Note: the totals, as shown, update automatically

Annual Respondent Hours:	52,641
Annual Agency Hours:	6,237
Annual Respondent Labor Cost (Present Worth):	$5,983,333
Annual Agency Labor Cost (Present Worth):	$293,333
Annual Respondent Non-Labor Cost ($)	$6,017,000
Annual Agency Non-Labor Cost ($)	$0
Total Respondent Cost (Present Worth)	$34,350,000
Total Annual Respondent Cost (Present Worth)	$11,450,000
No. of Industry Respondents:	489
No. of Agency Respondents (States):	21
Annual Hours/Industry Respondent:	108
Annual Cost/Industry Respondent:	
Annual Hours/Agency Respondent:	297
Annual Cost/Agency Respondent:	
Annual Industry Respondent Recordkeeping Hours:	10,775
Annual Industry Respondent Reporting Hours:	33,707
Total No. of Industry Responses	236,446
Annual No. of Industry Responses	78,815

Industry Sector	Number of Facilities	Number of Sources
Pipeline and Transportation of Natural Gas Idustry Sector:	138	307
Cement and Concrete Product Manufacturing Industry Sector:	38	47
Iron and Steel Mills and Ferroalloy Manufacturing Industry Sector:	10	39
Glass and Glass Product Manufacturing Industry Sector:	34	44
Basic Chemical Manufacturing Industry Sector:	6	17
Petroleum and Coal Products Manufacturing Industry Sector:	6	10
Pulp, Paper, and Paperboard Mills Industry Sector:	19	25

Industry

Cement and Concrete Product Manufacturing

Glass and Glass Product Manufacturing

Iron and Steel Mills and Ferroalloy Manufacturing

Pipeline Transportation of Natural Gas

Basic Chemical Manufacturing

Petroleum and Coal Products Manufacturing

Pulp, Paper, and Paperboard Mills

Emissions Source Group	Number of Units
Boilers - < 10 Million BTU/hr; Industrial Processes - Kiln	1
Industrial Processes - Kiln	24
Industrial Processes - Preheater Kiln	3
Industrial Processes - Preheater/Precalciner Kiln	19
Industrial Processes - Container Glass: Melting Furnace	27
Industrial Processes - Flat Glass: Melting Furnace	13
Industrial Processes - Furnace: General	1
Industrial Processes - Pressed and Blown Glass: Melting Furnace	3
Boilers - > 100 Million BTU/hr	3
Boilers - > 100 Million BTU/hr	6
Boilers - > 100 Million BTU/hr	2
Boilers - > 100 Million BTU/hr; Boilers - Blast Furnace Gas	1
Boilers - > 100 Million BTU/hr; Boilers - Coke Oven Gas	6
Boilers - > 100 Million BTU/hr; Boilers - Coke Oven Gas	1
Boilers - Blast Furnace Gas	1
Boilers - Blast Furnace Gas; Industrial Processes - Sintering: Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters	1
Boilers - Coke Oven Gas	3
Boilers - Coke Oven Gas; Boilers - > 100 Million BTU/hr	1
Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack	2
Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - General	1
Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary	1
Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation	1
Industrial Processes - General	5
Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace	1
Industrial Processes - Other Not Classified	2
Industrial Processes - Sintering: Windbox	1
Internal Combustion Engines - 2-cycle Clean Burn	1
Internal Combustion Engines - 2-cycle Lean Burn	136
Internal Combustion Engines - 4-cycle Lean Burn	41
Internal Combustion Engines - 4-cycle Rich Burn	2
Internal Combustion Engines - Reciprocating	94
Internal Combustion Engines - Reciprocating	12
Internal Combustion Engines - Reciprocating	1
Internal Combustion Engines - Turbine	17
Internal Combustion Engines - Turbine	3
Boilers - > 100 Million BTU/hr	6
Boilers - > 100 Million BTU/hr	2
Boilers - 10-100 Million BTU/hr	1
Boilers - 10-100 Million BTU/hr	1
Boilers - Cogeneration	1

Boilers - Distillate Oil - Grades 1 and 2: Boiler	1
Boilers - Petroleum Refinery Gas	2
Boilers - Petroleum Refinery Gas	2
Boilers - Subbituminous Coal: Traveling Grate (Overfeed) Stoker	1
Boilers - > 100 Million BTU/hr	1
Boilers - > 100 Million BTU/hr; Boilers - Blast Furnace Gas	1
Boilers - Boiler, >= 100 Million BTU/hr	1
Boilers - Coke Oven Gas	1
Boilers - Petroleum Refinery Gas	3
Boilers - Petroleum Refinery Gas	3
Boilers - > 100 Million BTU/hr	5
Boilers - > 100 Million BTU/hr	3
Boilers - > 100 Million BTU/hr	1
Boilers - 10-100 Million BTU/hr	2
Boilers - Bituminous Coal: Cyclone Furnace	2
Boilers - Bituminous Coal: Pulverized Coal: Dry Bottom	1
Boilers - Bituminous Coal: Pulverized Coal: Dry Bottom; Boilers - > 100 Million BTU/hr	1
Boilers - Bituminous Coal: Spreader Stoker	3
Boilers - Cogeneration	2
Boilers - Fluid Catalytic Cracking Unit with CO Boiler: Natural Gas	2
Boilers - Subbituminous Coal: Boiler, Spreader Stoker	2
Boilers - Subbituminous Coal: Spreader Stoker	1

Summary of Annual Respondent Burden and Cost by Industry Sector – Federal Implemer the 2015 Primary Ozone National Ambient Air Quality Standard: Transport Obligations f

Industry Sector & Year	Technical Hours	Managerial Hours	Clerical Hours	Total Labor Hours
Pipeline Transportation of Natural Gas				
Year 1	29,376	1,469	2,938	33,782
Year 2	22,234	1,112	2,223	25,570
Year 3	20,328	1,016	2,033	23,378
Cement and Concrete Product Manufacturing				
Year 1	5,740	287	574	6,601
Year 2	5,693	285	569	6,547
Year 3	5,693	285	569	6,547
Iron and Steel Mills and Ferroalloy Manufacturing				
Year 1	3,432	172	343	3,947
Year 2	2,574	129	257	2,960
Year 3	10,914	546	1,091	12,551
Glass and Glass Product Manufacturing				
Year 1	5,366	268	537	6,171
Year 2	5,326	266	533	6,125
Year 3	5,326	266	533	6,125
Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; Pulp, Paper, and Paperboard Mills				
Year 1	1,628	81	163	1,872
Year 2	528	26	53	607
Year 3	13167.6	658.38	1316.76	15142.74
Total	137,324	6,866	13,732	157,923
Average	45,775	2,289	4,577	52,641

Total No. of Industry Responses	236446
Annual No. of Industry Responses	78815

ntation Plan Addressing Regional Ozone Transport for
'or non-Electric Generating Units

Labor Costs	Present Worth Labor Costs	Non-Labor (Annualized Capital/Startup Cost + Annual O&M Cost) Costs	Total Costs	Present Worth Total Costs
$4,055,933	$4,055,933	$0	$4,055,933	$4,055,933
$3,069,947	$2,879,724	$204,428	$3,274,375	$3,071,485
$2,806,776	$2,549,985	$0	$2,806,776	$2,549,985
$792,481	$792,481	$0	$792,481	$792,481
$785,991	$737,289	$0	$785,991	$737,289
$785,991	$714,081	$0	$785,991	$714,081
$473,861	$473,861	$0	$473,861	$473,861
$355,396	$333,375	$0	$355,396	$333,375
$1,506,879	$1,369,015	$7,625,826	$9,132,705	$8,297,156
$740,859	$740,859	$0	$740,859	$740,859
$735,336	$689,772	$0	$735,336	$689,772
$735,336	$668,060	$43,648	$778,984	$707,715
$224,780	$224,780	$0	$224,780	$224,780
$72,902	$68,385	$0	$72,902	$68,385
$1,818,070	$1,651,735	$10,171,904	$11,989,974	$10,893,014
$18,961,000	$17,950,000	$18,050,000	$37,010,000	$34,350,000
$6,320,000	$5,983,000	$6,017,000	$12,337,000	$11,450,000

Discount rate at 3.25%

Present value costs

from Larry Sorrells in June 2020

2nd year rate	1.066056	**3rd year rate**	1.1007030781

Summary of Annual Agency Burden and Cost by Industry Sector - Federal Implementation Transport for the 2015 Primary Ozone National Ambient Air Quality Standard: Transport Generating Units

Industry Sector & Year	Technical Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs
Pipeline Transportation of Natural Gas					
Year 1	2,208	110	221	2,539	$126,900
Year 2	3,553	178	355	4,086	$204,100
Year 3	3,553	178	355	4,086	$204,100
Cement and Concrete Product Manufacturing					
Year 1	891	45	89	1,024	$51,172
Year 2	891	45	89	1,024	$51,172
Year 3	891	45	89	1,024	$51,172
Iron and Steel Mills and Ferroalloy Manufacturing					
Year 1	645	32	65	742	$37,084
Year 2	333	17	33	383	$19,158
Year 3	333	17	33	383	$19,158
Glass and Glass Product Manufacturing					
Year 1	834	42	83	959	$47,906
Year 2	834	42	83	959	$47,906
Year 3	834	42	83	959	$47,906
Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; Pulp, Paper, and Paperboard Mills					
Year 1	0	0	0	0	$0
Year 2	0	0	0	0	$0
Year 3	470	24	47	541	$27,018
Total	16,269	813	1,627	18,710	$934,750
Average	5,423	271	542	6,237	$62,320

ı Plan Addressing Regional Ozone
Obligations for non-Electric

Present Worth Labor Costs	Non-Labor Costs	Total Costs	Present Worth Total Costs
$126,900	$0	$126,900	$126,900
$191,453	$0	$204,100	$191,453
$185,427	$0	$204,100	$185,427
$51,172	$0	$51,172	$51,172
$48,001	$0	$51,172	$48,001
$46,491	$0	$51,172	$46,491
$37,084	$0	$37,084	$37,084
$17,971	$0	$19,158	$17,971
$17,406	$0	$19,158	$17,406
$47,906	$0	$47,906	$47,906
$44,938	$0	$47,906	$44,938
$43,523	$0	$47,906	$43,523
$0	$0	$0	$0
$0	$0	$0	$0
$24,546	$0	$27,018	$24,546
$880,000	$0	$934,750	$880,000
$293,000	$0	$62,320	$293,000

Discount rate at 3.25% from Larry Sorı

Present value costs	**2nd year rate**

rells in June 2020

1.066056	**3rd year rate**	1.10070307813

Pipeline Transportation of Natural Gas
Year 1, Reciprocating Internal Combustion Engines (RICE)

Table 1: Year 1, Respondent Burden and Cost – Pipeline Transportation of Natural Gas, RICE

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	24	1	24	2.58	61.89	3.09	6.19	$8,545
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	20	1	20	307	6140	307	614	$847,759.01
B. Required Activities								
New, Reconstructed, Modified Sources - Annual CPMS Performance Evaluation[c]								
Annual CPMS Performance Evaluation	8	1	8	0	0	0	0	$0.00
Repeat Annual CPMS Performance Evaluation	8	1	8	0	0	0	0	$0.00
Existing Sources - Annual CPMS Performance Evaluation and Performance Testing[d]								
Annual CPMS Performance Evaluation	8	1	8	0	0	0	0	$0.00
Repeat Annual CPMS Performance Evaluation	8	1	8	0	0	0	0	$0.00
Non EPA-Certified Engine Performance Testin	24	2	48	230.25	11,052	552.6	1105.2	$1,525,966.22
Repeat Non EPA-Certified Engine Performance Testing	24	2	48	11.5125	553	27.63	55.26	$76,298.31
New and Existing Sources - Monitoring[e]								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	$0.00
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Initial Performance Test	2	1	2	0	0	0	0	$0.00
Report of Performance Test	2	1	2	0	0	0	0	$0.00
Semi-Annual Report Submitted to Administrator of Compliance Statement, SubSection 52.41(d) performance test	8	2	16	2.58	41.26	2.06	4.13	$5,697
Existing Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Non EPA-Certified Engine Performance Test	2	2	2	241.76	483.53	24.18	48.35	$66,761.02
Report of Non EPA-Certified Engine Performance Test Results via CEDRI or analogous electronic reporting	2	2	2	241.76	483.53	24.18	48.35	$66,761.02
Semi-Annual Report submitted via CEDRI or analogous electronic reporting	8	2	16	307	4912	245.6	491.2	$678,207
Subtotal for Reporting Requirements					***27,286***			***$3,275,995***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.1	12	1.2	307	368	18.42	36.84	$50,865.54
Create and Store Engine Maintenance Plan	0.4	1	0.4	307	123	6.14	12.28	$16,955.18
Records of Hours of Operation	0.1	4	0.4	307	123	6.14	12.28	$16,955.18
Records of Engine Maintenance Conducted	0.1	4	0.4	307	123	6.14	12.28	$16,955.18
Engines Anticipated with SCR or NSCR								
Daily monitoring of catalyst inlet temperature	0.005	365	1.825	0	0	0	0	$0.00
Monthly monitoring of pressure drop across catalyst	0.1	12	1.2	0	0	0	0	$0.00
Engines Anticipated with no SCR or NSCR								
Prepare CPMS site-specific monitoring plan to address monitoring system design, data collection, and QA/QC	16	1	16	0	0	0	0	$0.00
Records of Annual CPMS Performance Evaluation	1	1	1	0	0	0	0	$0.00
Collect and record the CPMS monitoring parameters.	0.5	1	0.5	0	0	0	0	$0.00
New Sources								
Data Collection	0	0	0	2.5788	0	0	0	$0
Create and Store Maintenance Plan	0	0	0	2.5788	0	0	0	$0
F. Time to Train Personnel of 1st year Existing Sou	16	1	16	307	4,912	245.6	491.2	$678,207
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					**6,496**			***$779,938***
Total Labor Burden and Cost (rounded)[f]						**33,800**		**$4,060,000**
Total Capital and O&M Cost (rounded)[f]								**$0**
Grand TOTAL (rounded)[f]								**$4,100,000**

Labor Rates:	
Management	$157.61
Technical	$123.94
Clerical	$62.51

These rates were updated 12/21/21 to match the United States Department of Labor, Bureau of Labor Statistics, June 2021, "Table 2. Civilian Workers, by occupational and industry group

	Number of RICE
New	2.5788
Reconstructed/modified	33.2788
Existing	307
Assumed New RICE with SCR or NSCR	1.3272
Assumed New RICE with no SCR or NSCR	1.2516
Assumed Existing RICE with SCR or NSCR	158
Assumed Existing RICE with no SCR or NSCR	149
Assumed Existing EPA-Certified RICE	76.75
Assumed Existing Non EPA-Certified RICE	230.25

Note: New is assumed to be .84% of existing, per RICE MACT ICR data.

Note: New is assumed to be .84% of existing, per RICE MACT ICR data.

Note: New is assumed to be .84% of existing, per RICE MACT ICR data.

Assumed 25% of Existing Population per ECHO database.

Assumed 25% of Existing Population per ECHO database.

159 hr/response

No. of Responses

2.5788
0
307
0
0
0
0
0
0
0
0
0
0
5.1576
0
0
483.525
483.525
614
0
0
0
0
0
0
0
3684
307
1228
1228
0
0
0
0
0
0
0
0
0
307
9133.3114 SUM

[a] We have assumed that there are approximately 307 respondents operating RICE and that 10% of the existing facilities will have new construction/reconstruction.

[b] This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor; $123.94 per hour for Technical labor, and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New RICE CPMS performance evaluation conducted annually. We have assumed that 5 percent of respondents would repeat annual CPMS performance evaluation due to failure.

[d] We have assumed that 5 percent of respondents would repeat annual CPMS performance evaluation due to failure.

[e] Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Pipeline Transportation of Natural Gas
Year 2, Reciprocating Internal Combustion Engines (RICE)

Table 2: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	24	1	24	2.58	61.89	3.09	6.19	$8,545
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	20	1	20	0	0	0	0	$0.00
B. Required Activities								
New, Reconstructed, Modified Sources - Annual CPMS Performance Evaluation[c]								
Annual CPMS Performance Evaluation	8	1	8	1.25	10	0.50	1.00	$1,382.48
Repeat Annual CPMS Performance Evaluation	8	1	8	0.06	1	0.03	0.05	$69.12
Existing Sources - Annual CPMS Performance Evaluation[d]								
Annual CPMS Performance Evaluation	8	1	8	149	1,192	59.6	119.2	$164,581.23
Repeat Annual CPMS Performance Evaluation	8	1	8	7.45	60	2.98	5.96	$8,229.06
Non EPA-Certified Engine Performance Testing	24	2	48	230.25	11,052	552.6	1105.2	$1,525,966.22
Repeat Non EPA-Certified Engine Performance Testing	24	2	48	11.51	553	27.63	55.26	$76,298.31
New and Existing Sources - Monitoring[e]								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	$0.00
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Initial Performance Test	2	1	2	0	0	0	0	$0.00
Report of Performance Test	2	1	2	0	0	0	0	$0.00
Semi-Annual Report Submitted to Administrator of Compliance Statement, SubSection 52.41(d) performance test	8	2	16	2.58	41.26	2.06	4.13	$5,697
Existing Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Non EPA-Certified Engine Performance Test	2	2	2	241.76	483.53	24.18	48.35	$66,761.02
Report of Non EPA-Certified Engine Performance Test Results via CEDRI or analogous electronic reporting	2	2	2	241.76	483.53	24.18	48.35	$66,761.02
Semi-Annual Report submitted via CEDRI or analogous electronic reporting	8	2	16	307	4912	245.6	491.2	$678,207
Subtotal for Reporting Requirements					***21,676***			***$2,602,498***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.1	12	1.2	307	368	18.42	36.84	$50,865.54
Create and Store Engine Maintenance Plan	0.4	1	0.4	307	123	6.14	12.28	$16,955.18
Records of Hours of Operation	0.1	4	0.4	307	123	6.14	12.28	$16,955.18
Records of Engine Maintenance Conducted	0.1	4	0.4	307	123	6.14	12.28	$16,955.18
Engines Anticipated with SCR or NSCR								
Daily monitoring of catalyst inlet temperature	0.005	365	1.825	0	0	0	0	$0.00
Monthly monitoring of pressure drop across catalyst	0.1	12	1.2	0	0	0	0	$0.00
Engines Anticipated with no SCR or NSCR								
monitoring plan to address monitoring system design, data collection, and	16	1	16	149	2,384	119.2	238.4	$329,162.46
Records of Annual CPMS Performance Evaluation	1	1	1	149	149	7.45	14.9	$20,572.65
Collect and record the CPMS monitoring parameters	0.5	1	0.5	149	75	3.725	7.45	$10,286.33
New Sources								
Data Collection	0	0	0	2.58	0	0	0	$0
Create and Store Maintenance Plan	0	0	0	2.58	0	0	0	$0
F. Time to Train Personnel of New Sources	16	1	16	2.58	41	2.063	4.126	$5,697
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					***3,893***			***$467,449***
Total Labor Burden and Cost (rounded)[f]						**25,600**		**$3,070,000**
Total Capital and O&M Cost (rounded)[f]								**$0**
Grand TOTAL (rounded)[f]								**$3,100,000**

Labor Rates:	
Management	$157.61
Technical	$123.94
Clerical	$62.51

	Number of RICE
New	2.5788
Reconstructed/modified	33.2788
Existing	307
Assumed New RICE with SCR or NSCR	1.3272
Assumed New RICE with no SCR or NSCR	1.2516
Assumed Existing RICE with SCR or NSCR	158
Assumed Existing RICE with no SCR or NSCR	149
Assumed Existing EPA-Certified RICE	76.75
Assumed Existing Non EPA-Certified RICE	230.25

Civilian Workers, by occupational and industry group

Note: New is assumed to be .84% of existing, per RICE MACT ICR data.

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Note: New is assumed to be .84% of existing, per RICE MACT ICR data.

Assumed 25% of Existing Population per ECHO database.

Assumed 25% of Existing Population per ECHO database.

121 hr/response

Number of Responses
0
0
0
2.5788
0
0
0
0
1.2516
0.06258
0
149
7.45
460.5
23.025
0
0
0
0
0
0
0
0
0
0
483.525
483.525
614
0
0
0
0
0
0
3684
307
1228
1228
0
0
0
0
149
149
0
0
0
2.5788
9126.65438 SUM

[a] We have assumed that there are approximately 307 respondents operating RICE and that 10% of the existing facilities will have new construction/reconstruction.

[b] This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor, $123.94 per hour for Technical labor, and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New RICE CPMS performance evaluation conducted annually. We have assumed that 5 percent of respondents would repeat annual CPMS performance evaluation due to failure.

[d] We have assumed that 5 percent of respondents would repeat annual CPMS performance evaluation due to failure.

[e] Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Pipeline Transportation of Natural Gas
Year 3, Reciprocating Internal Combustion Engines (RICE)

Table 3: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	24	1	24	2.58	61.89	3.09	6.19	$8,545
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	20	1	20	0	0	0	0	$0.00
B. Required Activities								
New, Reconstructed, Modified Sources - Annual CPMS Performance Evaluation [c]								
Annual CPMS Performance Evaluation	8	1	8	1.25	10	0.50	1.00	$1,382.48
Repeat Annual CPMS Performance Evaluation	8	1	8	0.06	1	0.03	0.05	$69.12
Existing Sources - Annual CPMS Performance Evaluation [d]								
Annual CPMS Performance Evaluation	8	1	8	149	1,192	59.6	119.2	$164,581.23
Repeat Annual CPMS Performance Evaluation	8	1	8	7.45	60	2.98	5.96	$8,229.06
Non EPA-Certified Engine Performance Testing	24	2	48	230.25	11,052	552.6	1105.2	$1,525,966.22
Repeat Non EPA-Certified Engine Performance Testing	24	2	48	11.51	553	27.63	55.26	$76,298.31
New and Existing Sources - Monitoring [e]								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	$0.00
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Initial Performance Test	2	1	2	0	0	0	0	$0.00
Report of Performance Test	2	1	2	0	0	0	0	$0.00
Semi-Annual Report Submitted to Administrator of Compliance Statement, SubSection 52.41(d) performance test	8	2	16	2.58	41.26	2.06	4.13	$5,697
Existing Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Non EPA-Certified Engine Performance Test	2	2	2	241.76	483.53	24.18	48.35	$66,761.02
Report of Non EPA-Certified Engine Performance Test Results via CEDRI or analogous electronic reporting	2	2	2	241.8	483.53	24.18	48.35	$66,761.02
Semi-Annual Report submitted via CEDRI or analogous electronic reporting	8	2	16	307	4912	245.6	491.2	$678,207
Subtotal for Reporting Requirements					***21,676***			***$2,602,498***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.1	12	1.2	307	368	18.42	36.84	$50,865.54
Create and Store Engine Maintenance Plan	0.4	1	0.4	307	123	6.14	12.28	$16,955.18
Records of Hours of Operation	0.1	4	0.4	307	123	6.14	12.28	$16,955.18
Records of Engine Maintenance Conducted	0.1	4	0.4	307	123	6.14	12.28	$16,955.18
Engines Anticipated with SCR or NSCR								
Daily monitoring of catalyst inlet temperature	0.005	365	1.83	158	288	14.42	28.84	$39,812.92
Monthly monitoring of pressure drop across catalyst	0.1	12	1.2	158	190	9.48	18.96	$26,178.36
Engines Anticipated with no SCR or NSCR								
Prepare CPMS site-specific monitoring plan to address monitoring system design, data collection, and QA/QC	16	1	16	0	0	0	0	$0.00
Records of Annual CPMS Performance Evaluation	1	1	1	149	149	7.45	14.9	$20,572.65
Collect and record the CPMS monitoring parameters	0.5	1	0.5	149	75	3.725	7.45	$10,286.33
New Sources								
Data Collection	0	0	0	2.58	0	0	0	$0
Create and Store Maintenance Plan	0	0	0	2.58	0	0	0	$0
F. Time to Train Personnel of New Sources	16	1	16	2.58	41	2.06	4.13	$5,697
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					***1,701***			***$204,278***
Total Labor Burden and Cost (rounded) [f]						**23,400**		**$2,810,000**
Total Capital and O&M Cost (rounded) [f]								**$0**
Grand TOTAL (rounded) [f]								**$2,800,000**

Labor Rates:		
Management	$157.61	2021, Table 2. Civilian Workers, by occupational and industry group
Technical	$123.94	
Clerical	$62.51	

	Number of RICE	
New	2.5788	Note: New is assumed to be .84% of existing, per RICE MACT ICR data.
Reconstructed/modified	33.2788	
Existing	307	
Assumed New RICE with SCR or NSCR	1.3272	Note: New is assumed to be .84% of existing, per RICE MACT ICR data.
Assumed New RICE with no SCR or NSCR	1.2516	Note: New is assumed to be .84% of existing, per RICE MACT ICR data.
Assumed Existing RICE with SCR or NSCR	158	
Assumed Existing RICE with no SCR or NSCR	149	
Assumed Existing EPA-Certified RICE	76.75	Assumed 25% of Existing Population per ECHO database.
Assumed Existing Non EPA-Certified RICE	230.25	Assumed 25% of Existing Population per ECHO database.

110 hr/response

No. of Responses

0
0
2.5788
0
0
0
0
0
1.2516
0.06258
0
149
7.45
460.5
23.025
0
0
0
0
0
0
0
0
0
0
0
5.1576
0
0
483.525
483.525
614
0
0
0
0
0
0
0
3684
307
1228
1228
0
57670
1896
0
0
149
0
0
0
2.5788
68543.65438 SUM

[a] We have assumed that there are approximately 307 respondents operating RICE and that 10% of the existing facilities will have new construction/reconstruction.

[b] This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor, $123.94 per hour for Technical labor, and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New RICE CPMS performance evaluation conducted annually. We have assumed that 5 percent of respondents would repeat annual CPMS performance evaluation due to failure.

[d] We have assumed that 5 percent of respondents would repeat annual CPMS performance evaluation due to failure.

[e] Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Pipeline Transportation of Natural Gas

Year 1, Reciprocating Internal Combustion Engines (RICE)

Table 4: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
annual CPMS performance evaluations [c]	8	1	8	0	0.0
Repeat annual CPMS performance evaluations [d]	8	1	8	0	0
Report Review					
Notification of annual CPMS performance evaluations [e]	0.5	1.1	0.55	0	0.0
Review of Semi-annual reports [g]	8	2	16	138	2208.0
TOTAL (rounded) [f]		**5.1**			

Assumptions:

[a] We have assumed that there are approximately 307 respondents with kilns and that 10% of the existing facilities will be re-cc

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for governm $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical rate of $27.73 (G from the Office of Personnel Management (OPM) "2021 General Schedule" which excludes locality rates of pay.

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or modifie performance tests for existing facilities.

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not attend

[e] Only facilities with no SCR or NSCR will conduct annual CPMS performance evaluations.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

[g] 138 facilities operate 307 existing RICE units.

l Ozone Transport for

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
0.0	0.0	$0.00
0	0	$0
0.0	0.0	$0.00
110.40	220.80	$126,860.64
2,540		**$126,900**

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

onstructed or modified.

ent overhead expenses: Managerial rate of
GS-6, Step 3, $17.33 + 60%). These rates are

d, but will not attend the semi-annual

repeat performance tests.

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.

No. of Responses
0
0
0
0
276
276 Sum

Pipeline Transportation of Natural Gas

Year 2, Reciprocating Internal Combustion Engines (RICE)

Table 5: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
annual CPMS performance evaluations [c]	8	1	8	150.2516	1202.0
Repeat annual CPMS performance evaluations [d]	8	1	8	7.51258	60
Report Review					
Notification of annual CPMS performance evaluations [e]	0.5	1.1	0.55	150.2516	82.6
Review of Semi-annual reports [g]	8	2	16	138	2208.0
TOTAL (rounded) [f]					**4,090**

Assumptions:

[a] We have assumed that there are approximately 307 respondents with kilns and that 10% of the existing facilities will be re-cc

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for governm $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical rate of $27.73 (G from the Office of Personnel Management (OPM) "2021 General Schedule" which excludes locality rates of pay.

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or modifie performance tests for existing facilities.

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not attend

[e] Only facilities with no SCR or NSCR will conduct annual CPMS performance evaluations.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

[g] 138 facilities operate 307 existing RICE units.

l Ozone Transport

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
60.1	120.2	$69,061.65
3	6	$3,453
4.1	8.3	$4,747.99
110.40	220.80	$126,860.64
		$204,100

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.

onstructed or modified.

ent overhead expenses: Managerial rate of
GS-6, Step 3, $17.33 + 60%). These rates are

d, but will not attend the semi-annual

repeat performance tests.

No. of Respones	
150.2516	
7.51258	
0	
165.27676	
276	
599.04094	Sum

Pipeline Transportation of Natural Gas

Year 3, Reciprocating Internal Combustion Engines (RICE)

Table 6: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
annual CPMS performance evaluations [c]	8	1	8	150.2516	1202.0
Repeat annual CPMS performance evaluations [d]	8	1	8	7.51258	60
Report Review					
Notification of annual CPMS performance evaluations [e]	0.5	1.1	0.55	150.2516	82.6
Review of Semi-annual reports [g]	8	2	16	138	2208.0
TOTAL (rounded) [f]					**4,090**

Assumptions:

[a] We have assumed that there are approximately 307 respondents with kilns and that 10% of the existing facilities will be re-cc

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for governm $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical rate of $27.73 (G from the Office of Personnel Management (OPM) "2021 General Schedule" which excludes locality rates of pay.

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or modifie performance tests for existing facilities.

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not attend

[e] Only facilities with no SCR or NSCR will conduct annual CPMS performance evaluations.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

[g] 138 facilities operate 307 existing RICE units.

l Ozone Transport

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
60.1	120.2	$69,061.65
3	6	$3,453
4.1	8.3	$4,747.99
110.40	220.80	$126,860.64
		$204,100

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.

ɔnstructed or modified.

ent overhead expenses: Managerial rate of
;S-6, Step 3, $17.33 + 60%). These rates are

d, but will not attend the semi-annual

repeat performance tests.

No. of Responses	
150.2516	
7.51258	
0	
165.27676	
276	
599.04094	Sum

Pipeline Transportation of Natural Gas
Source: RICE
Table 7: Capital/Startup vs. Operation and Maintenance (O&M) Costs

	(A)	(B)	(C)	(D)	(E)
Year	Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Number of Respondents	Total Capital/Startup Cost, (B X C)	Annual O&M Costs for One Respondent
Year 1		$0	0	$0	$0
Year 2	Install CPMS		0	$0	$0
Year 2	(a) initial[a]				$724
Year 2	(b) annual[b]				$648
Year 3	CPMS				
Year 3	(a) initial	$0			
Year 3	(b) annual	$0			
	TOTAL			$0	

To

a Initial Annual Capital purchase and O&M Cost of $568 (year 2010) was obtained from EC/R, Inc. Memo date

b Annual CPMS cost is assumed to be 70% of initial CPMS cost; Annual Capital purchase and O&M Cost of $50

(F)	(G)
Number of Respondents with O&M	Total O&M, (E X F)
	$0
149	$0
149	$107,876
149	$96,552
	$0
	$0
	$0
	$200,000

tal Capital and O&M

d August 8, 2010 and adjusted to a 2023 cost of $724.

)7 (year 2010) adjusted to a 2023 cost of $724.

Cement and Concrete Manufacturing
Source: Kilns
Table 15: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Other EDITS: change PM to NOx

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	$0
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	1	1	1	47	47	2.35	4.7	$6,489.36
B. Required Activities								
New, Reconstructed, Modified Sources - Testing [c]								
Initial NOx Performance Test (kiln)	24	2	48	4.7	226	11.28	22.56	$31,148.93
Repeat NOx Performance Test	24	2	48	0.235	11	0.564	1.128	$1,557.45
Existing Sources - Annual Testing [d]								
Semi-annual NOx Performance Test (kiln)	24	2	48	47	2,256	112.8	225.6	$311,489.30
Repeat NOx Performance Test	24	2	48	2.35	113	5.64	11.28	$15,574.47
New, Reconstructed, Modified Sources								
Notification of Initial Performance Test	2	1	2	4.7	9.4	0.47	0.94	$1,297.87
Report of Performance Test Results via CEDRI or analogous electronic reporting	2	2	4	4.7	18.8	0.94	1.88	$2,595.74
Semi-Annual Report submitted via CEDRI or analogous electronic reporting	8	2	16	0.235	3.76	0.188	0.376	$519.15
Existing Sources								
Notification of Semi-annual Performance Test	2	2	4	47	188	9.4	18.8	$25,957.44
Report of Semi-Annual Performance Test Results via CEDRI or analogous electronic reporting	2	2	4	47	188	9.4	18.8	$25,957.44
Semi-Annual Report submitted via CEDRI or analogous electronic reporting	8	2	16	47	752	37.6	75.2	$103,829.77
Subtotal for Reporting Requirements					***4,385***			***$422,587***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.1	2	33	47	1,551	77.55	155.1	$214,148.90
Records of Performance Tests	0.1	2	24	47	1,128	56.4	112.8	$155,744.65
New Sources								
Data Collection	1.5	2	3	0	0	0	0	$0
Records of Performance Tests	0.1	2	0.2	0	0	0	0	$0
F. Time to Train Personnel	80	1	80	0	0	0	0	$0
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					***3,081***			***$369,894***
Total Labor Burden and Cost (rounded) [e]						**7,500**		**$790,000**
Total Capital and O&M Cost (rounded) [e]								**$0**
Grand TOTAL (rounded) [e]								**$800,000**

[a] We have assumed that there are approximately 47 respondents operating kilns and that 10% of the existing facilities will have new construction/reconstruction.

[b] This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor, $123.94 per hour for Technical labor, and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New kilns test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test due to failure.

[d] The rule requires existing kilns re-test semi-annually for NOx.

[e] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Labor Rates:	
Management	$157.61
Technical	$123.94
Clerical	$62.51

2021, "Table 2. Civilian Workers, by occupational and industry group

	Number of kilns
New	0
Reconstructed/modified	4.7
Existing	47

35 hr/response

No. of Responses

0
0
0
0
47
0
0
9.4
0.47
0
94
4.7
0
4.7
9.4
0.47
0
94
94
94
0
0
0
0
0
0
0
94
94
0
0
0
640.14 Sum

Cement and Concrete Manufacturing
Source: Kilns

Table 16: Average Annual EPA Burden and Cost - Federal Implementation Plan Addressin the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
Initial performance tests [c]	24	1	24	4.7	112.8
Repeat performance test [d]	24	1	24	0	0
Report Review					
Notification of performance test [e]	0.5	1.1	0.55	47	25.9
Review performance test results	8	2	16	47	752.0
TOTAL (rounded) [f]					**1,020**

Assumptions:

[a] We have assumed that there are approximately 47 respondents with kilns and that 10% of the existing facilities will b

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for g rate of $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical ra These rates are from the Office of Personnel Management (OPM) "2021 General Schedule" which excludes locality rat

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not

[e] Modified or reconstructed facilities conduct initial testing, and existing facilities (kilns) conduct semi-annual testing.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

ıg Regional Ozone Transport for

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
5.6	11.3	$6,480.92
0	0	$0
1.3	2.6	$1,485.21
37.60	75.20	$43,206.16
		$51,200

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.

ɔe re-constructed or modified.

ɡovernment overhead expenses: Managerial
ıte of $27.73 (GS-6, Step 3, $17.33 + 60%).
tes of pay.
modified, but will not attend the semi-

: attend repeat performance tests.

No. of Responses	
4.7	
0	
0	
51.7	
94	
150.4	Sum

Iron and Steel Mills and Ferroalloy Manufacturing
Year 1, Sources: Boilers, Furnaces, Coke Ovens, Windbox

Table 8: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	$0
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	20	1	20	39	780	39	78	$107,695.77
B. Required Activities								
New, Reconstructed, Modified Sources - Testing[c]								
Initial Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	$0.00
Repeat Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	$0.00
Existing Sources - Initial Testing[d]								
Initial Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	$0.00
Repeat Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	$0.00
New and Existing Sources - Monitoring[e]								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	$0.00
Quarterly Accuracy Assessment								
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	$0.00
Report of Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	$0.00
Quarterly Electronic Reports to Administrator	24	4	48	0	0	0	0	$0
Existing Sources								
Work Plan For Emission Units Not Identified in (d)(a)(i)(2) or (3) [refer to pg. 17 of Reg Text.doc][f]	10	1	2	20	40	2	4	$5,522.86
Work Plan For Basic Oxygen Process Furnaces	10	1	2	4	8	0.4	0.8	$1,104.57
For Taconite Kilns with Existing low-NOx burners, Submit Demonstration Report	5	1	2	9	18	0.9	1.8	$2,485.29
For Taconite Kilns with no Existing low-NOx burners, Submit Work Plan	10	1	2	6	12	0.6	1.2	$1,656.86
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	$0.00
Report of Initial Performance Evaluation of NOx CEMS Test Results	2	1	2	0	0	0	0	$0.00
CEDRI electronic submittal of NOx CEMS Report and Excess Emissions Report	2	4	8	0	0	0	0	$0.00
Subtotal for Reporting Requirements					***987***			***$118,465***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.1	330	33	39	1,287	64.35	128.7	$177,698.02
Recordkeeping of NOx emission rate, operating days data, CEMS data	0.1	330	33	39	1,287	64.35	128.7	$177,698.02
New Sources								
Data Collection	1.5	330	495	0	0	0	0	$0
CEMS Recordkeeping	0.1	330	33	0	0	0	0	$0
F. Time to Train Personnel	80	1	80	0	0	0	0	$0
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					***2,960***			***$355,396***
Total Labor Burden and Cost (rounded)[g]						**3,900**		**$470,000**
Total Capital and O&M Cost (rounded)[g]								**$0**
Grand TOTAL (rounded)[g]								**$500,000**

[a] We have assumed that there are approximately 26 respondents operating boilers and that 10% of the existing facilities will have new construction/reconstruction.

[b] This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor; $123.94 per hour for Technical labor, and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New boilers test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test due to failure.

[d] The rule requires existing boilers to conduct an initial compliance test within 90 days from the installation of the pollution control equipment used to comply with the NOx emission limits. We have assumed that 5 percent of respondents would repeat annual performance test due to failure.

[e] Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.

[f] Estimated number of taconite production kilns located in Minnesota and Michigan.

[g] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Labor Rates:		
		Civilian Workers, by occupational and industry group
Management	$157.61	
Technical	$123.94	
Clerical	$62.51	

	Number of Boilers
New	0
Reconstructed/modified	3.9
Existing	39

Note: Assumed that 40% of Taconite Kilns have no existing low-NOx burners.

18 hr/response

Number of Respones	
0	
0	
0	
0	
39	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
20	
4	
9	
6	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
12870	
12870	
0	
0	
0	
0	
25818	Sum
12948	Sum without CEMS

Iron and Steel Mills and Ferroalloy Manufacturing
Year 2, Sources: Boilers,
Furnaces, Coke Ovens,
Windbox

Table 9: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]	No. of Responses
1. APPLICATIONS	NA								0
2. SURVEY AND STUDIES	NA								0
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	$0	0
4. REPORT REQUIREMENTS									0
A. Familiarize with regulatory requirement	20	1	20	0	0	0	0	$0.00	0
B. Required Activities									0
New, Reconstructed, Modified Sources - Testing [c]									0
Initial Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	$0.00	0
Repeat Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	$0.00	0
Existing Sources - Initial Testing [d]									0
Initial Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	$0.00	0
Repeat Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	$0.00	0
New and Existing Sources - Monitoring [e]									0
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	$0.00	0
Quarterly Accuracy Assessment									0
C. Create Information (Included in 4B)									0
D. Gather Existing Information (Included in 4E)									0
E. Write Report									0
New, Reconstructed, Modified Sources									0
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00	0
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	$0.00	0
Report of Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	$0.00	0
Quarterly Electronic Reports to Administrator	24	4	48	0	0	0	0	$0	0
Existing Sources									0
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00	0
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	$0.00	0
Report of Initial Performance Evaluation of NOx CEMS Test Results	2	1	2	0	0	0	0	$0.00	0
CEDRI electronic submittal of NOx CEMS Report and Excess Emissions Report	2	4	8	0	0	0	0	$0.00	0
Subtotal for Reporting Requirements					***0***			***$0***	0
5. RECORDKEEPING REQUIREMENTS									0
A. Familiarize with regulatory requirement									0
B. Plan Activities									0
C. Implement Activities									0
D. Record Data	NA								0
E. Time to Transmit or Disclose Information									0
Existing Sources									0
Data Collection	0.1	330	33	39	1,287	64.35	128.7	$177,698.02	12870
Recordkeeping of NOx emission rate, operating days data, CEMS data	0.1	330	33	39	1,287	64.35	128.7	$177,698.02	12870
New Sources									0
Data Collection	1.5	330	495	0	0	0	0	$0	0
CEMS Recordkeeping	0.1	330	33	0	0	0	0	$0	0
F. Time to Train Personnel	80	1	80	0	0	0	0	$0	0
G. Time for Audits	NA								0
Subtotal for Recordkeeping Requirements					***2,960***			***$355,396***	0
Total Labor Burden and Cost (rounded) [f]						**3,000**		**$360,000**	0
Total Capital and O&M Cost (rounded) [f]								**$0**	0
Grand TOTAL (rounded) [f]								**$400,000**	25740 SUM

14 hr/response

Labor Rates:		
Management	$157.61	the United States Department of Labor, Bureau of Labor Statistics, June 2021, "Table 2. Civilian Workers, by occupational and industry group
Technical	$123.94	
Clerical	$62.51	

	Number of Boilers
New	0
Reconstructed/modified	3.9
Existing	39

[a] We have assumed that there are approximately 26 respondents operating boilers and that 10% of the existing facilities will have new construction/reconstruction.

[b] This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor; $123.94 per hour for Technical labor, and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New boilers test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test due to failure.
[d] The rule requires existing boilers to conduct an initial compliance test within 90 days from the installation of the pollution control equipment used to comply with the NOx emission limits. We have assumed that 5 percent of respondents would repeat annual performance test due to failure.
[e] Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Iron and Steel Mills and Ferroalloy Manufacturing
Year 3, Sources: Boilers,
Furnaces, Coke Ovens,
Windbox

Table 10: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	$0
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	20	1	20	0	0	0	0	$0.00
B. Required Activities								
New, Reconstructed, Modified Sources - Testing [c]								
Initial Performance Evaluation of NOx CEMS	24	2	48	3.9	187	9.36	18.72	$25,846.98
Repeat Performance Evaluation of NOx CEMS	24	2	48	0.20	9	0.47	0.94	$1,292.35
Existing Sources - Initial Testing [d]								
Initial Performance Evaluation of NOx CEMS	24	2	48	39	1,872	93.6	187.2	$258,469.85
Repeat Performance Evaluation of NOx CEMS	24	2	48	1.95	94	4.68	9.36	$12,923.49
Initial Performance Testing of Taconite Kilns with no existing low-NOx burners (within 5 years of effective date of rule)	24	1	24	6	144	7.2	14.4	$19,882.30
Repeat Performance Testing of Taconite Kilns with no existing low-NOx burners (within 5 years of effective date of rule)	24	1	24	0.3	7	0.36	0.72	$994.11
New and Existing Sources - Monitoring [e]								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	39	3,861	193.05	386.1	$533,094.06
Quarterly Accuracy Assessment	8	4	32	39	1,248	62.40	124.8	$172,313.23
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	3.9	7.8	0.39	0.78	$1,076.96
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	3.9	7.8	0.39	0.78	$1,076.96
Report of Performance Evaluation of NOx CEMS	2	1	2	3.9	7.8	0.39	0.78	$1,076.96
Quarterly Electronic Reports to Administrator	24	4	48	4	192	9.6	19.2	$26,510
Existing Sources								
Notification of Demonstration of CEMS	2	1	2	39	78	3.9	7.8	$10,769.58
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	39	78	3.9	7.8	$10,769.58
Report of Initial Performance Evaluation of NOx CEMS Test Results	2	1	2	39	78	3.9	7.8	$10,769.58
CEDRI electronic submittal of NOx CEMS Report and Excess Emissions Report	2	6	12	39	468	23.4	46.8	$64,617.46
Report of Taconite Kiln Performance Testing submitted via CEDRI or analogous electronic reporting (Kilns with no existing low-NOx burners at effective date of rule)	2	1	2	6.3	12.6	0.63	1.26	$1,739.70
Subtotal for Reporting Requirements					***9,591***			***$1,151,483***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.1	330	33	39	1,287	64.35	128.7	$177,698.02
Recordkeeping of NOx emission rate, operating days data, CEMS data	0.1	330	33	39	1,287	64.35	128.7	$177,698.02
New Sources								
Data Collection	1.5	330	495	0	0	0	0	$0
CEMS Recordkeeping	0.1	330	33	0	0	0	0	$0
F. Time to Train Personnel	80	1	80	0	0	0	0	$0
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					***2,960***			***$355,396***
Total Labor Burden and Cost (rounded) [f]					**12,600**			**$1,510,000**
Total Capital and O&M Cost (rounded) [f]								**$7,630,000**
Grand TOTAL (rounded) [f]								**$9,100,000**

[a] We have assumed that there are approximately 26 respondents operating boilers and that 10% of the existing facilities will have new construction/reconstruction.

[b] This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor; $123.94 per hour for Technical labor, and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New boilers test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test due to failure.

[d] The rule requires existing boilers to conduct an initial compliance test within 90 days from the installation of the pollution control equipment used to comply with the NOx emission limits. We have assumed that 5 percent of respondents would repeat annual performance test due to failure.

[e] Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Labor Rates:			No. of Responses
			0
Management	$157.61	2021, "Table 2. Civilian Workers, by occupational and industry group	0
Technical	$123.94		0
Clerical	$62.51		0
			0

	Number of Boilers		
			0
New	0		0
Reconstructed/modified	3.9		7.8
Existing	39		0.39
Total no. of Taconite kilns	15		0
Taconite kilns with existing low-NOx burners (at effective date of rule)	9		78
Taconite kilns with no existing low-NOx burners (at effective date of rule)	6	*Note: Assumed that 40% of Taconite Kilns have no existing low-NOx burners.*	3.9
			6
			0.3
			0
			12870
			156
			0
			0
			0
			0
			3.9
			3.9
			3.9
			16
			0
			39
			39
			39
			234
			6.3
			0
			0
			0
			0
			0
			0
			0
			12870
			12870
			0
			39247.39 SUM
59 hr/response			39247.09 Sum without CEMS

Iron and Steel Mills and Ferroalloy Manufacturing
Year 1, Sources: Boilers, Furnaces, Coke Ovens, Windbox

Table 11: Average Annual EPA Burden and Cost - Federal Implementation Plan Addressing the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
Initial Performance Evaluation of NOx CEMS [c]	24	1	24	0	0.0
Repeat Performance Evaluation of NOx CEMS [d]	24	1	24	0	0
Report Review					
Review of Work Plan For Emission Units Not Identified in (d)(a)(i)(2) or (3) [refer to pg. 17 of Reg Text.doc]	8	1	8	20	160.0
Review of Work Plan for Basic Oxygen Process Furnaces	8	1	8	4	32.0
Review Demonstration Report For Taconite Kilns with Existing low-NOx burners	8	1	8	8	64.0
Review Work Plan For Taconite Kilns with no Existing low-NOx burners	8	1	8	7	56.0
Notification of Performance Evaluation of NOx CEMS [e]	0.5	1.1	0.55	39	21.5
Review test results/CEMS Performance Evaluation Results [e]	8	1	8	39	312.0
Review quarterly electronic summary reports	8	4	32	0	0
TOTAL (rounded) [f]					**740**

Assumptions:

[a] We have assumed that there are approximately 26 respondents with boilers and that 10% of the existing facilities wil

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for g rate of $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical ra These rates are from the Office of Personnel Management (OPM) “2021 General Schedule” which excludes locality rat

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or performance tests for existing facilities.

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not

[e] Modified, reconstructed, and existing facilities conduct initial testing.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

; Regional Ozone Transport for

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
0.0	0.0	$0.00
0	0	$0
8.00	16.00	$9,192.80
1.60	3.20	$1,838.56
3.20	6.40	$3,677.12
2.80	5.60	$3,217.48
1.1	2.1	$1,232.41
15.60	31.20	$17,925.96
0.0	0.0	$0.00
		$37,100

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

[12/28/21- se soon to Gina on the # of taconite mills, then subtract that # from the 35 units currently shown]

[se Monday to Gina- how many estimated sources?]

[se Monday to Gina- how many estimated sources?]

l be re-constructed or modified.

government overhead expenses: Managerial
te of $27.73 (GS-6, Step 3, $17.33 + 60%).
es of pay.

modified, but will not attend the annual

attend repeat performance tests.

	No. of Responses
These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.	0
	0
	0
	20
	4
	8
	7
	42.9
	39
	0
	120.9 Sum

Iron and Steel Mills and Ferroalloy Manufacturing
Year 2, Sources: Boilers, Furnaces, Coke Ovens, Windbox

Table 12: Average Annual EPA Burden and Cost - Federal Implementation Plan Addressing the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
Initial Performance Evaluation of NOx CEMS [c]	24	1	24	0	0.0
Repeat Performance Evaluation of NOx CEMS [d]	24	1	24	0	0
Report Review					
Notification of Performance Evaluation of NOx CEMS [e]	0.5	1.1	0.55	39	21.5
Review test results/CEMS Performance Evaluation Results [e]	8	1	8	39	312.0
Review quarterly electronic summary reports	8	4	32	0	0
TOTAL (rounded) [f]					**380**

Assumptions:

[a] We have assumed that there are approximately 26 respondents with boilers and that 10% of the existing facilities wil

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for g rate of $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical ra These rates are from the Office of Personnel Management (OPM) "2021 General Schedule" which excludes locality rat

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or performance tests for existing facilities.

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not

[e] Modified, reconstructed, and existing facilities conduct initial testing.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

; Regional Ozone Transport for

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
0.0	0.0	$0.00
0	0	$0
1.1	2.1	$1,232.41
15.60	31.20	$17,925.96
0.0	0.0	$0.00
		$19,200

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.

l be re-constructed or modified.

government overhead expenses: Managerial
te of $27.73 (GS-6, Step 3, $17.33 + 60%).
es of pay.

modified, but will not attend the annual

: attend repeat performance tests.

No. of Responses

0

0

0

42.9

39

0

81.9 Sum

Iron and Steel Mills and Ferroalloy Manufacturing
Year 3, Sources: Boilers, Furnaces, Coke Ovens, Windbox

Table 13: Average Annual EPA Burden and Cost - Federal Implementation Plan Addressing the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
Initial Performance Evaluation of NOx CEMS [c]	24	1	24	0	0.0
Repeat Performance Evaluation of NOx CEMS [d]	24	1	24	0	0
Report Review					
Notification of Performance Evaluation of NOx CEMS [e]	0.5	1.1	0.55	39	21.5
Review test results/CEMS Performance Evaluation Results [e]	8	1	8	39	312.0
Review quarterly electronic summary reports	8	4	32	0	0
TOTAL (rounded) [f]					**380**

Assumptions:

[a] We have assumed that there are approximately 26 respondents with boilers and that 10% of the existing facilities wil

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for g rate of $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical ra These rates are from the Office of Personnel Management (OPM) “2021 General Schedule” which excludes locality rat

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or performance tests for existing facilities.

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not

[e] Modified, reconstructed, and existing facilities conduct initial testing.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

; Regional Ozone Transport for

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
0.0	0.0	$0.00
0	0	$0
1.1	2.1	$1,232.41
15.60	31.20	$17,925.96
0.0	0.0	$0.00
		$19,200

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.

l be re-constructed or modified.

government overhead expenses: Managerial
te of $27.73 (GS-6, Step 3, $17.33 + 60%).
es of pay.

modified, but will not attend the annual

attend repeat performance tests.

No. of Responses

0

0
0

42.9

39
0

81.9 Sum

Iron and Steel Mills and Ferroalloy Manufacturing
Source: Boilers
Table 14: Capital/Startup vs. Operation and Maintenance (O&M) Costs

	(A)	(B)	(C)	(D)	(E)
Year	Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Number of New Respondents	Total Capital/Startup Cost, (B X C)	Annual O&M Costs for One Respondent
Year 1	NOx Continuous Emission Monitors	$0	0	$0	$0
Year 1	Initial CEMS testing	$0	0	$0	
Year 2	NOx Continuous Emission Monitors	$0	0	$0	$0
Year 2	Initial CEMS testing	$0	0	$0	
Year 3	NOx Continuous Emission Monitors	$153,700	0	$0	
Year 3	(a) initial[a]	$131,222			$127,002
Year 3	(b) annual[b]				$68,532
	TOTAL			$0	

To

a Initial annual capital and O&M cost ($116,459) from Portland Cement ICR (2019) and adjusted to 2
b Annual capital and O&M cost ($53,600) from Boiler 5D MACT ICR (2010) and adjusted to 2023 cos

(F)	(G)
Number of Respondents with O&M	Total O&M, (E X F)
	$0
	$0
39	$4,953,078
39	$2,672,748
	$7,630,000

tal Capital and O&M $7,630,000

:023 cost.
:t.

Glass and Glass Product Manufacturing
Source: Furnaces
Table 17: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	$0
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	1	1	1	40	40	2	4	$5,522.86
B. Required Activities								
New, Reconstructed, Modified Sources - Testing[c]								
Initial NOx Performance Test (furnaces)	24	2	48	4.4	211	10.56	21.12	$29,160.70
Repeat NOx Performance Test	24	2	48	0.22	11	0.528	1.056	$1,458.04
Existing Sources - Annual Testing[d]								
Semi-annual NOx Performance Test (furnaces)	24	2	48	44	2,112	105.6	211.2	$291,607.01
Repeat NOx Performance Test	24	2	48	2.2	106	5.28	10.56	$14,580.35
New, Reconstructed, Modified Sources								
Notification of Initial Performance Test	2	1	2	4.4	8.8	0.44	0.88	$1,215.03
Report of Performance Tests submitted via CEDRI or analogous electronic reporting	2	2	4	4.4	17.6	0.88	1.76	$2,430.06
Existing Sources								
Notification of Semi-annual Performance Test	2	2	4	44	176	8.8	17.6	$24,300.58
Report of Semi-annual Performance Test Results submitted via CEDRI or analogous electronic reporting	2	2	4	44	176	8.8	17.6	$24,300.58
Subtotal for Reporting Requirements					***3,286***			***$394,575***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.1	2	33	44	1,452	72.6	145.2	$200,479.82
Records of Performance Tests	0.1	2	24	44	1,056	52.8	105.6	$145,803.50
New Sources								
Data Collection	1.5	2	3	0	0	0	0	$0
Records of Performance Tests	0.1	2	0.2	0	0	0	0	$0
F. Time to Train Personnel	80	1	80	0	0	0	0	$0
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					***2,884***			***$346,283***
Total Labor Burden and Cost (rounded)[e]						**6,200**		**$740,000**
Total Capital and O&M Cost (rounded)[e]								**$43,600**
Grand TOTAL (rounded)[e]								**$800,000**

[a] We have assumed that there are approximately 44 respondents operating furnaces and that 10% of the existing facilities will have new construction/reconstruction.

[b] This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor; $123.94 per hour for Technical labor, and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New furnaces test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test due to failure.

[d] The rule requires existing furnaces re-test semi-annually for NOx. Existing furnaces are assumed to not have existing CEMS installed.

[e] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Labor Rates:	
Management	$157.61
Technical	$123.94
Clerical	$62.51

2. Civilian Workers, by occupational and industry group

	Number of furnaces
New	0
Reconstructed/modified	4.4
Existing	44

29 hr/response

No. of Responses

0
0
0
0
40
0
0
0
8.8
0.44
0
88
4.4
0
4.4
8.8
0
88
88
0
0
0
0
0
0
0
88
88
0
0
0
0
0
506.84 Sum

Glass and Glass Product Manufacturing
Source: Furnaces
Table 18: Average Annual EPA Burden and Cost - Federal Implementation Plan Addressin the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
Initial performance tests [c]	24	1	24	4.4	105.6
Repeat performance test [d]	24	1	24	0	0
Report Review					
Notification of performance test [e]	0.5	1.1	0.55	44	24.2
Review performance test results	8	2	16	44	704.0
TOTAL (rounded) [f]					**960**

Assumptions:

[a] We have assumed that there are approximately 44 respondents with furnaces and that 10% of the existing facilities w

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for g rate of $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical ra These rates are from the Office of Personnel Management (OPM) “2021 General Schedule” which excludes locality rat

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or annual performance tests for existing facilities.

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not

[e] Modified or reconstructed facilities conduct initial testing, and existing facilities (kilns) conduct semi-annual testing.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

ıg Regional Ozone Transport for

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
5.3	10.6	$6,067.25
0	0	$0
1.2	2.4	$1,390.41
35.20	70.40	$40,448.32
		$47,900

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.

ill be re-constructed or modified.

;overnment overhead expenses: Managerial
ıte of $27.73 (GS-6, Step 3, $17.33 + 60%).
tes of pay.

modified, but will not attend the semi-

: attend repeat performance tests.

No. of Responses

4.4
0
0
48.4
88
140.8 Sum

Glass and Glass Product Manufacturing

Source: Furnaces

Table 19: Capital/Startup vs. Operation and Maintenance (O&M) Costs

(A)	(B)	(C)	(D)	(E)	(F)
Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Number of New Respondents	Total Capital/Startup Cost [a] (B X C)	Annual O&M Costs for One Respondent	Number of Respondents with O&M
Performance Tests		0	$0	$0	0
Monitoring Equipment		0	$0	$0	0
File Cabinets		0	$0	$0	0
Inspection of Emission Control Systems [b]	$0	0	$0	$992	44
Total [c]			$0		

[a] No new sources are expected and all existing sources have fully implemented capital costs to comply with the curr

[b] We estimate 34 glass manufacturing facilities with 44 affected furnaces. . We assume that annual inspections of er systems will require 8 hours per inspection at the current labor rate for technical personnel ($123.94/hr) for each of furnaces with a control device ($123.94 x 8 = $992 (rounded)).

[c] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

(G)	
Total O&M (E X F)	
$0	
$0	
$0	
$43,648	
$43,600	

rent standards. Therefore, no additional capital/start-up costs are expected.

nission control
the 22 affected

Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; Pulp, Paper, and Paperboard Manufacturing
Year 1, Boilers
Table 20: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	$0
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	20	1	20	55	1100	55	110	$151,878.65
B. Required Activities								
New, Reconstructed, Modified Sources - Testing[c]								
Initial NOx Performance Test (boiler)	24	2	48	0	0	0	0	$0.00
Repeat NOx Performance Test	24	2	48	0	0	0	0	$0.00
Existing Sources - Initial Testing[d]								
Initial NOx Performance Test (boiler)	24	2	48	0	0	0	0	$0.00
Repeat NOx Performance Test	24	2	48	0	0	0	0	$0.00
New and Existing Sources - Monitoring[e]								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	$0.00
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Initial Performance Test	2	1	2	0	0	0	0	$0.00
Report of Performance Tests	2	1	2	0	0	0	0	$0.00
Submit Quarterly Electronic Reports to Administrator of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other CEMS data.	24	4	48	0	0	0	0	$0
Existing Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Initial Performance Test	2	1	2	0	0	0	0	$0.00
Report of Initial Performance Test Results	2	1	2	0	0	0	0	$0.00
Submit Quarterly Electronic Reports to Administrator of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other CEMS data.	2	4	8	0	0	0	0	$0.00
Subtotal for Reporting Requirements					***1,265***			***$151,879***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.4	12	4.8	55	264	13.2	26.4	$36,450.88
Records of Montly Fuel Use	0.4	12	4.8	55	264	13.2	26.4	$36,450.88
New Sources								
Data Collection	1.5	330	495	0	0	0	0	$0
Records of Monthly Fuel Use	0.1	330	33	0	0	0	0	$0
F. Time to Train Personnel	80	1	80	0	0	0	0	$0
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					***607***			***$72,902***
Total Labor Burden and Cost (rounded)[f]						**1,900**		**$220,000**
Total Capital and O&M Cost (rounded)[f]								**$0**
Grand TOTAL (rounded)[f]								**$200,000**

Labor Rates:	
Management	$157.61
Technical	$123.94
Clerical	$62.51

Workers, by occupational and industry group

	Number of Boilers
New	0
Reconstructed/modified	5.5
Existing	55
Assumed Units with Existing CEMS	5.5
Assumed Units without Existing CEMS	49.5

9 hr/response

No. of Responses

0
0
0
0
55
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
660
660
0
0
0
0
0
1375 Sum

[a] We have assumed that there are approximately 55 respondents operating boilers and that 10% of the existing facilities will have new construction/reconstruction.

[b] This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor; $123.94 per hour for Technical labor, and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New boilers test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test due to failure.

[d] The rule requires existing boilers to conduct an initial compliance test within 90 days from the installation of the pollution control equipment used to comply with the NOx emission limits. We have assumed that 5 percent of respondents would repeat annual performance test due to failure.

[e] Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; Pulp, Paper, and Paperboard Manufacturing
Year 2, Boilers
Table 21: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	$0
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	1	1	1	0	0	0	0	$0.00
B. Required Activities								
New, Reconstructed, Modified Sources - Testing[c]								
Initial NOx Performance Test (boiler)	24	2	48	0	0	0	0	$0.00
Repeat NOx Performance Test	24	2	48	0	0	0	0	$0.00
Existing Sources - Initial Testing[d]								
Initial NOx Performance Test (boiler)	24	2	48	0	0	0	0	$0.00
Repeat NOx Performance Test	24	2	48	0	0	0	0	$0.00
New and Existing Sources - Monitoring[e]								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	$0.00
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Initial Performance Test	2	1	2	0	0	0	0	$0.00
Report of Performance Tests	2	1	2	0	0	0	0	$0.00
Submit Quarterly Electronic Reports to Administrator of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other CEMS data.	24	4	48	0	0	0	0	$0
Existing Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	$0.00
Notification of Initial Performance Test	2	1	2	0	0	0	0	$0.00
Report of Initial Performance Test Results	2	1	2	0	0	0	0	$0.00
Submit Quarterly Electronic Reports to Administrator of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other CEMS data.	2	4	8	0	0	0	0	$0.00
Subtotal for Reporting Requirements					***0***			***$0***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.4	12	4.8	55	264	13.2	26.4	$36,450.88
Records of Montly Fuel Use	0.4	12	4.8	55	264	13.2	26.4	$36,450.88
New Sources								
Data Collection	1.5	330	495	0	0	0	0	$0
Records of Monthly Fuel Use	0.1	330	33	0	0	0	0	$0
F. Time to Train Personnel	80	1	80	0	0	0	0	$0
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					***607***			***$72,902***
Total Labor Burden and Cost (rounded)[f]						**600**		**$70,000**
Total Capital and O&M Cost (rounded)[f]								**$0**
Grand TOTAL (rounded)[f]								**$100,000**

Labor Rates:		
Management	$157.61	Workers, by occupational and industry group
Technical	$123.94	
Clerical	$62.51	

	Number of Boilers
New	0
Reconstructed/modified	5.5
Existing	55

Assumed Units with Existing CEMS	5.5
Assumed Units without Existing CEMS	49.5

No. of Responses
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
660
660
0
0
0
0
1320 Sum

3 hr/response

[a] We have assumed that there are approximately 55 respondents operating boilers and that 10% of the existing facilities will have new construction/reconstruction.

[b] We have used labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor; $123.94 per hour for Technical labor; and $62.51 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2021, "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] New boilers test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test due to failure.

[d] The rule requires existing boilers to conduct an initial compliance test within 90 days from the installation of the pollution control equipment used to comply with the NOx emission limits. We have assumed that 5 percent of respondents would repeat annual performance test due to failure.

[e] Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; Pulp, Paper, and Paperboard Manufacturing
Year 3, Boilers
Table 22: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

Burden Item	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents/ Year[a]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year[b]
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	$0
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement	20	1	20	0	0	0	0	$0.00
B. Required Activities								
New, Reconstructed, Modified Sources - Testing [c]								
Initial NOx Performance Test (boiler)	24	2	48	5.5	264	13.2	26.4	$36,450.88
Repeat NOx Performance Test	24	2	48	0.275	13	0.66	1.32	$1,822.54
Existing Sources - Initial Testing [d]								
Initial NOx Performance Test (boiler)	24	2	48	55	2,640	132	264	$364,508.76
Repeat NOx Performance Test	24	2	48	2.75	132	6.6	13.2	$18,225.44
New and Existing Sources - Monitoring [e]								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	55	5,445	272.25	544.5	$751,799.32
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	5.5	11	0.55	1.1	$1,518.79
Notification of Initial Performance Test	2	1	2	5.5	11	0.55	1.1	$1,518.79
Report of Performance Tests submitted via CEDRI or analogous electronic reporting	2	1	2	4.95	9.9	0.495	0.99	$1,366.91
Submit Written Request to Administrator documenting Initial Performance Test and an Alternative Monitoring Plan (Alternative to CEMS).[f]	10	1	10	0.55	5.5	0.275	0.55	$759.39
Submit Quarterly Electronic Reports to of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other CEMS data.	24	4	48	4	192	9.6	19.2	$26,510
Existing Sources								
Notification of Demonstration of CEMS	2	1	2	55	110	5.5	11	$15,187.87
Notification of Initial Performance Test	2	1	2	55	110	5.5	11	$15,187.87
Report of Initial Performance Test Results submitted via CEDRI or analogous electronic reporting	2	1	2	49.5	99	4.95	9.9	$13,669.08
Submit Written Request to Administrator documenting Initial Performance Test and an Alternative Monitoring Plan (Alternative to CEMS).[f]	10	1	10	5.5	55	2.75	5.5	$7,593.93
Submit Quarterly Electronic Reports via CEDRI or analogous electronic reporting to EPA of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other CEMS data.	2	4	8	55	440	22	44	$60,751.46
Subtotal for Reporting Requirements					***10,968***			***$1,316,871***
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement								
B. Plan Activities								
C. Implement Activities								
D. Record Data	NA							
E. Time to Transmit or Disclose Information								
Existing Sources								
Data Collection	0.1	330	33	55	1,815	90.75	181.5	$250,599.77
Records of Monthly Fuel Use, Average Hourly NOx emission rates, 30-day average NOx emission rates, Excess Emissions data, Missed monitoring day data, "F" factor, and CEMS monitoring data.	0.1	330	33	55	1,815	90.75	181.5	$250,599.77
New Sources								
Data Collection	1.5	330	495	0	0	0	0	$0
Records of Monthly Fuel Use, Average Hourly NOx emission rates, 30-day average NOx emission rates, Excess Emissions data, Missed monitoring day data, "F" factor, and CEMS monitoring data.	0.1	330	33	0	0	0	0	$0
F. Time to Train Personnel	80	1	80	0	0	0	0	$0
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					***4,175***			***$501,200***
Total Labor Burden and Cost (rounded) [g]						**15,100**		**$1,820,000**
Total Capital and O&M Cost (rounded) [g]								**$10,170,000**
Grand TOTAL (rounded) [g]								**$12,000,000**

Labor Rates:		
		"Table 2. Civilian Workers, by
Management	$157.61	occupational and industry group
Technical	$123.94	
Clerical	$62.51	

	Number of Boilers
New	0
Reconstructed/modified	5.5
Existing	55

Assumed Units with Existing CEMS 5.5

Assumed Units without Existing CEMS 49.5

71 hr/response

No. of Responses

No. of Responses
0
0
0
0
0
0
11
0.55
0
110
5.5
0
18150
0
0
0
0
5.5
5.5
4.95
0.55
16
0
55
55
49.5
5.5
220
0
0
0
0
0
0
0
18150
18150
0
0
0
0
0
54994.55
36844.55 Sum

Sum without CEMS

[a] We have assumed that there are approximately 55 respondents operating boilers and that 10% of the existing facilities will have new construction/reconstruction.

[b] Labor rates are from the Bureau of Labor Statistics, May 2021 "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] New boilers test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test due to failure.

[d] The rule requires existing boilers to conduct an initial compliance test within 90 days from the installation of the pollution control equipment used to comply with the NOx emission limits. We have assumed that 5 percent of respondents would repeat annual performance test due to failure.

[e] Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.

[f] 10 percent of respondents are assumed to submit a written request to Administrator for an alternative monitoring procedure (instead of use of CEMS).

[g] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; Pulp, Paper, a
Year 1, Boilers

Table 23: Average Annual EPA Burden and Cost - Federal Implementation Plan Addressing

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
Initial performance tests [c]	24	1	24	0	0.0
Repeat performance test [d]	24	1	24	0	0
Report Review					
Notification of performance test [e]	0.5	1.1	0.55	0	0.0
Review test results/CEMS Results [e]	8	1	8	0	0.0
Review quarterly electronic summary reports of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other CEMS data	8	4	32	0	0
TOTAL (rounded) [f]					**0**

Assumptions:

[a] We have assumed that there are approximately 55 respondents with boilers and that 10% of the existing facilities wil

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for g rate of $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical ra These rates are from the Office of Personnel Management (OPM) "2021 General Schedule" which excludes locality rat

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not

[e] Modified, reconstructed, and existing facilities conduct initial testing.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

ınd Paperboard Manufacturing

; Regional Ozone Transport for

(F)	(G)	(H)
Manageme nt person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
0.0	0.0	$0.00
0	0	$0
0.0	0.0	$0.00
0.00	0.00	$0.00
0.0	0.0	$0.00
		$0

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.

l be re-constructed or modified.

;overnment overhead expenses: Managerial
ıte of $27.73 (GS-6, Step 3, $17.33 + 60%).
ŧes of pay
modified, but will not attend the annual

: attend repeat performance tests.

No. of Responses	
	0
	0
	0
	0
	0
	0
	0 Sum

Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; Pulp, Paper, a
Year 1, Boilers

Table 24: Average Annual EPA Burden and Cost - Federal Implementation Plan Addressing

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)
Initial performance tests [c]	24	1	24	0	0.0
Repeat performance test [d]	24	1	24	0	0
Report Review					
Notification of performance test [e]	0.5	1.1	0.55	0	0.0
Review test results/CEMS Results [e]	8	1	8	0	0.0
Review quarterly electronic summary reports of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other CEMS data.	8	4	32	0	0
TOTAL (rounded) [f]					**0**

Assumptions:

[a] We have assumed that there are approximately 55 respondents with boilers and that 10% of the existing facilities wil

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for g rate of $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical ra These rates are from the Office of Personnel Management (OPM) "2021 General Schedule" which excludes locality rat

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not

[e] Modified, reconstructed, and existing facilities conduct initial testing.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

ıd Paperboard Manufacturing

; Regional Ozone Transport for

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
0.0	0.0	$0.00
0	0	$0
0.0	0.0	$0.00
0.00	0.00	$0.00
0.0	0.0	$0.00
		$0

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.

l be re-constructed or modified.

;overnment overhead expenses: Managerial
ıte of $27.73 (GS-6, Step 3, $17.33 + 60%).
ıes of pay.
modified, but will not attend the annual

: attend repeat performance tests.

No. of Responses

0
0
0
0
0

0
0 Sum

Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; Pulp, Paper, a
Year 3, Boilers

Table 25: Average Annual EPA Burden and Cost - Federal Implementation Plan Addressing

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year	(D) Plants per year [a]	(E) Technical person-hours per year
			(C=AxB)		(E=CxD)
Initial performance tests [c]	24	1	24	0	0.0
Repeat performance test [d]	24	1	24	0	0
Report Review					
Notification of performance test [e]	0.5	1.1	0.55	55	30.3
Review test results/CEMS Results [e]	8	1	8	55	440.0
Review quarterly electronic summary reports of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other CEMS data.	8	4	32	0	0
TOTAL (rounded) [f]					**540**

Assumptions:

[a] We have assumed that there are approximately 55 respondents with boilers and that 10% of the existing facilities wil

[b] This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for g rate of $69.04 (GS-13, Step 5, $43.15 + 60%), Technical rate of $51.23 (GS-12, Step 1, $32.02 + 60%), and Clerical ra These rates are from the Office of Personnel Management (OPM) “2021 General Schedule” which excludes locality rat

[c] We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or

[d] We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not

[e] Modified, reconstructed, and existing facilities conduct initial testing.

[f] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

ınd Paperboard Manufacturing

; Regional Ozone Transport for

(F)	(G)	(H)
Management person-hours per year	**Clerical person-hours per year**	**Cost, $ [b]**
(Ex0.05)	**(Ex0.1)**	
0.0	0.0	$0.00
0	0	$0
1.5	3.0	$1,738.01
22.00	44.00	$25,280.20
0.0	0.0	$0.00
		$27,000

Labor Rates:	
Management	$69.04
Technical	$51.23
Clerical	$27.73

ıates from the Office of Personnel Management (OPM), 2021 General Schedule.

l be re-constructed or modified.

ıovernment overhead expenses: Managerial
ıte of $27.73 (GS-6, Step 3, $17.33 + 60%).
ıes of pay.

modified, but will not attend the annual

: attend repeat performance tests.

No. of Responses	
0	
0	
0	
60.5	
55	
0	
115.5	Sum

Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; and Pul
Source: Boilers
Table 26: Capital/Startup vs. Operation and Maintenance (O&M) Costs

	(A)	(B)	(C)	(D)	(E)
Year	Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Number of New Respondents	Total Capital/Startup Cost, (B X C)	Annual O&M Costs for One Respondent
Year 1	NOx Continuous Emission Monitors	$0	0	$0	$0
Year 1	Initial CEMS testing	$0	0	$0	
Year 2	NOx Continuous Emission Monitors	$0	0	$0	$0
Year 2	Initial CEMS testing	$0	0	$0	
Year 3	NOx Continuous Emission Monitors[a]	$153,700	0	$0	
Year 3	(a) initial[b]	$131,222			$127,002
Year 3	(b) annual[c]				$68,532
Year 3	Initial O2 or CO2 Monitors[a]				
Year 3	(a) initial				$8,523
Year 3	(b) annual				$1,436
	TOTAL			$0	

Tot

[a]10 percent of 55 Respondents are assumed to have existing NOx CEMS and existing O2 or CO2 mon
b Initial annual capital and O&M cost ($116,459) from Portland Cement ICR (2019) and adjusted to 2
c Annual capital and O&M cost ($53,600) from Boiler 5D MACT ICR (2010) and adjusted to 2023 cos

p, Paper, and Paperboard Manufacturing

(F)	(G)
Number of Respondents with O&M	Total O&M, (E X F)
	$0
49.5	$0
49.5	$6,286,599
49.5	$3,392,334
49.5	$421,889
49.5	$71,082
	$10,170,000

tal Capital and O&M $10,170,000

itors installed.

2023 cost.

t.