

Table 1: Annual Respondent Burden and Cost – NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (Amendments)

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=AxB)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=CxD)	(F) Management person-hours per year (Ex0.05)	(G) Clerical person-hours per year (Ex0.1)	(H) Total Cost per year, \$ ^b
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting Requirements								
A. Familiarization with the regulatory requirements ^c	2	1	2	3	6	0.3	0.6	\$812
B. Required activities								
Develop an operation, maintenance, monitoring plan	32	1	32	0	0	0	0	\$0
Update operation, maintenance, monitoring plan ^d	4	1	4	1	4	0.2	0.4	\$542
Performance tests and reports ^e	48	1	48	0.8	38.4	1.92	3.84	\$5,199
Performance retests and reports ^e	24	1	24	0.2	4.8	0.24	0.48	\$650
Initial CMS performance evaluation ^f	12	1	12	0	0	0	0	\$0
Initial CEMS demonstration ^g	229	1	229	0	0	0	0	\$0
Quarterly Appendix F audits of CEMS (THC) ^g								
a) RATA audit (one per year)	4	1	4	0	0	0	0	\$0
b) RAA audit (three per year)	4	3	12	0	0	0	0	\$0
c) Daily calibration and operation	1	365	365	0	0	0	0	\$0
C. Create information	See 3B							
D. Gather existing information	See 3B							
E. Write report								
Notification of applicability	2	1	2	0	0	0	0	\$0
Notification of construction/reconstruction	2	1	2	0	0	0	0	\$0
Notification of anticipated startup	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Notification of performance test ^e	2	1	2	1	2	0.1	0.2	\$271
Notification of compliance status	16	1	16	1	16	0.8	1.6	\$2,166
Request approval to bypass the control device for maintenance ^h	1	6	6	1	6	0.3	0.6	\$812
Semi-annual compliance report with deviations ⁱ	21	1	21	2	42	2.1	4.2	\$5,687
Semi-annual compliance report with no deviations ^j	10	2	20	2	40	2	4	\$5,416
Subtotal for Reporting Requirements						183		\$21,555
4. Recordkeeping Requirements								
A. Familiarization with rule requirements	See 3A							
B. Plan activities	See 4E							
C. Implement activities	See 4E							
D. Develop record system	See 4E							

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E. Time to enter information								
Records of all information required by standards ^k	0.25	52	13	3	39	1.95	3.9	\$5,280
F. Time to train personnel	20	1	20	0	0	0	0	\$0
G. Time to transmit or disclose information ^l	0.25	3	0.75	3	2.25	0.1125	0.225	\$305
H. Time for audits	N/A							
Subtotal for Recordkeeping Requirements						47		\$5,585
TOTAL ANNUAL BURDEN AND COSTS (rounded): ^m						230		\$27,100
Annual Capital Costs: Performance tests ⁿ								\$46,292
Total Annual Costs (O & M) ⁿ								\$23,580
TOTAL CAPITAL/O&M COST (rounded): ^m								\$69,900
GRAND TOTAL (rounded): ^m								\$97,000

Assumptions:

- ^a We have assumed that the average number of respondents that will be subject to the rule will be three. There will be no additional new source per year that will become subject to the rule over the 3-year period of this ICR.
- ^b This ICR uses the following labor rates: \$148.81 per hour for Executive, Administrative, and Managerial labor; \$121.88 per hour for Technical labor, and \$60.69 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2020, "Table 2: Civilian Workers, by Occupational and Industry group." The rates are from column 1, "Total Compensation." The rates have been increased by 110% to account for the benefit packages available to those employed by private industry.
- ^c We have assumed that the number of person-hours per occurrence is an average over 3 years of Year 1 (5), Year 2 (0.5), and Year 3(0.5) with more effort in Year 1 to read and understand the amendments.
- ^d We have assumed that all three facilities will need to update their plan, for an average number of respondents of 1 per year.
- ^e The person-hours per response account for tests on both continuous and batch sources. Tests for continuous sources may be shorter than average and tests for batch sources may be longer than average. In addition, we have assumed that the respondents per year is 0.8 for performance testing since there are effectively 4 separate sets of tests that would have to be done every 5 years across the three facilities. We have also assumed that one test will need to be redone each five years, or 0.2 respondents per year.
- ^f We assume 12 hours are required to complete the CMS performance evaluation. This activity only applies to new sources.
- ^g We have assumed that there are no existing respondents required to comply using THC CEMS.
- ^h Facilities must request approval to bypass the control device for each instance of control device maintenance. The estimated number of requests per year is based on information from industry regarding the type of scheduled routine maintenance.
- ⁱ We have assumed that two respondents will report a deviation once per year. Hours per occurrence include time to compile information regarding deviations that previously would have been included in a startup, shutdown, and malfunction report and also include new requirements for reporting for bypass of the THC control device on a continuous kiln for maintenance.
- ^j We have assumed that one respondent will report no deviations on a semi-annual basis and the other two respondents will report no deviations for one of the two semi-annual reports per year. Hours per occurrence updated to include new requirements for reporting for bypass of the THC control device on a continuous kiln for maintenance.
- ^k We have assumed that information will be recorded once per week for 52 weeks per year.
- ^l We have assumed that it will take 0.25 hours for information to be transmitted or disclosed, and two semi-annual reports with at least one more report (e.g. notification of fuel change) will be submitted annually.
- ^m Totals have been rounded to 3 significant values. Figures may not add exactly due to rounding.
- ⁿ See Section 6(b)(iii) for details.

Table 2: Average Annual EPA Burden and Cost – NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (Amendments)

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year (C=AxB)	(D) Plants per year ^a	(E) Technical person-hours per year (E=CxD)	(F) Management person-hours per year (Ex0.05)	(G) Clerical person-hours per year (Ex0.1)	(H) Total Cost per year, \$ ^b
Attend initial performance test	48	1	48	0.8	38.4	1.92	3.84	\$2,180
Attend repeat performance test								
Retesting preparation	8	1	8	0.2	1.6	0.08	0.16	\$91
Retesting	20	1	20	0.2	4	0.2	0.4	\$227
Report review								
Notification of applicability	2	1	2	0	0	0	0	\$0
Notification of construction/reconstruction	2	1	2	0	0	0	0	\$0
Notification of anticipated startup	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Notification of initial performance test	2	1	2	1	2	0.1	0.2	\$114
Notification of compliance status	2	1	2	1	2	0.1	0.2	\$114
Request for approval to bypass the control device for maintenance	2	6	12	1	12	0.6	1.2	\$681
Review performance test report	40	1	40	1	40	2	4	\$2,271
Semi-annual compliance reports								
Deviation ^c	18	1	18	2	36	1.8	3.6	\$2,044
No Deviation ^d	10	2	20	2	40	2	4	\$2,271
TOTAL ANNUAL BURDEN AND COST (rounded) ^e						202		\$9,990

Assumptions:

- ^a We have assumed that the average number of respondents that will be subject to the rule will be three. There will be no additional new source per year that will become subject to the rule over the 3-year period of this ICR.
- ^b This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for government overhead expenses: Managerial rate of \$66.35 (GS-13, Step 5, \$41.47 x 1.6), Technical rate of \$50.72 (GS-12, Step 1, \$31.70 x 1.6), and Clerical rate of \$27.46 (GS-6, Step 3, \$17.16 x 1.6). These rates are from the Office of Personnel Management (OI “2020 General Schedule” which excludes locality rates of pay.
- ^c We have assumed that two respondents will report deviations once a year.
- ^d We have assumed that one respondent will report no deviations twice a year and that the other two respondents will report no deviations for one of the two semi-annual reports.
- ^e Totals have been rounded to 3 significant values. Figures may not add exactly due to rounding.