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: Annual Cost/Industry Respondent:	108
Annual Cost/Industry Respondent: Annual Hours/Agency Respondent:	108 297
Annual Cost/Industry Respondent:	
Annual Cost/Industry Respondent: Annual Hours/Agency Respondent: Annual Cost/Agency Respondent:	297
Annual Cost/Industry Respondent: Annual Hours/Agency Respondent: Annual Cost/Agency Respondent: Annual Industry Respondent Recordkeeping Hours:	297 10,775

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

Boilers -< 10 Million BTU/hr; Industrial Processes - Kiln1Industrial Processes - Kin24Industrial Processes - Serbeter Kin3Industrial Processes - Preheater Kin19Industrial Processes - Container Glass: Melting Furnace13Industrial Processes - Flat Glass: Melting Furnace13Industrial Processes - Pressed and Blown Glass: Melting Furnace3Boilers -> 100 Million BTU/hr3Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr; Boilers - Blast Furnace Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas6Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas2Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas3Boilers -> 100 Million BTU/hr; Boilers -> 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood2Stack11Industrial Processes - General1Industrial Processes - General1Industrial Processes - General1Industrial Processes - General; Industrial Processes - Coke1Industri	Emissions Source Group	Number of Units
Industrial Processes - Preheater Kiln3Industrial Processes - Preheater/Precalciner Kiln19Industrial Processes - Flat Glass: Melting Furnace13Industrial Processes - Flat Glass: Melting Furnace13Industrial Processes - Pressed and Blown Glass: Melting3Boilers -> 100 Million BTU/hr3Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr; Boilers - Blast Furnace Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas6Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers -> Coke Oven Gas1Boilers -> Coke Oven Gas3Boilers -> Coke Oven Gas3Boilers -> Coke Oven Gas3Boilers -> Coke Oven Gas3Boilers -> Coke Oven Gas1Industrial Processes -> Basic Oxygen Furnace (BOF): Open Hood2Stack1Industrial Processes -> Basic Oxygen Furnace (BOF): Open Hood1Industrial Processes -> Basic Oxygen Furnace (BOF): Top Blown1Industrial Processes -> Basic Oxygen Furnace (BOF): Top Blown1Industrial Processes -> Basic Oxygen Furnace (BOF): Top Blown1Industrial Processes -> Basic Oxygen Furnace (BOF): Top Blown1	Boilers - < 10 Million BTU/hr; Industrial Processes - Kiln	1
Industrial Processes - Preheater/Precalciner Kiln19Industrial Processes - Container Glass: Melting Furnace27Industrial Processes - Flat Glass: Melting Furnace13Industrial Processes - Furnace: General1Industrial Processes - Pressed and Blown Glass: Melting3Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr2Boilers -> 100 Million BTU/hr; Boilers - Blast Furnace Gas1Boilers -> 100 Million BTU/hr; Boilers - Blast Furnace Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas6Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> Bast Furnace Gas; Industrial Processes - Sintering;1Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters3Boilers - Coke Oven Gas3Boilers - Coke Oven Gas; Boilers -> 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - General1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Sintering: Windbox1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace2 <td>Industrial Processes - Kiln</td> <td>24</td>	Industrial Processes - Kiln	24
Industrial Processes - Container Glass: Melting Furnace27Industrial Processes - Flat Glass: Melting Furnace13Industrial Processes - Furnace: General1Industrial Processes - Pressed and Blown Glass: Melting Furnace3Boilers -> 100 Million BTU/hr3Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr; Boilers - Blast Furnace Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas6Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas6Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers - Coke Oven Gas; Industrial Processes - Sintering: Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Boilers - Coke Oven Gas; Boilers -> 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack2Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Other Not Classified Industrial Processes - Sintering: Windbox1Internal Combustion Engines - 2-cycle Clean Burn Internal	Industrial Processes - Preheater Kiln	3
Industrial Processes - Flat Glass: Melting Furnace13Industrial Processes - Furnace: General1Industrial Processes - Furnace: General1Industrial Processes - Pressed and Blown Glass: Melting Furnace3Boilers -> 100 Million BTU/hr3Boilers -> 100 Million BTU/hr2Boilers -> 100 Million BTU/hr; Boilers - Blast Furnace Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas6Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers - Coke Oven Gas; Industrial Processes - Sintering; Windbox; Industrial Processes - Bast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Boilers - Coke Oven Gas; Boilers -> 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack2Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General1Industrial Processes - General1Industrial Processes - Coke1Industrial Processes - General2Industrial Processes - Coke: Oven or Blast Furnace1Industrial Processes - Coke: Oven or Blast Furnace1Industrial Processes - Coke: Oven or Blast Furnace1Industrial Processes - Other Not Classified Internal Combustion Engines - 2-cycle C	Industrial Processes - Preheater/Precalciner Kiln	19
Industrial Processes - Furnace: General1Industrial Processes - Pressed and Blown Glass: Melting Furnace3Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr;2Boilers -> 100 Million BTU/hr;8Boilers -> 100 Million BTU/hr;1Boilers -> 100 Million BTU/hr;1Boilers -> 100 Million BTU/hr;1Boilers -> 100 Million BTU/hr;1Boilers -> 100 Million BTU/hr;1Industrial Processes - Blast Furnace:3Boilers -> 100 Killion BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack;1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General5Industrial Processes - General5Industrial Processes - General1Industrial Processes - General2Industrial Processes - General1Industrial Processes - General2Industrial Processes - General1Industrial Processes - General <td< td=""><td>Industrial Processes - Container Glass: Melting Furnace</td><td>27</td></td<>	Industrial Processes - Container Glass: Melting Furnace	27
Industrial Processes - Pressed and Blown Glass: Melting Furnace3Boilers -> 100 Million BTU/hr3Boilers -> 100 Million BTU/hr;2Boilers -> 100 Million BTU/hr;2Boilers -> 100 Million BTU/hr;Boilers -> Coke Oven GasBoilers -> Blast Furnace Gas1Boilers -> Blast Furnace Gas;1Boilers - Blast Furnace Gas;1Process Gas:7Process Gas:3Boilers - Coke Oven Gas3Boilers - Coke Oven Gas;3Boilers - Doubstion Engines	Industrial Processes - Flat Glass: Melting Furnace	13
Furnace3Boilers -> 100 Million BTU/hr3Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr; Boilers - Blast Furnace Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas6Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers -> Blast Furnace Gas; Industrial Processes - Sintering: Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters1Boilers - Coke Oven Gas3Boilers - Coke Oven Gas3Boilers - Coke Oven Gas; Boilers -> 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack2Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General5Industrial Processes - General; Industrial Processes - Coke1Industrial Processes - General; Industrial Processes - Coke	Industrial Processes - Furnace: General	1
Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr;2Boilers -> 100 Million BTU/hr;2Boilers -> 100 Million BTU/hr;80 ergBoilers -> 100 Million BTU/hr;80 ergBoilers -> 100 Million BTU/hr;80 ergBoilers -> 8last Furnace Gas1Boilers -> 8last Furnace Gas;1Boilers -> 8last Furnace Gas;1Boilers -> 8last Furnace Gas;1Boilers -> 8last Furnace Gas;1Boilers -> Coke Oven Gas3Boilers - Coke Oven Gas;3Boilers - Stace Oxygen Furnace (BOF): Open Hood Stack;2Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General1Industrial Processes - General;1Industrial Processes - General;1Industrial Processes - Coher Not Classified2Industrial Processes - Sintering;1Internal Combustion Engines - 2-cycle Clean Burn<		3
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Boilers -> 100 Million BTU/hr; Boilers - Blast Furnace Gas1Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas6Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers - Blast Furnace Gas1Boilers - Blast Furnace Gas; Industrial Processes - Sintering; Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters1Boilers - Coke Oven Gas3Boilers - Coke Oven Gas; Boilers -> 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack2Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - General1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Other Not Classified2Industrial Processes - Other Not Classified2Industrial Processes - Sintering; Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating <t< td=""><td>Boilers - > 100 Million BTU/hr</td><td>6</td></t<>	Boilers - > 100 Million BTU/hr	6
Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas6Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers - Blast Furnace Gas1Boilers - Blast Furnace Gas; Industrial Processes - Sintering; Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters1Boilers - Coke Oven Gas3Boilers - Coke Oven Gas; Boilers -> 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Sintering; Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1 <td>Boilers - > 100 Million BTU/hr</td> <td>2</td>	Boilers - > 100 Million BTU/hr	2
Boilers -> 100 Million BTU/hr; Boilers - Coke Oven Gas1Boilers - Blast Furnace Gas1Boilers - Blast Furnace Gas; Industrial Processes - Sintering; Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters1Boilers - Coke Oven Gas3Boilers - Coke Oven Gas; Boilers -> 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack2Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - General1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation1Industrial Processes - General5Industrial Processes - General1Industrial Processes - General1Industrial Processes - General2Industrial Processes - General1Industrial Processes - General1Industrial Processes - General1Industrial Processes - General2Industrial Processes - General2Industrial Processes - General2Industrial Processes - General1Industrial Processes - General2Industrial Processes - General2Industrial Processes - General2Industrial Processes - General1Industrial Processes - General2Industrial Processes - General2Industrial Processes - General2Industrial Processes - General2	Boilers - > 100 Million BTU/hr; Boilers - Blast Furnace Gas	1
Boilers - Blast Furnace Gas1Boilers - Blast Furnace Gas; Industrial Processes - Sintering: Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters1Boilers - Coke Oven Gas3Boilers - Coke Oven Gas; Boilers - > 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack2Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - General1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General1Industrial Processes - General1Industrial Processes - General1Industrial Processes - General1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Sintering: Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine17<	Boilers - > 100 Million BTU/hr; Boilers - Coke Oven Gas	6
Boilers - Blast Furnace Gas; Industrial Processes - Sintering: Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters1Boilers - Coke Oven Gas3Boilers - Coke Oven Gas; Boilers - > 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack2Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; industrial Processes - General1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General1Industrial Processes - General1Industrial Processes - General5Industrial Processes - General5Industrial Processes - General1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Other Not Classified Industrial Processes - Sintering; Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr2Boilers - > 100	Boilers - > 100 Million BTU/hr; Boilers - Coke Oven Gas	1
Windbox; Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters1Boilers - Coke Oven Gas3Boilers - Coke Oven Gas; Boilers - > 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack2Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - General1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - General1Industrial Processes - General5Industrial Processes - General1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Other Not Classified Industrial Processes - Sintering; Windbox1Internal Combustion Engines - 2-cycle Clean Burn Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 4-cycle Rich Burn Internal Combustion Engines - Reciprocating Internal Combustion Engines - Reciprocating Internal Combustion Engines - Reciprocating Internal Combustion Engines - Turbine Boilers - > 100 Million BTU/hr3Boilers - > 100 Million BTU/hr63Boilers - > 100 Million BTU/hr1Boilers - > 10-100 Million BTU/hr1	Boilers - Blast Furnace Gas	1
Casting/Tapping: Local Evacuation; Industrial Processes - Process Gas: Process Heaters3Boilers - Coke Oven Gas3Boilers - Coke Oven Gas; Boilers - > 100 Million BTU/hr1Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - General2Industrial Processes - Basic Oxygen Furnace (BOF): Open Hood Stack; Industrial Processes - General1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation1Industrial Processes - General5Industrial Processes - General5Industrial Processes - General2Industrial Processes - General2Industrial Processes - General1Industrial Processes - General1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Sintering; Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 4-cycle Lean Burn2Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr2Boilers - > 100 Million BTU/		1
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Stack; Industrial Processes - General1Industrial Processes - Basic Oxygen Furnace (BOF): Top Blown Furnace: Primary1Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation1Industrial Processes - General5Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Other Not Classified2Industrial Processes - Sintering: Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1		2
Furnace: Primary1Industrial Processes - Blast Furnace: Casting/Tapping: Local Evacuation1Industrial Processes - General5Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace2Industrial Processes - Other Not Classified2Industrial Processes - Sintering: Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 2-cycle Lean Burn41Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1		1
Evacuation1Industrial Processes - General5Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Other Not Classified2Industrial Processes - Other Not Classified2Industrial Processes - Sintering: Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 4-cycle Lean Burn2Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1		1
Industrial Processes - General; Industrial Processes - Coke Oven or Blast Furnace1Industrial Processes - Other Not Classified2Industrial Processes - Sintering: Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 4-cycle Lean Burn41Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1		1
Oven or Blast Furnace1Industrial Processes - Other Not Classified2Industrial Processes - Sintering: Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 4-cycle Lean Burn41Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine3Boilers -> 100 Million BTU/hr6Boilers -> 100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Industrial Processes - General	5
Industrial Processes - Sintering: Windbox1Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 4-cycle Lean Burn41Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1		1
Internal Combustion Engines - 2-cycle Clean Burn1Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 4-cycle Lean Burn41Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - A-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Industrial Processes - Other Not Classified	2
Internal Combustion Engines - 2-cycle Lean Burn136Internal Combustion Engines - 4-cycle Lean Burn41Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr2Boilers - 10-100 Million BTU/hr1	Industrial Processes - Sintering: Windbox	1
Internal Combustion Engines - 4-cycle Lean Burn41Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Internal Combustion Engines - 2-cycle Clean Burn	1
Internal Combustion Engines - 4-cycle Rich Burn2Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr2Boilers - 10-100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Internal Combustion Engines - 2-cycle Lean Burn	136
Internal Combustion Engines - Reciprocating94Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr2Boilers - 10-100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Internal Combustion Engines - 4-cycle Lean Burn	41
Internal Combustion Engines - Reciprocating12Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr2Boilers - 10-100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Internal Combustion Engines - 4-cycle Rich Burn	2
Internal Combustion Engines - Reciprocating1Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr2Boilers - 10-100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Internal Combustion Engines - Reciprocating	94
Internal Combustion Engines - Turbine17Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr2Boilers - 10-100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Internal Combustion Engines - Reciprocating	12
Internal Combustion Engines - Turbine3Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr2Boilers - 10-100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Internal Combustion Engines - Reciprocating	1
Boilers - > 100 Million BTU/hr6Boilers - > 100 Million BTU/hr2Boilers - 10-100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Internal Combustion Engines - Turbine	17
Boilers - > 100 Million BTU/hr2Boilers - 10-100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Internal Combustion Engines - Turbine	3
Boilers - 10-100 Million BTU/hr1Boilers - 10-100 Million BTU/hr1	Boilers - > 100 Million BTU/hr	6
Boilers - 10-100 Million BTU/hr 1	Boilers - > 100 Million BTU/hr	2
	Boilers - 10-100 Million BTU/hr	1
Boilers - Cogeneration 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 Impleme 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
¢702 /01	\$702.491	\$0	\$702.491	\$702.491
\$792,481 \$785,991	\$792,481 \$737,289	\$0 \$0	\$792,481 \$785,991	\$792,481 \$737,289
\$785,991	\$737,209	\$0	\$785,991	\$714,081
\$700,001	φ/14,001	Ψ	\$703,331	ψ/14,001
\$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

1 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 Sori 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"	(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 ^s
APPLICATIONS	NA		(4.5.0)					
APPLICATIONS	34							
SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	24	1	24	2.58	61.89	3.09	6.19	\$8,54
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement B. Required Activities	20	1	20	307	6140	307	614	\$847,759.
B. Required Activities New, Reconstructed, Modified Sources - Annual CPMS Performance Evaluation *								
Annual CPMS Performance Evaluation	8	1	8	0	0	0	0	\$0.0
Repeat Annual CPMS Performance Evaluation	8	1	8	0	0	0	0	\$0.0
Existing Sources - Annual CPMS Performance Eva	uation and Pe	rformance Testi	1g 4					
Annual CPMS Performance Evaluation	8	1	8	0	0	0	0	\$0.0
Repeat Annual CPMS Performance Evaluation	8	1	8	0	0	0	0	\$0.0
Non EPA-Certified Engine Performance Testin	24	2	48	230.25	11,052	552.6	1105.2	\$1,525,966.
Repeat Non EPA-Certified Engine Performance Testing	24	2	48	11.5125	553	27.63	55.26	\$76,298.
New and Existing Sources - Monitoring "	03	330	99	0	0	0	0	\$0.0
Daily Calibration Drift Tests - NOx CEMS C. Create Information (Included in 4B) D. Gather Existing Information (Included in 4E)	0.3	3.90	99	0	0	0	0	\$0.1
E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS Notification of Initial Performance Test	2	1	2	0	0	0	0	\$0.0
Report of Performance Test	2	1	2	0	0	0	0	\$0.0
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	\$5,6
Existing Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	\$0.0
Notification of Non EPA-Certified Engine Performance Test	2	2	2	241.76	483.53	24.18	48.35	\$66,761.
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	\$66,761.0
Semi-Annual Report submitted via CEDRI or analogous electronic reporting	8	2	16	307	4912	245.6	491.2	\$678,2
Subtotal for Reporting Requirements					27,286			\$3,275,9
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.
Create and Store Engine Maintenance Plan	0.4	12	0.4	307	123	6.14	12.28	\$16,955.
Records of Hours of Operation	0.1	4	0.4	307	123	6.14	12.28	\$16,955.
Records of Engine Maintenance Conducted	0.1	4	0.4	307	123	6.14	12.28	\$16,955.
Engines Anticipated with SCR or NSCR								
Daily monitoring of catalyst inlet temperature	0.005	365	1.825	0	0	0	0	\$0.0
Monthly monitoring of pressure drop across catalyst	0.1	12	1.2	0	0	0	0	\$0.0
Engines Anticipated with no SCR or NSCR Prepare CPMS site-specific monitoring plan								
to address monitoring system design, data collection, and OAIDC	16	1	16	0	0	0	0	\$0.0
Records of Annual CPMS Performance Evaluation	1	1	1	0	0	0	0	\$0.0
Collect and record the CPMS monitoring parameters.	0.5	1	0.5	0	0	0	0	\$0.0
New Sources Data Collection	0	0	0	2.5788	0	0	0	
Create and Store Maintenance Plan	0	0	0	2.5788	0	0	0	
F. Time to Train Personnel of 1st year Existing Soc	16	1	16	307	4,912	245.6	491.2	\$678,21
G. Time for Audits	NA							
Subtotal for Recordkeeping Requirements					6,496			\$779,9
Total Labor Burden and Cost (rounded) ¹ Total Capital and O&M Cost (rounded) ¹				-		33,800		\$4,060,0

Labor Rates:		
Management	\$157.61	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
Technical Clerical	\$123.94 \$62.51	
	Number of RICE	1
New		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	1.327	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	145	
		Assumed 25% of Existing Population per ECHO
Assumed Existing EPA-Certified RICE	/b./:	Gatatoose.

159 hr/response

307 9133.3114 SUM

No. of Responses

* We have assumed that there are approximately 307 respondents operating RECE and that 10% of the existing facilities will have new construction/inconstruction.
* This ICB uses the following labor area: \$107.61 per boar for Careking Administrative, and Managerid Labor. \$127.54 per boar for Technical Labor, and \$62.51 per boar for Careking area from chain and the structure of the meeting particle and the structure of the Structure

Pipeline Transportation of Natural Gas Year 2, Reciprocating Internal Combustion Engines (RICE) Table 2: Annual Respondent Burvelen 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
I. APPLICATIONS	NA							
. SURVEY AND STUDIES	NA							
ACQUISITION, INSTALLATION, AND UTILIZATION OF FECHNOLOGY AND SYSTEMS	24	1	24	2.58	61.89	3.09	6.19	\$8,54
4. REPORT REQUIREMENTS								
 Familiarize with regulatory requirement 	20	1	20	0	0	0	0	\$0.0
 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.
Repeat Annual CPMS Performance	8	1	8	0.06	1	0.03	0.05	\$69.
Existing Sources - Annual CPMS Performance Evaluation ⁴								
Annual CPMS Performance Evaluation	8	1	8	149	1,192	59.6	119.2	\$164,581.3
Repeat Annual CPMS Performance								
Evaluation	8	1	8	7.45	60	2.98	5.96	\$8,229.
Non EPA-Certified Engine Performance Festing	24	2	48	230.25	11,052	552.6	1105.2	\$1,525,966.
Repeat Non EPA-Certified Engine Performance Testing	24	2	48	11.51	553	27.63	55.26	\$76,298.
New and Existing Sources - Monitoring °								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	\$0.0
C. Create Information (Included in 4B) D. Gather Existing Information								
Included in 4E) Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	\$0.
Notification of Initial Performance Test Report of Performance Test	2	1	2	0	0	0	0	\$0. \$0.
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	\$5,6
Existing Sources Notification of Demonstration of CEMS	2	1	2	0	0	0	0	\$0.0
Notification of Non EPA-Certified	2	2	2	241.76	483.53	24.18	48.35	\$66,761.
Engine Performance Test Report of Non EPA-Certified Engine	2	2	2	241.76	483.53	24.18	48.35	
Performance Test Results via CEDRI or inalogous electronic reporting	2	2	2	241.76	483.53	24.18	48.35	\$66,761.
Semi-Annual Report submitted via CEDRI or analogous electronic reporting	8	2	16	307	4912	245.6	491.2	\$678,2
Subtotal for Reporting Requirements 5. RECORDKEEPING REQUIREMENTS					21,676			\$2,602,4
A. Familiarize with regulatory requirement								
 Plan Activities 								
C. Implement Activities D. Record Data	NA							
E. Time to Transmit or Disclose information								
Existing Sources				0.07		10.10		
Data Collection Create and Store Engine Maintenance	0.1	12	0.4	307 307	368	18.42 6.14	36.84 12.28	\$50,865. \$16,955.
Plan		4	0.4	307	123	6.14	12.28	\$16,955.
Records of Hours of Operation Records of Engine Maintenance	0.1							
Engines Anticipated with SCR or	0.1	4	0.4	307	123	6.14	12.28	\$16,955.
VSCR Daily monitoring of catalyst inlet	0.005	365	1.825	0	0	0	0	\$0
emperature Monthly monitoring of pressure drop	0.1	12	1.2	0	0	0	0	\$0. \$0.
across catalyst Engines Anticipated with no SCR or	0.1	12	1.2	U	d	U	U	\$0.
VSCR nonitoring plan to address monitoring ystem design, data collection, and	16	1	16	149	2,384	119.2	238.4	\$329,162.
Records of Annual CPMS	10	1	10	143	149	7.45	14.9	\$20,572.
Performance Evaluation Collect and record the CPMS	-		-					
New Sources	0.5	1	0.5	149	75	3.725	7.45	\$10,286.
Data Collection	0	0	0	2.58	0	0	0	
Create and Store Maintenance Plan	0	0	0	2.58	0	0	0	
7. Time to Train Personnel of New Sources	16	1	16	2.58	41	2.063	4.126	\$5,6
3. Time for Audits Subtotal for Recordkeepina	NA						-	
Requirements Fotal Labor Burden and Cost					3,893			\$467,4
rounded) ⁴ Fotal Capital and O&M Cost rounded) ⁴						25,600		\$3,070,0
		1	1	1	1	1		

Labor Bates:		1	Number of Respons
Labor Rates.	\$157.61	Civilian Workers, by occupational and industry group	0
Technical Elerical	\$123.94 \$62.51		2.5788 0
	Number of RICE]	0
New	2.5788	Note: New is assumed to be .84% of existing, per RICE MACT ICR data.	0
Reconstructed/modified	33.2788	8	1.2516
Existing	307		0.06258
Assumed New RICE with SCR or NSCR	1.3272	Note: New is assumed to be .84% of existing, per RICE MACT ICR data.	0
Assumed New RICE with no SCR or NSCR	1.2516	Note: New is assumed to be .84% of existing, per RICE MACT ICR data.	149
Assumed Existing RICE with SCR or NSCR	158	8	7.45
Assumed Existing RICE with no SCR or NSCR	149	9	460.5
Assumed Existing EPA-Certified RICE	76.75	Assumed 25% of Existing Population per 5 ECHO database.	23.025
Assumed Existing Non EPA-Certified RICE	230.25	Assumed 25% of Existing Population per 5 ECHO database.	0

2.5788 9126.65438 SUM

121 hr/response

* We have assumed that there are approximately 307 respondents operating RICE and that 10% of the existing facilities will have new construction/reconstruction. ⁴ We have assumed that there are approximately 30 respondents operating RUCE and that UPs (of the existing hacilities will have new construction existence) for the activation of the existing hacilities will have new construction existence of the existing hacilities will have new construction existence of the exist of the existing hacilities will have new construction existence of the exist of the existing hacilities will have new construction existence of the exist of the exist of the existing hacilities will have new construction existence of the exist of the exist

Pipeline Transportation of Natural Gas Yaer 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 B. Required Activities	20	1	20	0	0	0	0	\$0.00
New, Reconstructed, Modified Sources - Annual CPMS Performance Evaluation 6								
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 ⁶								
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 *								
Daily Calibration Drift Tests - NOx CEMS C. Create Information (Included in 4B) D. Gather Existing Information (Included	0.3	330	99	0	0	0	0	\$0.00
in 4E) E. Write Report								
New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS Notification of Initial Performance Test	2	1	2	0	0	0	0	\$0.0
Report of Performance Test	2	1	2	0	0	0	0	\$0.0
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	\$5,69
Existing Sources								
Notification of Demonstration of CEMS Notification of Non EPA-Certified Engine Performance Test	2	2	2	0 241.76	0 483.53	0 24.18	0 48.35	\$66,761.0
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 E. Time to Transmit or Disclose Information	NA							
Existing Sources Data Collection	0.1	12	1.2	307	368	18.42	36.84	\$50,865.5
Create and Store Engine Maintenance	0.4	1	0.4	307	123	6.14	12.28	\$16,955.1
Plan Records of Hours of Operation	0.1	4	0.4	307	123	6.14	12.28	\$16,955.1
Records of Engine Maintenance Conducted	0.1	4	0.4	307	123	6.14	12.28	\$16,955.1
Engines Anticipated with SCR or NSCR								
Daily monitoring of catalyst inlet temperature Monthly monitoring of pressure drop	0.005	365	1.83	158	288 190	14.42 9.48	28.84	\$39,812.9
across catalyst Engines Anticipated with no SCR or NSCR	0.1	12	1.2	158	190	9.48	18.96	\$26,178.3
Prepare CPMS site-specific monitoring plan to address monitoring system	16	1	16	0	0	0	0	\$0.0
Records of Annual CPMS Performance Evaluation	1	1	1	149	149	7.45	14.9	\$20,572.6
Collect and record the CPMS	0.5	1	0.5	149	75	3.725	7.45	\$10,286.3
monitoring parameters		0	0	2.58	0	0	0	si
New Sources	0	0			0			61
<u>New Sources</u> Data Collection Create and Store Maintenance Plan F. Time to Train Personnel of New	0 0 16	0	0	2.58	0 41	0 2.06	0 4.13	
<u>New Sources</u> Data Collection Create and Store Maintenance Plan F. Time to Train Personnel of New Sources G. Time for Audits	0	0	0					\$i \$5,69
New Sources Data Collection Create and Store Maintenance Plan F. Time to Train Personnel of New Sources C. Time for Audits Subtout for Recordkeeping Requirements Total Labor Burden and Cost	0	0	0			2.06		\$5,69 \$204,27
<u>New Sources</u> Data Collection Create and Store Maintenance Plan F. Time to Train Personnel of New Sources G. Time for Audits Subtotal for Recordkeeping Requirements	0	0	0		41			

Labor Rates:		1	No. of Responses
Management	\$157.61	Workers, by occupational and industry group	0
Technical Clerical	\$123.94 \$62.51	-	2.5788 0
	Number of RICE]	0
New	2.5788	Note: New is assumed to be .84% of existing, per RICE MACT ICR data.	0
Reconstructed/modified	33.2788	3	1.2516
Existing	307	7	0.06258
Assumed New RICE with SCR or NSCR	1.327	Note: New is assumed to be .84% of existing, per RICE MACT ICR data.	0
Assumed New RICE with no SCR or NSCR	1.2516	Note: New is assumed to be .84% of existing, per RICE MACT ICR data.	149
Assumed Existing RICE with SCR or NSCR	158	3	7.45
Assumed Existing RICE with no SCR or NSCR	149	3	460.5
Assumed Existing EPA-Certified RICE	76.75	Assumed 25% of Existing Population per ECHO database.	23.025
Assumed Existing Non EPA-Certified RICE	230.25	Assumed 25% of Existing Population per ECHO database.	0
			0

2.5788 68543.65438 SUM

110 hr/response

⁶ We have assumed that there are approximately 307 respondents operating RICE and that 10% of the existing facilities will have new construction/reconstruction. This is not uses use non-ring uses instances are also been as a second period. The advectory of the second response of the second re

Pipeline Transportation of Natural Gas

Year 1, Reciprocating Internal Combustion Engines (RICE)

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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			

 Table 4: Annual Respondent Burden and Cost – Federal Implementation Plan Addressing Regional

 the 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

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 modified 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 1
- ^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.

| 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 Ra	ites:
Management	\$69.04
Technical	\$51.23
Clerical	\$27.73

onstructed 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.

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 0 276 276 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

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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 modified 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 1

^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)
Manageme nt 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 Ra	ites:]
Management	\$69.04	These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.
Technical	\$51.23	
Clerical	\$27.73]

onstructed 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 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

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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 modified 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 1
- ^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)
Manageme nt 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 Ra	toc	1
	iles.	
Management	\$69.04	These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.
Technical	\$51.23	1
Clerical	\$27.73	

onstructed 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

1	(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)	
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	

То

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

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 24	47 47	1,551	77.55 56.4	155.1 112.8	\$214,148.90
Records of Performance Tests New Sources	0.1	2	24	47	1,128	56.4	112.8	\$155,744.65
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 NA	1	80	0	0	0	0	\$0
G. Time for Audits Subtotal for Recordkeeping Requirements	NA				3,081			\$369,894
Total Labor Burden and Cost (rounded) "						7,500		\$790,000
Total Capital and O&M Cost (rounded) *								\$0
Grand TOTAL (rounded) *								\$800,000

Other EDITS: change PM to NOx

Labor Rat		1	No. of Responses 0
		2021, "Table 2. Civilian Workers, by	
Management	\$157.61	occupational and industry group	C
Technical Clerical	\$123.94 \$62.51		0
ciericai	502.51	1	
			47
	Number of kilns		0
			a
New	0	-	u
Reconstructed/modified	4.7		9.4
Existing	47	1	0.47
			a
			94
			4.7
			C
			4.7
			9.4
			0.47
			0
			94
			94

640.14 Sum

35 hr/response

We have seemed but there are approximately 47 respondents operating kills and that 10% of the existing facilities will have new construction reconstruction reconstructi

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

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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 t

^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 1 ^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.

g Regional Ozone Transport for

(F)	(G)	(H)
Manageme nt 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 Ra	ates:]
		_
Management	\$69.04	These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.
Technical	\$51.23	
Clerical	\$27.73]

e re-constructed or modified.

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

t attend repeat performance tests.

No. of Responses

4.7 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 2. SURVEY AND STUDIES	NA							
	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF FECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	s
A. REPORT REQUIREMENTS								
 Familiarize with regulatory requirement 	20	1	20	39	780	39	78	\$107,695.7
Required Activities								
New, Reconstructed, Modified Sources - Festing ^c								
nitial Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	\$0.0
Repeat Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	\$0.0
Existing Sources - Initial Testing a								
nitial Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	\$0.0
Repeat Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	\$0.0
New and Existing Sources - Monitoring *								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	\$0.0
Quarterly Accuracy Assessment C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E) E. Write Report								
E. Write Report New, Reconstructed, Modified Sources								
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	\$0.0
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	\$0.0
Report of Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	\$0.0
Quarterly Electronic Reports to Administrator	24	4	48	0	0	0	0	s
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	\$5,522.8
Work Plan For Basic Oxygen Process Furnaces	10	1	2	4	8	0.4	0.8	\$1,104.5
For Taconite Kilns with Existing low- NOx burners, Submit Demonstration Report	5	1	2	9	18	0.9	1.8	\$2,485.2
For Taconite Kilns with no Existing low- NOx burners, Submit Work Plan	10	1	2	6	12	0.6	1.2	\$1,656.8
Notification of Demonstration of CEMS	2	1	2	0	0	0	0	\$0.0
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	\$0.0
Report of Initial Performance Evaluation of NOx CEMS Test Results	2	1	2	0	0	0	0	\$0.0
CEDRI electronic submittal of NOx CEMS Report and Excess Emissions Report	2	4	8	0	0	0	0	\$0.0
Subtotal for Reporting Requirements					987			\$118,46
5. RECORDKEEPING REQUIREMENTS								
A. Familiarize with regulatory requirement B. Plan Activities								
C. Implement Activities								
D. Record Data E. Time to Transmit or Disclose	NA							
information Existing Sources								
Data Collection	0.1	330	33	39	1,287	64.35	128.7	\$177,698.0
Recordkeeping of NOx emission rate, operating days data, CEMS data	0.1	330	33	39	1,287	64.35	128.7	\$177,698.0
New Sources								
Data Collection	1.5	330	495	0	0	0	0	5
CEMS Recordkeeping	0.1	330	33	0	0	0	0	\$
7. Time to Train Personnel	80	1	80	0	0	0	0	2
G. Time for Audits Subtotal for Recordkeeping Requirements	NA				2,960			\$355,35
Requirements Fotal Labor Burden and Cost 'rounded) #						3,900		\$470,00
rounded) * Fotal Capital and O&M Cost rounded) *								
(rounded) ⁸ Grand TOTAL (rounded) ⁸								\$500.00

			Number of Respones
Labor R		1	
Management	\$157.61	Civilian Workers, by occupational and industry group	
Technical	\$123.94		
Clerical	\$62.51]	
	Number of Boilers	1	
	Number of Boners	-	
New	0		
Reconstructed/modified	3.9		
Existing	39		

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

18 hr/response

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

¹ 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. There are set mon the United States Department of Labor, Bareau of Labor Statistics, Jane 2021, "Table 2, Cvillau Workers, by Occupational Indivisity group." The rates are from column 1, "Tadla Compensation." The rates have been increased by 110% to account on the hearth packages available to those employed by private industry.
 ⁸ New boiles rest for NOX. We have assumed that 5 percent of respondents would repost initial performance test due to failure.
 ⁸ The rate requires existing boilers to conduct an initial complance test within 90 days from the installation of the pollitoine control equipment used to comply with the NOX emission limits. We have assumed that 5 percent of respondents would repost manual performance test due to failure.
 ⁸ Calination drift checks on the art flow sensor on the NOX CEMAS are performed daily.
 ⁸ Estimated mathem of taccore for doction, likino State al Minimesca and Michingan.
 ⁸ Estimated mathem of taccore for doction. Biolic Data (Interessa and Integration).
 ⁸ Tatalis have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

0

12948 Sum without CEMS

Iron and Steel Mills and Ferroalloy Manufacturing

Year 2, Sources: Boilers, Furnaces, Coke Ovens, Windbox

Winuox 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
1. APPLICATIONS	NA							
2. SURVEY AND STUDIES	NA							
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS	16	1	16	0	0	0	0	s
4. REPORT REQUIREMENTS								
A. Familiarize with regulatory requirement B. Required Activities	20	1	20	0	0	0	0	\$0.0
New, Reconstructed, Modified								
Sources - Testing ^c Initial Performance Evaluation of								
NOx CEMS	24	2	48	0	0	0	0	\$0.0
Repeat Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	\$0.0
Existing Sources - Initial Testing ^d								
Initial Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	\$0.0
Repeat Performance Evaluation of NOx CEMS	24	2	48	0	0	0	0	\$0.0
New and Existing Sources - Monitoring *								
Daily Calibration Drift Tests - NOx CEMS	0.3	330	99	0	0	0	0	\$0.0
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	\$0.0
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	\$0.0
Report of Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	\$0.0
Quarterly Electronic Reports to Administrator	24	4	48	0	0	0	0	s
Existing Sources Notification of Demonstration of CEMS	2	1	2	0	0	0	0	\$0.0
Notification of Initial Performance Evaluation of NOx CEMS	2	1	2	0	0	0	0	\$0.0
Report of Initial Performance Evaluation of NOx CEMS Test	2	1	2	0	0	0	0	\$0.0
Results CEDRI electronic submittal of NOx CEMS Report and Excess Emissions Report	2	4	8	0	0	0	0	\$0.0
Subtotal for Reporting Requirements					о			s
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	\$177,698.0
Recordkeeping of NOx emission								
rate, operating days data, CEMS data	0.1	330	33	39	1,287	64.35	128.7	\$177,698.0
<u>New Sources</u> Data Collection	1.5	330	495	0	0	0	0	\$
CEMS Recordkeeping F. Time to Train Personnel	0.1 80	330	33 80	0	0	0	0	s s
G. Time for Audits	NA	1	00		U	U	U	3
Subtotal for Recordkeeping Requirements					2,960			\$355,39
Total Labor Burden and Cost (rounded) ^f						3,000		\$360,00
Total Capital and O&M Cost (rounded) ^f								s
Grand TOTAL (rounded) ⁽								\$400,00

		_	No. of Responses
Labor Ra		1	
Management		the United States Department of Labor, Bureau of Labor Statistics, June 2021, "Table 2. Civilian Workers, by occupational and industry group	
Technical	\$123.94 \$62.51		
		1	
	Number of Boilers]	
New	0		
Reconstructed/modified	3.9		
Existing	39		

14 hr/response

* 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: These 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 Crcupational and Industry group." The rates are from column 1, "Total Compression." The rates have been increased by 110% to account for the benefit packages available to those endpoyed by private industry.
^c New hollers test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test date to failure.
^c Threads have been industry. 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.
^c Calibration difficult focks on the air flow sensor on the NOX CELMS are performed daily.
^c Calibration difficults:
^c Calibration difficults

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 *								
Daily Calibration Drift Tests - NOx	0.3	330	99	39	3.861	193.05	386.1	\$533,094.06
CEMS 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)								
(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								
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
<u>New Sources</u> 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 G. Time for Audits	80 NA	1	80	0	0	0	0	\$0
Subtotal for Recordkeeping Requirements					2,960			\$355,396
Total Labor Burden and Cost (rounded) ^f						12,600	•	\$1,510,000
rounded) ¹ Total Capital and O&M Cost (rounded) ¹								\$7,630,000
Grand TOTAL (rounded) ^r								\$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.	
* This ICR uses the following labor rates: \$157.61 per nour for Executive, Administrative, and Managerial labor; \$123.94 per nour 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	

Uccupational and industry group.²⁻ The rates are from column 1, "Ioid Compensation." The rates have been increased by 110% to account for the benefit packages available to those employed by private industry. ²⁻ New boliers test for NOx. We have assumed that 5 percent of respondents would repeat initial performance test due to failure. ²⁻ The rule requires existing boliers 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. ²⁻ Calibration drift tecks on the air flow sensor on the NOX CEMS are performed daily. ²⁻ Iotals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

		No	of Responses
Labor Rates:			0
Management	\$157.61	2021, "Table 2. Civilian Workers, by occupational and industry group	0
Technical Clerical	\$123.94 \$62.51		0
			0
	Number of Boilers		0
New			0
Reconstructed/modified	3.9		7.8
Existing	35		0.39
Total no. of Taconite kilns	15	i	0
Taconite kilns with existing low- NOx burners (at effective date of rule)	ç		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

59 hr/response

0 39247.39 SUM 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 Addressingthe 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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 will

^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)	
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	
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.

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

modified, but will not attend the annual

t attend repeat performance tests.

These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule. 0 0 20 4 8 7 4 8 7 42.9 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 Addressingthe 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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	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 will

^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.

; 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
1.1	2.1	\$1,232.41
15.60	31.20	\$17,925.96
0.0	0.0	\$0.00
		\$19,200

ſ	Labor Ra	ites:]
	Management	\$69.04	These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.
,	Technical	\$51.23	
	Clerical	\$27.73	

l be re-constructed or modified.

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

modified, but will not attend the annual

t attend repeat performance tests.

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 Addressingthe 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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	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 will

^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.

; 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
1.1	2.1	\$1,232.41
15.60	31.20	\$17,925.96
0.0	0.0	\$0.00
		\$19,200

Labor Ra	ites:]
Management	\$69.04	These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.
Technical	\$51.23	
Clerical	\$27.73	

l be re-constructed or modified.

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

modified, but will not attend the annual

t attend repeat performance tests.

81.9 Sum

Iron and Steel Mills and Ferroalloy Manufacturing Source: Boilers

	(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)	
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	

Table 14: Capital/Startup vs. Operation and Maintenance (O&M) Costs

То

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

2023 cost.

st.

Glass and Glass Product Manufacturing

Glass and Glass Front, communication, 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	1	1	1	40	40	2	4	\$5,522.86
requirement B. Required Activities								
New, Reconstructed, Modified								
Sources - Testing 6								
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 ^a								
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	NA							
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	SO
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) *						6,200		\$740,000
Total Capital and O&M Cost (rounded) *								\$43,600
Grand TOTAL (rounded) *								\$800,000

Labor F	ates:	
Management	\$157.61	 Civilian Workers, by occupational and industry group
Technical	\$123.94	
Clerical	\$62.51]
		1
	Number of furnaces	
New	0	
Reconstructed/modified Existing	4.4	

29 hr/response

No. of Responses 0

0

0 0 0 506.84 Sum

* We have assumed that there are approximately 44 respondents operating furnaces and that 10% of the existing facilities will have new construction/reconstruction. ¹ we have essume una user at equivalantacy in responses operaning unactes and una 10×0 one excang activities and una 10×0 one excange activities and unactivities and unactivitities and unactivities and unactivities

⁴ The rule requires existing furnaces re-test semi-annually for NOx. Existing furnaces are assumed to not have existing CEMS installed.
⁴ Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Glass and Glass Product Manufacturing

Source: Furnaces

Table 18: Average Annual EPA Burden and Cost -Federal Implementation Plan Addressinthe 2015 Primary Ozone NAAQS: Transport Obligations for non-EGUs

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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 1 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.

g Regional Ozone Transport for

(F)	(G)	(H)
Manageme nt 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 Ra	ites:]
Management	\$69.04	These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.
Technical	\$51.23	
Clerical	\$27.73	

ill be re-constructed or modified.

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

modified, but will not attend the semi-

t attend repeat performance tests.

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				

Table 10 J 1/1 - :--0 . . 0 1/0 . .

^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)).

(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 I, 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 4. REPORT REQUIREMENTS	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 °								
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								
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 *								
Daily Calibration Drift Tests - NOx CEMS C. Create Information (Included	0.3	330	99	0	0	0	0	\$0.00
in 4B)								
D. Gather Existing Information (Included in 4E) E. Write Report								
E. Write Report New, Reconstructed, Modified								
Sources Notification of Demonstration of	2	1	2	0	0	0	0	\$0.00
CEMS Notification of Initial	2	1	2	0	0	0	0	\$0.00
Performance Test								
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 Notification of Initial	2	1	2	0	0	0	0	\$0.00
Performance Test Report of Initial Performance	2	1	2	0	0	0	0	\$0.00
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	0.4	12	4.9		264	12.2	26.4	£3C 4F0 00
Data Collection Records of Montly Fuel Use	0.4	12	4.8	55	264 264	13.2 13.2	26.4 26.4	\$36,450.88 \$36,450.88
New Sources								
Data Collection Records of Monthly Fuel Use	1.5	330 330	495	0	0	0	0	\$0
F. Time to Train Personnel	80	1	80	0	0	0	0	\$0
G. Time for Audits Subtotal for Recordkeeping	NA				607			677
Requirements Total Labor Burden and Cost					607			\$72,902
(rounded) ⁽						1,900		\$220,000
Total Capital and O&M Cost (rounded) ⁽								\$0
Grand TOTAL (rounded) ⁱ				1				\$200,000

Labor Rates: Workers, by occupational and Management \$157.61 industry group	0
Management \$157.61 industry group	0
Technical \$123.94 Clerical \$62.51	0
Number of Boilers	55
New 0	0
Reconstructed/modified 5.5	0
Existing 55	0
Assumed Units with Existing CEMS 5.5	0
Assumed Units without Existing CEMS 49.5	0

0 660

9 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.

Construction reconstruction. 50:25 per bour for Clerical labor, These rates, s157-61 per hour for Executive, Administrative, and Managerial labor; 5123.94 per hour for Technical labor, and 50:251 per bour for Clerical labor. These rates are from the United States Department of Labor, Buewa of Labor Statistics, June 2021, "Table 2, Civilian Workers, by Occupational and Industry group." The track are from column 1, "Ford Compensation." The rates have been increased by 110% to account for the benefit peckages available to those employed by provise industry. "Aver bolles rest for NOX. We have assumed that's percent of respondents would repeat initial performance test due to failure.

⁴ 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.
⁶ Calibration drift feeds on the air flow sensor on the NOX CEMS are performed daily.
⁶ 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 4. REPORT REQUIREMENTS	16	1	16	0	0	0	0	\$0
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								
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 *								
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								
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	2	1	2	0	0	0	0	£0.00
Test Results	2	1	2	0	0	0	U	\$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 E. Time to Transmit or Disclose	NA							
Information								
Existing Sources Data Collection	0.4	12	4.8	55	264	13.2	26.4	\$36,450.88
Data Collection Records of Montly Fuel Use	0.4	12	4.8	55	264	13.2	26.4	\$36,450.88
New Sources						- 5.4		
Data Collection	1.5	330	495	0	0	0	0	\$0
Records of Monthly Fuel Use F. Time to Train Personnel	0.1	330	33 80	0	0	0	0	\$0 \$0
G. Time for Audits	NA	1	00	J	0	J	J	50
Subtotal for Recordkeeping					607			\$72,902
Requirements Total Labor Burden and Cost						600		\$70,000
(rounded) ^f Total Capital and O&M Cost								\$0
(rounded) ⁽ Grand TOTAL (rounded) ⁽				m and that 100/		(\$100,000

Labor Ra	ites:	1
Management	\$157.61	Workers, by occupational and industry group
Technical	\$123.94	
Clerical	\$62.51]
	Number of Boilers	
New	C	
Reconstructed/modified	5.5	
Existing	55]
Assumed Units with		
Existing CEMS	5.5	

49.5

No. of Responses 0

Assumed Units with Existing CEMS Assumed Units without Existing CEMS

3 hr/response

Grand TOTAL (rounded)¹
 S100,006
 We have assumed that there are approximately 55 respondents operating boilers and that 10% of the existing facilities will have new
construction/accounters/accoun

The null requires existing bollers 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.
* Calibration drift hecks on the air flow sensor on the NOX CEMS are performed daily.
* 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

X 3400 Y AD STUDIESNAIC <th< th=""><th>Burden Item</th><th>(A) Hours per Occurrence</th><th>(B) Occurrences/ Respondent/ Year</th><th>(C) Hours/ Respondent/ Year (A x B)</th><th>(D) Respondents/ Year^a</th><th>(E) Technical Hours/Year (C x D)</th><th>(F) Managerial Hours/Year (E x 0.05)</th><th>(G) Clerical Hours/Year (E x 0.10)</th><th>(H) Cost/ Year^b</th></th<>	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							
NYALAPNA PARAMENTS16115000011NYALAP NYALAPNA 	2. SURVEY AND STUDIES	NA							
LARDONE TRUCKURSMENTSII <th< td=""><td>3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND</td><td>16</td><td>1</td><td>16</td><td>0</td><td>0</td><td>0</td><td>0</td><td>s</td></th<>	3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND	16	1	16	0	0	0	0	s
Special symplem20112000<									
Design and the set of	A. Familiarize with regulatory	20	1	20	0	0	0	0	\$0.0
Way. Resource 1 and the set of the set									
Disk Northermanes Park P	New, Reconstructed, Modified								
backey 1/4 2 000 1/13 0.000 0.000 1/13 0.0		24				264	42.2	26.4	626.450.0
Dating Source - Inside Training biolog Sources - Inside NY Methomatics Training APA and A	(boiler)								
basis Control Control <thcontrol< th=""> <thcontrol< th=""> <thcon< td=""><td>Repeat NOX Performance Test Existing Sources - Initial Testing</td><td>24</td><td>2</td><td>48</td><td>0.275</td><td>13</td><td>0.66</td><td>1.32</td><td>\$1,822.5</td></thcon<></thcontrol<></thcontrol<>	Repeat NOX Performance Test Existing Sources - Initial Testing	24	2	48	0.275	13	0.66	1.32	\$1,822.5
Normal Subscription	Initial NOx Performance Test (boiler)	24	2	48	55	2,640	132	264	\$364,508.7
Normal Subscription	Repeat NOx Performance Test	24	2	48	2.75	132	6.6	13.2	\$18,225.4
Daily Calibor Daily Calibor Calibor Calibor Calibor Calibor Calibor Calibor Calibor Calibor Calibor Calibor Calibor 	New and Existina Sources -								
Concernation functional and 0) Concernation (Include of al.) Concernation (Include of al.) <thco< td=""><td>Daily Calibration Drift Tests -</td><td>0.3</td><td>330</td><td>99</td><td>55</td><td>5.445</td><td>272.25</td><td>544.5</td><td>\$751 799 3</td></thco<>	Daily Calibration Drift Tests -	0.3	330	99	55	5.445	272.25	544.5	\$751 799 3
ad)						0,110			4.03,.0010
Include of af: Image	in 4B)								
E. With Report Image: Construction of the con	D. Gather Existing Information (Included in 4E)								
Source: Source: <t< td=""><td>E. Write Report</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	E. Write Report								
Statication of Demonstration of Lab. 2 1 2 5.5 11 0.55 1.1 5.5.8 Statication of Tabil 2 1 2 5.5 11 0.55 1.1 5.5.8 Submit of CEDRI erration anageone circum of tabil 2 1 2 4.55 9.9 0.455 0.99 5.3.86.1 Submit Victor Report or Ministrator Concentration of Laber of ViX Lamison (Marenaty to CEDR) 10 1 10 0.55 5.5 0.275 0.55 5.799 Submit Victor Report to Ministrator Concentration of Labers of ViX Lamison (Marenaty to CEDR) 24 4.4 48 4 192 9.6 19.2 \$55.187.1 Submit Victor Report to Ministrator Concentration of Labers and Decomposition 2 1 2 55 110 5.5 111 \$15.187.1 Submit Victor Report to Ministrator Concentration of Laber analogo error and Ministrator Concentration of Laber analogo error and Ministrator Concentration of Laber analogo error and Ministrator Concentration input to the CEMS or analogo error	New, Reconstructed, Modified Sources								
LASS Image Image <th< td=""><td>Notification of Demonstration of</td><td>2</td><td>1</td><td>2</td><td>5.5</td><td>11</td><td>0.55</td><td>11</td><td>\$1,518.7</td></th<>	Notification of Demonstration of	2	1	2	5.5	11	0.55	11	\$1,518.7
Performance Test adminish QCTDR1 segments (Segment Performance Test adminish QCTDR1 segments) 2 1 2 4.5 9.9 0.495 0.99 51.3661 Mather VCTDR1 segments (Marcally CCTDR1 segments) 10 1 10 0.55 5.5 0.275 0.55 $$779:$ Mather VCTDR1 segments 10 1 10 0.55 5.5 0.275 0.55 $$779:$ Mather VCTDR1 segments 24 4 48 4 192 9.6 112 $$255$ 110 5.5 111 $$15,167.1$ Segment Serie Constraints one present set of NS final sectors 2 11 22 55 110 5.5 111 $$15,167.1$ Segment Serie Constraints one present sectors 2 11 22 485 99 4.95 9.9 $$13,669.1$ Segment Serie Constraints one present sectors 2 11 22 485 55 2.75 5.5 $57,59.5$ $57,59.5$ $57,59.5$ $57,59.5$	CEMS Notification of Initial								
Submitted values 2 1 2 4.95 9.9 0.485 0.99 \$\$,386.1 Submit Vieture Request to Multishtrare forcementing intal Performance Test and an Uncentive to CEMSy.' 10 1 10 0.55 5.5 0.275 0.55 \$\$,575.2 Submit Vieture Request to Multishtrare forcementing intal Performance Test and an Uncentive to CEMSy.' 24 4 48 4 192 9.6 19.2 \$	Performance Test		1				0.00	1.1	\$1,518./
Mainistruct documenting interferences 10 1 10 0.55 5.5 0.275 0.55 \$7592 Submit Quartery Dectronic Report to NX Evens Insiston, Tars data, Evens Insiston, Report to NX Evens Insiston, Report to NX Evens Insiston, Report to NX Evens Insiston, Part data Sarcet 10 1 10 0.55 5.5 0.275 0.55 \$7592 Submit Quartery Dectronic Report to NX Evens Insiston, Part data Sarcet 24 44 48 44 192 9.6 19.2 \$255.5 Editian Sarcet 2 1 2 55 110 5.5 111 \$151,187.1 Numbration of Demonstration of Part distand Performance Test Results submitted via EERR evaluations that the top and part distand Performance Test Results submitted via EERR evaluations and the top and part distand Performance Test Results and	Report of Performance Tests submitted via CEDRI or analogous electronic reporting	2	1	2	4.95	9.9	0.495	0.99	\$1,366.9
Reports of NOL Emission (action, and other CEMS data, end other CEMS data, end other CEMS data, end other CEMS data, end other CEMS data, 24 4 48 4 192 9.6 19.2 \$25,5 Stating Source (end other CEMS data, Enders, and other CEMS data, end other CEMS data, Enders of Demonstration of 2 1 2 55 110 5.5 111 \$15,187.1 Stating Source (end other CEMS data, Enders of Demonstration of 2 1 2 55 110 5.5 111 \$15,187.1 Stating Source (end relation Submitted Via Upport of Initial Performance Feet Realisabilitied Via Upport via CEDM or elevance (end relation Submitted Via Upport via CEDM or analogous dictions (reporting Data) (End other CEMS data, end other CEMS data,	Submit Written Request to Administrator documenting Initial Performance Test and an Alternative Monitoring Plan (Alternative to CEMS). ⁴	10	1	10	0.55	5.5	0.275	0.55	\$759.3
Existing Sources Image: Constraint of the co	Submit Quarterly Electronic Reports to of NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F"	24	4	48	4	192	9.6	19.2	\$26,51
EAKS 2 1 2 35 110 5.5 111 \$15, 67.4 Verification of Initial Performance Test Results submitted Via ESR or aulogue electronic opporting agained selectronic 2 1 2 55 110 5.5 111 \$15, 167.4 Mematy Montoring Plan Alternative of CMBA) 2 1 2 49.5 99 4.95 9.9 \$13, 66.4 Main Write Request to Administrator documenting Alternative Montoring Plan Alternative OCMBA) 10 1 10 5.5 5.5 2.75 5.5 \$7,993.4 Submit Quartery Electronic Reports Via CDDR or analogon Alternative OCMBA) 2 4 8 55 440 22 44 \$60,751.4 Subolar for Roorting Subolar for Roorting Subolar for Roorting Record Data 2 4 8 55 440 22 44 \$60,751.4 Subolar for Roorting Subolar for Roorting Record Data 2 4 8 55 10,968 2 4.4 \$60,751.4 Subolar for Roorting Record Data NA 2 4 8 55 <td>Existing Sources</td> <td></td> <td></td> <td></td> <td></td> <td>440</td> <td></td> <td></td> <td>645 405 0</td>	Existing Sources					440			645 405 0
Performance Test Results submitted via Est Constructions Est Est Est Est Est Est Est Est Est Est	CEMS Notification of Initial			-					
If set Results submitted via capaciting sporting 2 1 2 40.5 99 4.95 9.9 \$13,669.0 sporting sporting 10 1 10 5.5 5.5 2.75 5.5 \$7,593.3 Alternative to CRNN; 10 1 10 5.5 55 2.75 5.5 \$7,593.3 Submit Quartery Electronic Reports via CDR1 or analogon Alternative to CRNN; 2 4 8 55 440 22 44 \$60,751.4 Submit Quartery Electronic Reports via CDR1 or analogon the CENS data. 2 4 8 55 440 22 44 \$60,751.4 Submit Quartery Electronic Reports via Construction 2 4 8 55 440 22 44 \$60,751.4 Submot for Reporting Reports via Construction 2 4 8 55 440 22 44 \$60,751.4 Submot for Reporting Reports via Construction 2 4 8 55 10,968 2 4 \$60,751.4 Submot for Reporting Reports via Construction 2 4 8 55 10,968 2 <td>Performance Test</td> <td>2</td> <td>1</td> <td>2</td> <td>55</td> <td>110</td> <td>5.5</td> <td>11</td> <td>\$15,187.8</td>	Performance Test	2	1	2	55	110	5.5	11	\$15,187.8
Administrator documenting Niemarky Monitoring Plan Miemarky Miemarky Mercore Marky Mercore Marky Mercore Marky Mercore Miemarky Miemarky Miemarky Miemarky Miemarky Mercore Miemarky Mercore Miemarky Mercore Miemarky Mercore Miemarky Mie	Report of Initial Performance Test Results submitted via CEDRI or analogous electronic reporting	2	1	2	49.5	99	4.95	9.9	\$13,669.0
Reports vice CEDR or analogous betronic reporting excluded Data, "F" factor, and CEMS monitoring data. 2 4 8 55 440 22 44 \$60,751.4 Subsoid For Reporting Requirements 2 4 8 55 440 22 44 \$60,751.4 Subsoid For Reporting Requirements 1 10.968 1 \$10,968 1 \$10,968 A. Familiarize with regulatory equirements 1 <td>Submit Written Request to Administrator documenting Initial Performance Test and an Alternative Monitoring Plan (Alternative to CEMS).¹</td> <td>10</td> <td>1</td> <td>10</td> <td>5.5</td> <td>55</td> <td>2.75</td> <td>5.5</td> <td>\$7,593.9</td>	Submit Written Request to Administrator documenting Initial Performance Test and an Alternative Monitoring Plan (Alternative to CEMS). ¹	10	1	10	5.5	55	2.75	5.5	\$7,593.9
Requirements Constant Constant Constant Requirements Annotation Constant Constant Constant Record MRENTS Annotation Annotation Constant Constant Constant Requirement Annotation Annotation Constant Constant Constant Constant Read Retriction Annotation Annotation Constant Constant <td>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.</td> <td>2</td> <td>4</td> <td>8</td> <td>55</td> <td>440</td> <td>22</td> <td>44</td> <td>\$60,751.4</td>	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	\$60,751.4
Requirements Constant Constant Constant Requirements Annotation Constant Constant Constant Record MRENTS Annotation Annotation Constant Constant Constant Requirement Annotation Annotation Constant Constant Constant Constant Read Retriction Annotation Annotation Constant Constant <td>Subtotal for Reporting</td> <td></td> <td></td> <td> </td> <td></td> <td>10,968</td> <td></td> <td></td> <td>\$1.316.87</td>	Subtotal for Reporting					10,968			\$1.316.87
DEQUIRENTS	Requirements								,,07
Requirement Image: Control of the second secon	REQUIREMENTS								
E. Implement Activities M M M M M E. Time to Transmit or Disclose formation NA	requirement								
D. Record Data NA Image Image <thimage< th=""> Image <thimage< th=""></thimage<></thimage<>	B. Plan Activities		-						
Information Image: State S	D. Record Data	NA							
Data Collection 0.1 330 33 55 1,815 90.75 181.5 \$250,599.1 Verage Houry XOx emission mission rate, Excess b monitoring data. 0.1 330 33 55 1,815 90.75 181.5 \$250,599.1 Verage Houry XOx emission emission rate, Excess b monitoring data. 0.1 330 33 55 1,815 90.75 181.5 \$250,599.1 Verage Houry XOx emission emission rate, Excess b monitoring data. 0.1 330 33 55 1,815 90.75 181.5 \$250,599.1 Verage Houry XOx emission emission rate, Excess monitoring data. 0 0 0 0 0 5 Records of Monthly Fuel Use, Verage Houry XOx emission emission rate, Excess monitoring data. 0.1 330 33 0 0 0 0 5 Stational CEMS monitoring data. 0.1 330 33 0 0 0 0 5 Stational CEMS monitoring data. 1 80 0 0 0 0 5 5 <td< td=""><td>E. Time to Transmit or Disclose Information</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	E. Time to Transmit or Disclose Information								
Record of Monthy Fael Use, Names Boday Yurger NOS, mission rates, Excess Emissions data, Missed monitoring data, and set in the set of the set	Existing Sources								
Verage Hourly Nox emission ters, 30-day areage Nox mission rate, Excess 0.1 330 33 55 1,815 90.75 181.5 \$\$250,599. motioring duta. *** 5 0 0 0 0 90.75 181.5 \$\$250,599. motioring duta. *** 5 0 0 0 0 90.75 181.5 \$\$250,599. Data Callection 1.5 330 495 0 0 0 0 90.75 181.5 \$\$250,599. Data Callection 1.5 330 495 0 0 0 0 90.75 \$\$250,599. Storads of Monthy Evel Use, Werage Hourly Nox emission ates, 30-day areage Nox motioning duta. 0.1 330 33 0 0 0 0 90 9 Storads of werage Nox monitoring duta. 0.1 330 33 0 0 0 0 9 9 Constance of the Mosed monitoring duta. 1 80 0 0 0 0 9	Data Collection	0.1	330	33	55	1,815	90.75	181.5	\$250,599.7
Year Sources <t< td=""><td>Average Hourly NOx emission rates, 30-day average NOx emission rates, Excess Emissions data, Missed monitoring day data, "F" factor,</td><td>0.1</td><td>330</td><td>33</td><td>55</td><td>1,815</td><td>90.75</td><td>181.5</td><td>\$250,599.7</td></t<>	Average Hourly NOx emission rates, 30-day average NOx emission rates, Excess Emissions data, Missed monitoring day data, "F" factor,	0.1	330	33	55	1,815	90.75	181.5	\$250,599.7
Records of Monthly Fuel Use, Verage Hourly XOL emission Emissions data, Mased monitoring data, ref "Factor, and CEMS monitoring data. 7. Time tor Tain Pessonel 8.0 1 80 0 0 0 0 0 0 7. Time for Audits NA 0 0 0 0 0 5. Time for Audits NA 4.175 0 1.5 100 5.5 01,20 1.5 100 5.	New Sources			107					
Average Hourly NOx emission mission rate, 30-day average NOX mission rate, 20-experiments 0.1 330 33 0 0 0 0 9 9 Sinsiston data, Missions d		1.5	330	495	0	0	0	U	\$
F. Time to Train Personnel 80 1 80 0 0 0 0 9 5 5 5 5 7 1 80 0 0 0 0 9 5 5 5 7 1 80 0 0 0 0 0 9 5 5 7 1 1 80 0 0 0 0 9 5 5 7 1 <th1< th=""> <th1< th=""> 1 <th1< td=""><td>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.</td><td>0.1</td><td>330</td><td>33</td><td>0</td><td>0</td><td>0</td><td>0</td><td>s</td></th1<></th1<></th1<>	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	s
C. Time for Audits NA Control Control <thcontrol< th=""> <thcontrol< th=""></thcontrol<></thcontrol<>		80	1	80	0	0	0	0	s
Requirements 4,27,3 300,24 Total Labor Burden and Cost (rounded) ⁷ 15,100 \$1,820,00 Total Capital and O&M Cost 51,000 \$1,820,00	G. Time for Audits							-	
rounded) ^r Total Capital and O&M Cost	Requirements					4,175			\$501,20
rounded) 1 \$10,170,00	Total Labor Burden and Cost (rounded) ¹						15,100		\$1,820,00
	Total Capital and O&M Cost (rounded) ¹								\$10,170,00

Labor Ra	atoci		No. of Responses	0
LdUOI Ra	ites:	"Table 2. Civilian Workers, by		0
Management	\$157.61	occupational and industry group		0
Fechnical	\$123.94			C
Clerical	\$62.51			0
				(
	Number of Boilers			(
vew	0			C
Reconstructed/modified	5.5			11
Existing	55			0.55
Assumed Units with Existing CEMS	5.5			0
Assumed Units without Existing CEMS	49.5			110
				(
			18	15

71 hr/response

Sum without CEMS

0 0 0 0 5.5 5.5 4.95

0.55

49.5

5.5

18150 0 0

0 0 0 54994.55 36844.55 Sum

We have assumed that there are approximately 55 respondents operating boilers and that 10% of the existing facilities will have new
 WORKNEY/WORKNEY/And Industry group." The rates are from column 1, "Total Compensation." The rates have been increased by 110% to account for the
 beenefit 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.

⁴ 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.
⁶ Calibration drift checks on the air flow sensor on the NOx CEMS are performed daily.
¹ 10 percent of respondents are assumed to submit a written request to Administrator for an alternative monitoring procedure (instead of use of CEMS).
⁸ 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, ¿ Year 1, Boilers

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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 or NOx Emission Rates data, Excess Emissions, Missing and Excluded Data, "F" factor, and other	8	4	32	0	0
TOTAL (rounded) ^f					0

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

Assumptions:

^a We have assumed that there are approximately 55 respondents with boilers and that 10% of the existing facilities will

^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 1

^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.

and 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 Ra	ates:	
Management	\$69.04	These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General Schedule.
Technical	\$51.23	
Clerical	\$27.73]

l be re-constructed or modified.

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

t attend repeat performance tests.

0 Sum

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

	(A)	(B)	(C)	(D)	(E)
	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	Technical person- hours per year
Activity			(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

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

Assumptions:

^a We have assumed that there are approximately 55 respondents with boilers and that 10% of the existing facilities will

^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 1

^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.

and 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 Ra	tes:	
		-
		These rates were updated 12/21/21 to match the rates from the Office of Personnel Management (OPM), 2021 General
Management	\$69.04	Schedule.
Technical	\$51.23	
Clerical	\$27.73	

l be re-constructed or modified.

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

t attend repeat performance tests.

0 Sum

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

	(A)	(B)	(C)	(D)	(E)
Activity	EPA person- hours per occurrence	No. of occurrence s per plant per year	EPA person- hours per plant per year	Plants per year ^a	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

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

Assumptions:

^a We have assumed that there are approximately 55 respondents with boilers and that 10% of the existing facilities will

^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 1

^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.

and 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
1.5	3.0	\$1,738.01
22.00	44.00	\$25,280.20
0.0	0.0	\$0.00
		\$27,000

Labor Ra	ites:	7
	1	
		Personnel Management
Management	\$69.04	(OPM), 2021 General Schedule.
Technical	\$51.23	
Clerical	\$27.73	

l be re-constructed or modified.

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

modified, but will not attend the annual : attend repeat performance tests. No. of Responses 0 0 60.5 55 0 115.5 Sum

Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; and Pul Source: Boilers

l	(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)	
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	

 Table 26: Capital/Startup vs. Operation and Maintenance (O&M) Costs

Tot

^a10 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.