Table 1: Annual Respondent Burden and Cost – NESHAP for Lime Manufacturing (40 CFR Pa

| Burden item | (A) Person hours per occurrence | (B) No. of occurrence s per respondent per year | (C) Person hours per respondent per year (C=AxB) | (D) Respondents per year ª |
|--|---------------------------------------|--|---|----------------------------------|
| 1. Applications | N/A | | | |
| 2. Survey and Studies | N/A | | | |
| 3. Acquisition, Installation, And Utilization of Technology and Systems ^c | 40 | 1 | 40 | 1 |
| 4. Reporting Requirements | | | | |
| a. Familiarization with Regulatory Requirements | 2 | 1 | 2 | 37 |
| b. Required Activities | | | | |
| Repeat performance tests for existing kilns and material handling ^{d, e, f} | 40 | 1 | 40 | 22.6 |
| Visible emission (VE) report for material handling ^g | 8 | 1 | 8 | 37 |
| Annual inspection of capture, collection, and transport system ^h | 8 | 1 | 8 | 37 |
| Inspection and maintenance of affected sources, control devices, and monitoring systems according to operation, maintenance, and monitoring plan ⁱ | 4 | 1 | 4 | 37 |
| c. Create Information | See 4B | | | |
| d. Gather Existing Information | See 4B | | | |
| e. Write Report | | | | |
| Notification of Applicability ^c | 2 | 1 | 2 | 1 |
| Notification of Construction/Reconstruction ^c | 2 | 1 | 2 | 1 |
| Notification of Anticipated Startup ^c | 2 | 1 | 2 | 1 |
| Notification of Actual Startup, ^c | 2 | 1 | 2 | 1 |
| Notification of Special Compliance | N/A | | | |
| Compliance Extension Request ^c | 2 | 1 | 2 | 1 |
| Notification of Initial and Repeat Performance Tests ^{d, e, f} | 2 | 1 | 2 | 23.6 |
| Notification of Opacity/VE Observations | 2 | 1 | 2 | 37 |
| Operation, Maintenance, and Monitoring Plan ^c | 40 | 1 | 40 | 1 |
| Startup, Shutdown, and Malfunction Plan ^c | 40 | 1 | 40 | 1 |
| Site-Specific Test Plan ^c | 40 | 1 | 40 | 1 |
| Notification of Compliance Status ^c | 8 | 1 | 8 | 1 |
| Waiver Application | N/A | | | |
| Semiannual Compliance Reports ^j | 8 | 2 | 16 | 37 |
| Emergency Startup, Shutdown, and Malfunction Reports ^{k,l} | 8 | 1 | 8 | 1.9 |
| Subtotal for Reporting Requirements | | | | |
| 5. Recordkeeping Requirements | | | | |
| a. Familiarization with Regulatory Requirements | See 4A | | | |
| b. Plan Activities | 3 | 1 | 3 | 1 |

| c. Implement Activities ^m | 12 | 1 | 12 | 1 |
|---|------|----|-----|----|
| d. Develop Record System | 3 | 1 | 3 | 1 |
| e. Time to Enter Information | | | | |
| Record of All Information Required by Standards ⁿ | 3 | 52 | 156 | 37 |
| f. Train Personnel ° | 3 | 1 | 3 | 1 |
| g. Time to Adjust Existing Waste to Comply with Previously Applicable Requirements ^p | 3 | 1 | 3 | 1 |
| h. Time to Transmit or Disclose Information ^q | 0.25 | 2 | 0.5 | 37 |
| g. Time for Audits | N/A | | | |
| Subtotal for Recordkeeping Requirements | | | | |
| Total Labor Burden and Costs (rounded) ^r | | | | |
| Capital and O&M Cost (rounded) ^r | | | | |
| Grand Total (rounded) ^r | | | | |

Assumptions:

a. Assumed that the average number of respondents that will be subject to the rule will be 36 existing respondents. There v become subject to the rule over the three-year period of this ICR for an average of 37 existing and new respondents per ye

b. This ICR uses the following labor rates: \$141.06 per hour for Executive, Administrative, and Managerial labor; \$120.27 Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2019, "Table group." The rates are from column 1, "Total Compensation." The rates have been increased by 110 percent to account for private industry.

c. This is a one-time only activity. New facilities install kilns and material handling equipment. New facilities submit noti d. Assumed that there will be a total of three new kilns brought into production (installed) over the three year period of the kiln per year is expected to conduct an initial Method 5 test. The performance testing costs are covered in Section 6(b)(iii)

e. Respondents must conduct repeat performance tests on existing kilns every 5 years to demonstrate continuous complian of respondents to repeat a performance test is 20.4 performance tests per year (102 affected kilns/5years).

f. Respondents must conduct repeat performance tests on existing materials handling operations whose emissions exit thrc compliance. There are 11 existing affected materials handling operations with stacks that would conduct a Method 5 perfc to repeat a performance test is 2.2 performance tests per year (11 affected materials handling operations/5years).

g. Assumed that each respondent will take 8 hours to complete the annual visible emission (VE) tests for material handling

- h. Assumed that each respondent will take 8 hours to complete the annual inspection of the capture, collection, and transpo
- i. Assumed that each respondent will take 4 hours to complete the inspection and maintenance of affected sources, control
- j. Assumed that it will take 8 hours each and two times per year to complete semiannual compliance reports.
- k. Assumed that it will take 8 hours once a year to write the emergency startup, shutdown, or malfunction reports.
- l. Assumed that 5 percent of respondents will have to complete the emergency startup, shutdown, or malfunction reports.m. Assumed that it will take 12 hours to record activities implemented.
- n. Assumed that all respondents will take 3 hours each to enter records of all the required information 52 times a year.
- o. Assumed that it will take 3 hours to train each personnel.
- p. Assumed that it will take 3 hours for each respondent to adjust existing ways to comply with previously applicable requ
- q. Assumed that respondents are required to transmit/disclose information twice per year.
- r. Totals are rounded to three significant figures. Figures may not add up exactly due to rounding.

70 percent subject to these rules – 1,675 Total number of respondents subject to L 25 percent subject to these rules = 4,534

rt 63, Subpart AAAAA) (Renewal)

| (E) Technical person- hours per year (E=CxD) | (F) Manageme nt person hours per year (F=Ex0.05) | (G) Clerical person hours per year (G=Ex0.1) | (H) Total Cost Per Year (\$) ^b |
|---|---|---|---|
| | | | |
| 40 | 2 | 4 | \$5,327.60 |
| 74 | 4 | 7 | \$9,856.06 |
| 904 | 45 | 90 | \$120,403.76 |
| 296 | 15 | 30 | \$39,424.24 |
| 296 | 15 | 30 | \$39,424.24 |
| 148 | 7 | 15 | \$19,712.12 |
| | | | |
| 2 | 0.1 | 0.2 | \$266.38 |
| 2 | 0.1 | 0.2 | \$266.38 |
| 2 | 0.1 | 0.2 | \$266.38 |
| 2 | 0.1 | 0.2 | \$266.38 |
| 2 | 0.1 | 0.2 | \$266.38 |
| 47 | 2 | 5 | \$6,286.57 |
| 74 | 4 | 7 | \$9,856.06 |
| 40 | 2 | 4 | \$5,327.60 |
| 40 | 2 | 4 | \$5,327.60 |
| 40 | 2 | 4 | \$5,327.60 |
| 8 | 0.4 | 0.8 | \$1,065.52 |
| 592 | 30 | 59 | \$78,848.48 |
| 15 | 0.7 | 1 | \$1,971.21 |
| | 3,018 | | \$349,491 |
| | | | |
| 3 | 0.2 | 0.3 | \$399.57 |

| Labor Rates | | |
|-------------------|----------|--|
| Management \$141. | | |
| | | |
| Technical | \$120.27 | |
| Clerical | \$58.67 | |

| 12 | 0.6 | 1.2 | \$1,598.28 |
|-------|-------|-----|--------------|
| 3 | 0.2 | 0.3 | \$399.57 |
| | | | |
| 5,772 | 289 | 577 | \$768,772.68 |
| 3 | 0.2 | 0.3 | \$399.57 |
| 3 | 0.2 | 0.3 | \$399.57 |
| 19 | 0.9 | 1.9 | \$2,464.02 |
| | | | |
| | 6,687 | | \$774,433 |
| | 9,700 | | \$1,120,000 |
| | | | \$335,000 |
| | | | \$1,460,000 |

will be one additional new source per year that will ear.

' per hour for Technical labor, and \$58.67 per hour for 2. Civilian Workers, by Occupational and Industry the benefit packages available to those employed by

fications and plans.

• ICR. This averages out to one unit per year. One new of the Supporting Statement.

Ice. There are 102 existing affected kilns. The number

high stacks every 5 years to demonstrate continuous rmance test every 5 years. The number of respondents

g.

ort system. devices, and monitoring systems according to

iirements.

67 hrs/response

QG requirements = 18,135

Table 2: Average Annual EPA Burden and Cost – NESHAP for Lime Manufacturing (40 CFR Pa(Renewal)

| Activity | (A) EPA person hours per occurrence | (B) No. of occurrence s per plant per year | (C) EPA person hours per respondent per year (C=AxB) | (D) Plants per year ^a | (E) Technical person- hours per year (E=CxD) |
|--|---|--|--|--|---|
| Initial Performance Tests ^c | 40 | 1 | 40 | 1 | 40 |
| Retesting Preparation for Repeat Performance Tests ^d | 2 | 1 | 2 | 22.6 | 45 |
| Repeat Performance Tests ^d | 40 | 1 | 40 | 22.6 | 904 |
| Report Review | | | | | |
| Notification of Applicability | 1 | 1 | 1 | 1 | 1 |
| Notification of Construction/Reconstruction | 1 | 1 | 1 | 1 | 1 |
| Notification of Anticipated Startup | 1 | 1 | 1 | 1 | 1 |
| Notification of Actual Startup | 1 | 1 | 1 | 1 | 1 |
| Notification of Special Compliance Requirements | N/A | | | | |
| Notification of Initial Performance Tests | 1 | 1 | 1 | 1 | 1 |
| Notification of Compliance Status | 4 | 1 | 4 | 1 | 4 |
| Review of Repeat Performance Test Report ^e | 2 | 1 | 2 | 22.6 | 45 |
| Review of Semiannual Compliance Report | 4 | 2 | 8 | 37 | 296 |
| Review of Waiver Application | N/A | | | | |
| Review of Emergency Startup, Shutdown, and Malfunction Report ^f | 4 | 1 | 4 | 1.9 | 7.4 |
| Total (rounded) ^g | | | | | |

Assumptions:

a. Assumed that the average number of respondents that will be subject to the rule will be 36 existing respondents. There will that will become subject to the rule over the three-year period of this ICR for an average of 37 existing and new respondents.

b. This ICR uses the following labor rates: \$66.62 for managerial, \$49.44 for technical, and \$26.75 for clerical labor. The Management (OPM), 2019 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 perc available to government employees.

c. One new source per year will conduct a performance test on their kiln and materials handling operations. The Agency will review the performance test report.

d. To demonstrate continuous compliance, plants must conduct repeat performance tests every 5 years. The number of respc tests/year ((102 existing kilns + 11 existing materials handling operations)/5years = 22.6 performance tests per year). Assume respondents to repeat performance tests.

e. Assumed that it will take 2 hours for respondents to review repeat performance test report.

- f. Assumed five percent of sources will need to submit emergency startup, shutdown, and malfunction reports.
- g. Totals have been rounded to three significant figures. Figures may not add together exactly due to rounding.

rt 63, Subpart AAAAA)

| (F) Manageme nt person hours per year (F=Ex0.05) | (G) Clerical person hours per year (G=Ex0.1) | (H) Total Cost Per Year (\$) ⁵ |
|---|---|--------------------------------------|
| 2 | 4 | \$2,217.84 |
| 2.26 | 4.5 | \$2,506.16 |
| 45 | 90 | \$50,123.18 |
| | | |
| 0.05 | 0.1 | \$55.45 |
| 0.05 | 0.1 | \$55.45 |
| 0.05 | 0.1 | \$55.45 |
| 0.05 | 0.1 | \$55.45 |
| | | |
| 0.05 | 0.1 | \$55.45 |
| 0.2 | 0.4 | \$221.78 |
| 2.3 | 4.5 | \$2,506.16 |
| 15 | 30 | \$16,412.02 |
| | | |
| 0.37 | 0.74 | \$410.30 |
| 1,550 | | \$74,700 |

| Labor Rates | | | |
|-------------|---------|--|--|
| Management | \$66.62 | | |
| Technical | \$49.44 | | |
| Clerical | \$26.75 | | |

ll be one additional new source per year per year.

se rates are from the Office of Personnel cent to account for the benefit packages

l spend 40 hours to attend the test and

ondents to repeat performance test is 22.6 ed that it will take 40 hours for

| | Tota |
|---|-----------------------|
| (A) | (B) |
| Information Collection Activity | Number of Respondents |
| Notification of applicability | 1 |
| Notification of construction/ reconstruction | 1 |
| Notification of anticipated startup | 1 |
| Notification of actual startup | 1 |
| Notification of special compliance requirements | N/A |
| Compliance extension request | 1 |
| Notification of performance tests | 23.6 |
| Notification of opacity/VE observations | 37 |
| Operation, maintenance, and monitoring plans | 1 |
| Startup, shutdown, and malfunction plans | 1 |
| Site-specific test plan | 1 |
| Notification of compliance status | 1 |
| Waiver application | N/A |
| Semiannual compliance reports | 37 |
| Emergency startup, shutdown, or malfunction reports | 1.9 |
| | |

| | Respondents That Submit Repo |
|---------|------------------------------|
| | (A) |
| Year | Number of New Respondents |
| 1 | 1 |
| 2 | 1 |
| 3 | 1 |
| Average | 1 |

^a New respondents include sources with constructed, reconstructed and modifie

| (A) | (B) |
|---|--|
| Continuous Monitoring Device | Capital/Startup Cost for One Respondent |
| Bag leak detector ^a | \$0 |
| Performance Test for New and Existing Kilns b^{b} | \$10,000 |
| Performance Test for New and Existing Material Handling ^c | \$10,000 |
| Total ^d | |

^a The cost of a bag leak detection monitor is \$10,000. The bag leak detector ha capital recovery factor [CRF] of 0.1424). To calculate annualized costs, the C fabric filters or ESP in operation. We assume that the bag leak detector is repla

^b Each new respondent is assumed to conduct an initial Method 5 performance year. The cost for an initial Method 5 test is \$10,000 per new unit. It is also as: \$7,750. We assume 20.4 respondents will need to conduct repeat performance

^c Each new respondent is assumed to have a material handling operation that w ICR, which will average out to one unit per year. The cost of the initial test is $\frac{5}{100}$ material handling operations have stacks that would conduct a Method 5 perfotests (11 affected stacks / 5 = 2.2).

^dTotals have been rounded to three significant figures. Figures may not add ex

| l Annual Responses | | | |
|---------------------|---|-------------------------------------|--|
| (C) | (D) | (E) | |
| Number of Responses | Number of Existing Respondents That Keep Records But Do Not Submit Reports | Total Annual Responses E=(BxC)+D | |
| 1 | 0 | 1 | |
| 1 | 0 | 1 | |
| 1 | 0 | 1 | |
| 1 | 0 | 1 | |
| N/A | N/A | N/A | |
| 1 | 0 | 1 | |
| 1 | 0 | 23.6 | |
| 1 | 0 | 37 | |
| 1 | 0 | 1 | |
| 1 | 0 | 1 | |
| 1 | 0 | 1 | |
| 1 | 0 | 1 | |
| N/A | N/A | N/A | |
| 2 | 0 | 74 | |
| 1 | 0 | 1.9 | |
| | Total | 145 | |

| Number of Respondents | | | | |
|-----------------------------------|--|--|--|--|
| orts | Respondents That Do Not Submit Any Reports | | | |
| (B) | (C) | (D) | | |
| Number of Existing Respondents | Number of Existing Respondents that keep records but do not submit reports | Number of Existing Respondents That Are Also New Respondents | | |
| 35 | 0 | 0 | | |
| 36 | 0 | 0 | | |
| 37 | 0 | 0 | | |
| 36 | 0 | 0 | | |

ed affected facilities.

| Capital/Startup vs. Operation and Maintenance (O&M) Costs | | | |
|---|--|--|--|
| (C) | (D) | (E) | |
| Number of New Respondents | Total Capital/Startup Cost, (B X C) | Annual O&M Costs for One Respondent | |
| 1 | \$0 | \$1,424 | |
| 1 | \$10,000 | \$7,750 | |
| 1 | \$10,000 | \$7,750 | |
| | \$20,000 | | |

s a life span of 10 years. The capital cost associated with the bag leak detector was annualized RF was multiplied by the capital cost of the detector, or \$1,424 per known fabric filter or ESP iced every 10 years and include this as an O&M cost.

test. It is assumed that there will be a total of three new kilns in production over the three year sumed that each existing affected unit would conduct a Method 5 performance test every 5 yea test per year (102 affected kilns / 5 = 20.4).

rould conduct an initial Method 5 performance test. It is assumed that there will be a total of tl \$10,000 per new unit. Most material handling is not vented through a stack, and therefore do n rmance test every 5 years. The cost of a repeat Method 5 test is approximately \$7,750. We ass

actly due to rounding.

9,704 hours 67

hr/response

| (E) | | |
|--------------------------------------|--|--|
| (E) | | |
| Number of Respondents (E=A+B+C-D) | | |
| 36 | | |
| 37 | | |
| 38 | | |
| 37 | | |

| (F) | (G) |
|--------------------------------|----------------------|
| Number of Respondents with O&M | Total O&M (E X F) |
| 98 | \$139,552 |
| 20.4 | \$158,100 |
| 2.2 | \$17,050 |
| | \$315,000 |

assuming a seven percent interest rate and 10-year life (i.e., . Information from the RTR in progress indicate there are 98

r period of the ICR, which will average out to one unit per Irs. The cost of a repeat Method 5 test is approximately

hree new kilns in production over the three-year period of the ot conduct Method 5 tests. It is assumed that 11 existing sume 2.2 existing respondents per year will conduct repeat