

Table 1: Annual Respondent Burden and Cost - NESHAP for Portland Cement (40 CFR Part 63, Subpart LLL)

(Renewal)

REPORTING/RECORDKEEPING REQUIREMENT	Hours/ Occurrence (A)	Occurrences/ Year (B)	Hours/Year/ Respondent (C)	Respondents/ Year (D)	Technical Person Hours (E=CxD)	Managerial Person Hours (Ex0.05)	Clerical Person Hours (Ex0.10)	Total Costs/Year (F)
1. APPLICATIONS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2. SURVEY AND STUDIES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3. REPORTING REQUIREMENTS								
a. Read Instructions	1	1	1	0	0	0	0	\$0
b. Required Activities								
Initial Performance Tests	57	2	114	2	228	11.4	22.8	\$24,659
Repeat of Performance Tests	57	0.1	5.7	0.4	2	0.1	0.2	\$247
Periodic Performance Tests	40	1	40	56.4	2,256	113	226	\$243,997
Repeat of Performance Tests	40	0.1	4	5.6	22.6	1.1	2.3	\$2,440
Initial THC Performance Tests	280	2	560	2	1120	56	112	\$121,133
Initial Hg Performance Tests	280	2	560	2	1120	56	112	\$121,133
Startup, Shutdown and Malfunction Plan	40	1	40	94	3,760	188	376	\$406,661
Operations and Maintenance Plan	40	1	40	94	3,760	188	376	\$406,661
Visual Emissions and Opacity Monitoring	0.1	12	1.2	94	112.8	5.64	11.28	\$12,200
c. Create Information			-----Included in 3b-----					
d. Gather Existing Information			-----Included in 3b-----					
e. Write Report								
Notification of Applicability	2	2	4	2	8	0.4	0.8	\$865
Notification of Construction/Reconstruction	2	2	4	2	8	0.4	0.8	\$865
Notification of Actual Startup	2	2	4	2	8	0.4	0.8	\$865
Request for Extension of Compliance	2	1	2	0	0	0	0	\$0
Notification of Special Compliance Requirements	2	1	2	0	0	0	0	\$0
Notification of THC Performance Tests	2	2	4	2	8	0	1	\$865
Notification of Hg Performance Tests	2	2	4	2	8	0	1	\$865
Notification of Performance Test	2	1.1	2.2	56.4	124	6.2	12.4	\$13,420
Notification of Opacity and Visible Emissions Observation	2	1	2	56.4	112.8	5.6	11.3	\$12,200
Notification of the Continuous Emission Monitor Performance Evaluation	2	2	4	2	8	0.4	0.8	\$865
Notification of Compliance Status	2	2	4	2	8	0.4	0.8	\$865
Time Periods or Postmark Deadlines for Submittal and Review of Required Communications	2	1	2	0	0	0	0	\$0

Notification of Change in Information Already Provided	2	1	2	0	0	0	0	\$0	
Report of Initial Performance Tests	8	2	16	2	32	1.6	3.2	\$3,461	
Report of Periodic Performance Tests	8	1.1	8.8	56.4	496.3	24.8	49.6	\$53,679	
Opacity and Visible Emissions Observations		-----Included in 3b-----							
Reporting Results of Continuous Monitoring System Performance Report and Summary Report		-----Included in 3b-----							
Progress Reports	8	2	16	0	0	0	0	\$0	
Excess Emissions and Continuous Monitoring System Performance Report and Summary Report	8	2	16	94	1,504	75.2	150.4	\$162,664	
Periodic Startup, Shutdown, Malfunction Report		-----Included in Excess Emissions Report-----							
Immediate Startup, Shutdown, Malfunction Reports	4	1	4	5	20	1	2	\$2,163.09	
Request for Waiver of Reporting and Recordkeeping	4	1	4	0	0	0	0	\$0.00	
	Total Reporting Hours by Labor Category				2,345	117	235		
TOTAL REPORTING BURDEN						2,697	Hours	\$253,644	
4. RECORDKEEPING REQUIREMENTS									
a. Read Instructions		-----Included in 3b-----							
b. Plan Activities		-----Included in 3b-----							
c. Implement Activities		-----Included in 3b-----							
d. Develop Record System	N/A	N/A	N/A	N/A				N/A	
e. Time to Enter Information									
Records of All Information Required by Standards	0.25	52	13	94	1,222	61.1	122.2	\$132,165	
Records of Amount of Cement Recycled and Amount Wasted	0.25	365	91.25	94	8,578	428.875	857.75	\$927,695	
f. Train Personnel	N/A	N/A	N/A	N/A				N/A	
g. Time for CEM Audits	8	2	16	2	32	1.6	3.2	\$3,460.94	
	Total Recordkeeping Hours by Labor Category				22,213	1,111	2,221		
TOTAL RECORDKEEPING BURDEN						25,545	Hours	\$2,402,451	
	Total Hours by Labor Category				24,558	1,228	2,456		
TOTAL ANNUAL LABOR BURDEN AND COST						28,242	Hours	\$2,656,095	
5. ANNUAL CAPITAL COSTS									
a. Annual cost of capital/startup				94				\$1,439,200	
b. Operation and maintenance								\$880,092	
TOTAL ANNUAL CAPITAL/STARTUP AND O&M COSTS								\$2,319,292	

Table 1A - Assumptions	
Number of affected facilities (per year)	94
Number of new sources (per year)	4
Time required to read instructions (hours)	1
Time required to complete performance test (hours)	57
Periodic performance test (hours)	40
Performance test reports (hours)	8
Rate of failed performance tests (repeat)	10%
Periodic performance tests (every five years and every 30 minutes) = 60%	56.4
Estimated hours to prepare the Startup/Shutdown/Malfunction	40
Time required to conduct visual and opacity monitoring	0.1
Estimated number of sources at an affected facility that require visual emissions and opacity	12
Time required to prepare notifications (hours)	2
Time required to prepare progress reports (hours)	8
Time required to prepare excess emissions reports (hours)	8
Time required to prepare immediate startup, shutdown, and malfunction reports (hours)	4
Time required to file information required by standard (hours)	0.25
Technical labor rate	\$97.59
Managerial labor rate	\$114.77
Clerical labor rate	\$48.26
Number of facilities with new kilns (per year)	2
Number of new kilns per plant (per year)	2

Table 1B - Annualized Capital Costs					
Item	Capital Cost per Item	CRF	Annualized Capital Cost^a	Number of Items	Total Annualized Capital Cost
Continuous Emission Monitors	\$220,000	0.1424	\$31,323	4	\$125,292
THC Continuous Emission Monitors	\$139,800	0.1424	\$19,904	4	\$79,617
the capital cost.					
service life (years).					
Interest (%) =	7%				
Equipment service life (years) =	10				

Table 2: Annual Agency Burden and Cost - NESHAP for Portland Cement (40 CFR Part 63, Subpart LLL)

(RENEWAL)

REPORTING/RECORDKEEPING REQUIREMENT	EPA Hours/ Occurrence (A)	Occurrences /Plant/Year (B)	EPA Hours/ Year (C=A*B) (C)	Plants/ Year (D)	Technical Person Hours (E=CxD)	Managerial Person Hours (Ex0.05)	Clerical Person Hours (Ex0.10)	Total Costs/Year (F)
INITIAL PERFORMANCE TESTS								
New or Modified Facility	5	2	10	2	20	1	2	\$1,021
Repeat of Performance Tests	5	0.1	0.5	0.2	0.1	0.005	0.01	\$5
PERIODIC PERFORMANCE TESTS								
Existing Facility	5	1	5	56.4	282	14.1	28.2	\$14,397
Repeat of Performance Tests	5	0.1	0.5	5.64	2.82	0.141	0.282	\$144
REPORT REVIEW								
Notification of Applicability	2	2	4	2	8	0.4	0.8	\$408
Notification of Construction/Reconstruction	2	2	4	2	8	0.4	0.8	\$408
Notification of Actual Startup	2	2	4	2	8	0.4	0.8	\$408
Request for Extension of Compliance	2	1	2	0	0	0	0	\$0
Notification of Special Compliance Requirements	2	1	2	0	0	0	0	\$0
Notification of THC Performance Test	2	2	4	2	8	0.4	0.8	\$408
Notification of Hg Performance Test	2	2	4	2	8	0.4	0.8	\$408
Notification of Performance Test	2	1.1	2.2	56.4	124.08	6.204	12.41	\$6,335
Notification of Opacity and Visible Emissions Observation	2	1	2	56.4	112.8	5.64	11.28	\$5,759
Notification of the Continuous Emission Monitor Performance Evaluation	2	2	4	2	8	0.4	0.8	\$408
Notification of Compliance Status	2	2	4	2	8	0.4	0.8	\$408
Notification of Adjustments to Time Periods or Postmark Deadlines for Submittal and Review of Required Communications	2	1	2	0	0	0	0	\$0
Notification of Change in Information Already Provided	2	1	2	0	0	0	0	\$0
Review Operations and Maintenance Plan	40	1	40	0	0	0	0	\$0
Review Report of Initial Performance Test	5	2	10	2	20	1	2	\$1,021
Review Report of Periodic Performance Test	5	1.1	5.5	56.4	310.2	15.51	31.02	\$15,836
Review Opacity and Visual Emission Observation Report		-----Included in Review of Performance Test Report-----						
Monitoring System Performance Report and Summary Report		-----Included in Review of Performance Test Report-----						
Review Progress Reports		-----Included in Review of Performance Test Report-----						

Continuous Monitoring System Performance Report and Summary Report	20	2	40	94	3760	188	376	\$191,956
Review Periodic Startup, Shutdown, Malfunction Report		-----Included in Excess Emission Report-----						
Review Immediate Startup, Shutdown, Malfunction Report	8	1	8	5	40	2	4	\$2,042
Review Request for Waiver of Reporting and Recordkeeping	2	1	2	0	0	0	0	\$0
Total Hours by Labor Category					4,728	236	473	
TOTAL ANNUAL LABOR BURDEN AND COST							5,437 Hours	\$241,374
Travel Expenses for Tests Attended (1 person x 4 test site x 2 days/test x \$50 per diem + \$500/round trip x 4 test site/yr)								\$2,400
TOTAL ANNUAL COST								\$243,774

Assumptions	
Number of affected facilities (per year)	94
Number of facilities with new kilns (per year)	2
Number of new kilns per plant (per year)	2
Time required to review notifications (hours)	2
Time required to oversee performance test (hours)	5
Time required to review performance test report (hours)	5
Rate of failed performance tests (repeat)	10%
Periodic performance tests (every five years and every 30 minutes) = 60%	56.4
Estimated number of performance tests per facility	10
Operations and Maintenance Plan (hours)	40
Continuous Monitoring Reports, and Summary Reports	20
Estimated number of immediate startup/shutdown/malfunction reports submitted to EPA (per facility)	5
Time required to review the immediate startup/shutdown/malfunction report (hours)	8
Time required to review existing plant emission reports (hours)	4
EPA Managerial Labor rate	\$61.36
EPA Technical Labor rate	\$45.52
EPA Clerical Labor rate	\$24.64