10,765 | f | |
| 5. Notification requirements | | | | | | | | | |
| A. Review amended design capacity report | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | g | |
| 6. Reporting requirements | | | | | | | | | |
| A. Review initial design capacity report | 1 | 9 | 9 | 9 | 0 | 1 | \$481 | h | |
| B. Review annual NMOC emission rate report | 2 | 33 | 66 | 66 | 3 | 7 | \$3,524 | i | |
| C. Review landfill closure report | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | j | |
| D. Review equipment removal report | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | j | |
| E. Review Collection and Control System Design Plan | 15 | 84 | 1,260 | 1,260 | 63 | 126 | \$67,284 | d | |
| F. Review Revised Collection and Control System Design Plan | 5 | 8 | 42 | 42 | 2 | 4 | \$2,243 | k | |
| G. Review Initial Performance Test | 12 | 84 | 1,008 | 1,008 | 50 | 101 | \$53,827 | d | |
| H. Review Annual Report | 2 | 84 | 168 | 168 | 8 | 17 | \$8,971 | | |
| I. Review Corrective Action Analysis | 3.75 | 2 | 8 | 8 | 0 | 1 | \$401 | n | |
| J. Review Implementation Timeline | 3.75 | 2 | 8 | 8 | 0 | 1 | \$401 | n | |
| K. Review Root Cause Analysis | 3.75 | 2 | 8 | 8 | 0 | 1 | \$401 | n | |
| L. Wet Landfills Monitoring Report | 2 | 32 | 64 | 64 | 3 | 6 | \$3,418 | o | |
| 7. Travel Expenses for Tests Attended | 3 days * (\$118 hotel + \$58 meals/incidentals) + (\$600 round trip) = \$1128 per trip | | | | | | | \$37,901 | m |
| TOTAL BURDEN AND COST (SALARY) | | | | 4,283 | 214 | 428 | \$283,632 | | |
| TOTAL ANNUAL HOURS | | | | | | 4,925 | | | |

a Number of occurrences is the number of EPA Regions (10 regions). This is a one-time occurrence that is only incurred during the first year of compliance.

b Number of occurrences 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.

c Number of occurrences is based on the assumption that EPA personnel will observe 20% of the landfills where initial performance tests and surface methane monitoring that occur. Cost to conduct surface methane monitoring includes time for monitor rental for agency as well as agency labor, which is \$1,014 per occurrence based on the size of the landfills expected to install controls beginning in year 2020.

d Number of occurrences is based on the estimated number of controlled landfills expected to come online or modify by 2017. This is a one-time occurrence that is only incurred during the first year of compliance.

e Number of occurrences is based on the estimated number of controlled landfills expected to come online or modify by 2017.

f Number of occurrences is based on the assumption that of the landfills that test, 10% of them will have exceedances and need enforcement.

g Assumes no landfills during this ICR period will have modifications.

h Based on the regulatory database, there are 9 greenfields and modified landfills with design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume and thus will complete the initial design capacity report in the first year of this ICR. This is a one-time requirement. Assumes no landfills will submit an amended design capacity report.

i Number of occurrences is the number of uncontrolled landfills that use Tier 1 or Tier 2 calculations for their NMOC reports.

j We have assumed that no controlled landfill will close or remove equipment during this ICR period.

k Assumes 10 percent of respondents submitting a 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).

l Assumes the following labor rates: \$64.16 per hour for Management labor; \$47.62 per hour for Technical labor, and \$25.76 per hour for Clerical labor. These rates are from the Office of Personnel Management (OPM), 2016 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. These rates can be obtained from the OPM web site, <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2016/general-schedule/>

m 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>

n Number of occurrences 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.

o While this data is being collected to inform future standards, it is assumed the agency will briefly review each report submitted by the landfills during the reporting year. Since the initial year reports include historical data, when available, the review of the report in the initial year will take additional time than subsequent year reports.

**Table 2.C. Annual Federal Government Burden and Cost of Recordkeeping and Reporting
for Municipal Solid Waste Landfills - Subpart XXX - Year 2**

| Burden Item | EPA hours per occurrence (A) | Number of occurrences per year (B) | EPA hours per occurrence per year (C=AxB) | Technical hours per year (D=C) | Management hours per year (E=Dx0.05) | Clerical hours per year (F=Dx0.1) | (H) Costs, \$ ^k | Footnotes | |
|--|--|------------------------------------|---|--------------------------------|--------------------------------------|-----------------------------------|----------------------------|-----------|---|
| 1. Read and understand rule requirements | 40 | 0 | 0 | 0 | 0 | 0 | \$0 | a | |
| 2. Enter and update information into agency recordkeeping system | 2 | 91 | 182 | 182 | 9 | 18 | \$9,719 | b | |
| 3. Required activities | | | | | | | | | |
| A. Observe initial performance test | 12 | 1 | 17 | 17 | 1 | 2 | \$897 | c, d | |
| B. Observe surface methane monitoring quarterly | 20 | 18 | 364 | 364 | 18 | 36 | \$37,892 | c | |
| C. Review operating parameters | 1 | 7 | 7 | 7 | 0 | 1 | \$374 | d | |
| D. Review continuous parameter monitoring | 1 | 91 | 91 | 91 | 5 | 9 | \$4,859 | e | |
| E. Review notification of performance test | 2 | 7 | 14 | 14 | 1 | 1 | \$748 | d | |
| 4 Excess Emissions Enforcement Activities | 24 | 1 | 17 | 17 | 1 | 2 | \$897 | f | |
| 5 Notification requirements | | | | | | | | | |
| A. Review amended design capacity report | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | g | |
| 6. Reporting requirements | | | | | | | | | |
| A. Review initial design capacity report | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | h | |
| B. Review annual NMOC emission rate report | 2 | 20 | 39 | 39 | 2 | 4 | \$2,083 | i | |
| C. Review landfill closure report | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | j | |
| D. Review equipment removal report | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | j | |
| E. Review Collection and Control System Design Plan | 15 | 7 | 105 | 105 | 5 | 11 | \$5,607 | d | |
| F. Review Revised Collection and Control System Design Plan | 5 | 1 | 4 | 4 | 0 | 0 | \$187 | k | |
| G. Review Initial Performance Test | 12 | 7 | 84 | 84 | 4 | 8 | \$4,486 | d | |
| H. Review Annual Report | 2 | 91 | 182 | 182 | 9 | 18 | \$9,719 | | |
| I. Review Corrective Action Analysis | 1.25 | 2 | 3 | 3 | 0 | 0 | \$134 | n | |
| J. Review Implementation Timeline | 1.25 | 2 | 3 | 3 | 0 | 0 | \$134 | n | |
| K. Review Root Cause Analysis | 1.25 | 2 | 3 | 3 | 0 | 0 | \$134 | n | |
| L. Wet Landfills Monitoring Report | 1 | 32 | 32 | 32 | 2 | 3 | \$1,709 | o | |
| 7. Travel Expenses for Tests Attended | 3 days * (\$118 hotel + \$58 meals/incidentals) + (\$600 round trip) = \$1128 per trip | | | | | | | \$22,109 | m |
| TOTAL BURDEN AND COST (SALARY) | | | | 1,145 | 57 | 114 | \$101,685 | | |
| TOTAL ANNUAL HOURS | | | | | | 1,316 | | | |

a Number of occurrences is the number of EPA Regions (10 regions). This is a one-time occurrence that is only incurred during the first year of compliance.

b Number of occurrences 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.

c Number of occurrences is based on the assumption that EPA personnel will observe 20% of the landfills where initial performance tests and surface methane monitoring that occur. Cost to conduct surface methane monitoring includes time for monitor rental for agency as well as agency labor, which is \$1,014 per occurrence based on the size of the landfills expected to install controls beginning in year 2020.

d Number of occurrences is based on the estimated number of controlled landfills expected to come online or modify by 2018. This is a one-time occurrence that is only incurred during the first year of compliance.

e Number of occurrences is based on the estimated number of controlled landfills expected to come online or modify by 2018.

f Number of occurrences is based on the assumption that of the landfills that test, 10% of them will have exceedances and need enforcement.

g Assumes no landfills during this ICR period will have modifications.

h No additional landfills subject to this subpart are estimated to have a design capacity of less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. Assumes no landfills will submit an amended design capacity report.

i Number of occurrences is the number of uncontrolled landfills that use Tier 1 or Tier 2 calculations for their NMOC reports.

j We have assumed that no controlled landfill will close or remove equipment during this ICR period.

k Assumes 10 percent of respondents submitting a 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).

l Assumes the following labor rates: \$64.16 per hour for Management labor; \$47.62 per hour for Technical labor, and \$25.76 per hour for Clerical labor. These rates are from the Office of Personnel Management (OPM), 2016 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. These rates can be obtained from the OPM web site, <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2016/general-schedule/>

m 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>

n Number of occurrences 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.

o While this data is being collected to inform future standards, it is assumed the agency will briefly review each report submitted by the landfills during the reporting year. Since the initial year reports include historical data, when available, the review of the report in the initial year will take additional time than subsequent year reports.

**Table 3.C. Annual Federal Government Burden and Cost of Recordkeeping and Reporting
for Municipal Solid Waste Landfills - Subpart XXX - Year 3**

| Burden Item | EPA hours per occurrence (A) | Number of occurrences per year (B) | EPA hours per occurrence per year (C=AxB) | Technical hours per year (D=C) | Management hours per year (E=Dx0.05) | Clerical hours per year (F=Dx0.1) | (H) Costs, \$ * | Footnotes |
|--|--|------------------------------------|---|--------------------------------|--------------------------------------|-----------------------------------|-----------------|-----------|
| 1. Read and understand rule requirements | 40 | 0 | 0 | 0 | 0 | 0 | \$0 | a |
| 2. Enter and update information into agency recordkeeping system | 2 | 104 | 208 | 208 | 10 | 21 | \$11,107 | b |
| 3. Required activities | | | | | | | | |
| A. Observe initial performance test | 12 | 3 | 31 | 31 | 2 | 3 | \$1,666 | c, d |
| B. Observe surface methane monitoring quarterly | 20 | 21 | 416 | 416 | 21 | 42 | \$43,306 | c |
| C. Review operating parameters | 1 | 13 | 13 | 13 | 1 | 1 | \$694 | d |
| D. Review continuous parameter monitoring | 1 | 104 | 104 | 104 | 5 | 10 | \$5,554 | e |
| E. Review notification of performance test | 2 | 13 | 26 | 26 | 1 | 3 | \$1,388 | d |
| 4 Excess Emissions Enforcement Activities | 24 | 1 | 31 | 31 | 2 | 3 | \$1,666 | f |
| 5 Notification requirements | | | | | | | | |
| A. Review amended design capacity report | 2 | 0 | 0 | 0 | 0 | 0 | \$0 | g |
| 6. Reporting requirements | | | | | | | | |
| A. Review initial design capacity report | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | h |
| B. Review annual NMOC emission rate report | 2 | 5 | 10 | 10 | 1 | 1 | \$534 | i |
| C. Review landfill closure report | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | j |
| D. Review equipment removal report | 1 | 0 | 0 | 0 | 0 | 0 | \$0 | j |
| E. Review Collection and Control System Design Plan | 15 | 13 | 195 | 195 | 10 | 20 | \$10,413 | d |
| F. Review Revised Collection and Control System Design Plan | 5 | 1 | 7 | 7 | 0 | 1 | \$347 | k |
| G. Review Initial Performance Test | 12 | 13 | 156 | 156 | 8 | 16 | \$8,330 | d |
| H. Review Annual Report | 2 | 104 | 208 | 208 | 10 | 21 | \$11,107 | |
| I. Review Corrective Action Analysis | 1.25 | 2 | 3 | 3 | 0 | 0 | \$134 | n |
| J. Review Implementation Timeline | 1.25 | 2 | 3 | 3 | 0 | 0 | \$134 | n |
| K. Review Root Cause Analysis | 1.25 | 2 | 3 | 3 | 0 | 0 | \$134 | n |
| L. Wet Landfills Monitoring Report | 1 | 32 | 32 | 32 | 2 | 3 | \$1,709 | o |
| 7. Travel Expenses for Tests Attended | 3 days * (\$118 hotel + \$58 meals/incidentals) + (\$600 round trip) = \$1128 per trip | | | | | | \$26,395 | m |
| TOTAL BURDEN AND COST (SALARY) | | | | 1,444 | 72 | 144 | \$124,617 | |
| TOTAL ANNUAL HOURS | | | | | | 1,661 | | |

a Number of occurrences is the number of EPA Regions (10 regions). This is a one-time occurrence that is only incurred during the first year of compliance.

b Number of occurrences 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.

c Number of occurrences is based on the assumption that EPA personnel will observe 20% of the landfills where initial performance tests and surface methane monitoring that occur. Cost to conduct surface methane monitoring includes time for monitor rental for agency as well as agency labor, which is \$1,014 per occurrence based on the size of the landfills expected to install controls beginning in year 2020.

d Number of occurrences is based on the estimated number of controlled landfills expected to come online or modify by 2019. This is a one-time occurrence that is only incurred during the first year of compliance.

e Number of occurrences is based on the estimated number of controlled landfills expected to come online or modify by 2019.

f Number of occurrences is based on the assumption that of the landfills that test, 10% of them will have exceedances and need enforcement.

g Assumes no landfills during this ICR period will have modifications.

h No additional landfills subject to this subpart are estimated to have a design capacity of less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. Assumes no landfills will submit an amended design capacity report.

i No additional landfills subject to this subpart are estimated to have a design capacity of less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume.

j Number of occurrences is the number of uncontrolled landfills that use Tier 1 or Tier 2 calculations for their NMOC reports.

k We have assumed that no controlled landfill will close or remove equipment during this ICR period.

l Assumes 10 percent of respondents submitting a 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).

m Assumes the following labor rates: \$64.16 per hour for Management labor; \$47.62 per hour for Technical labor, and \$25.76 per hour for Clerical labor. These rates are from the Office of Personnel Management (OPM), 2016 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. These rates can be obtained from the OPM web site, <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2016/general-schedule/>

n 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>

o Number of occurrences 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 While this data is being collected to inform future standards, it is assumed the agency will briefly review each report submitted by the landfills during the reporting year. Since the initial year reports include historical data, when available, the review of the report in the initial year will take additional time than subsequent year reports.